

Support structures in the career progression of women in mining at Amandelbult Mine.

**WITS SCHOOL OF
GOVERNANCE**



Tshifhiwa Peter Singo

2421941

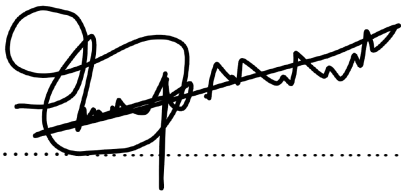
A research report submitted to the faculty of Commerce, Law, and Management at the University of Witwatersrand in partial fulfilment of the requirements for the degree of Master of Management: Governance and Public Policy.

Supervised by Dr. Hlengiwe Ndhlovu and Ms Lihle Ngcobozi

Johannesburg 2023

DECLARATION

I declare that this research report is my own unaided work. It is submitted for the degree of Master of Management in Governance and Public Policy at the University of Witwatersrand, Johannesburg. It has not been submitted before for any other degree or examination in any other University. Where I have used the work of other authors, I have properly acknowledged them and I have not copied any author or scholar's work with the intention of passing it off as my own. All the interviews and informal conversations that have been conducted for the purposes of this research report have also been cited correctly and I have not passed off any of my participants work, suggestions and quotes as my own.



Signature.....Date 16th of March 2024

Tshifhiwa Peter Singo

Contents

DEDICATION.....	i
ABSTRACT	ii
ACKNOWLEDGEMENTS.....	iii
1. INTRODUCTION	1
1.1. Introduction	1
1.2. Background.....	2
1.3. Problem statement	6
1.4. Research Questions.....	7
1.5. Research Purpose.....	8
1.6. Research objectives	8
2. LITERATURE REVIEW	10
2.1. Introduction	10
2.2. A historical overview of South Africa’s mining industry	11
2.3. Culture dimensions: masculinisation and gendered disparities in mining	17
2.4. Culture transformation in Mining.....	24
2.5. National Culture Transformation.....	24
2.6. Organisational Culture Transformation (OCT) in Mining	28
2.7. Conclusion	35
2.8. Theoretical Approach	35

2.8.1. Gendered organisational theory.	35
3. RESEARCH METHODS.....	38
3.1. Introduction	38
3.2. Research approach.....	38
3.3. Research design and Strategy	39
3.4. Data collection.....	41
3.5. Sampling.....	42
3.6. Data Analysis.....	44
3.7. Validity and Reliability	45
3.8. Credibility.....	45
3.9. Dependability.....	46
3.10. Positionality.....	46
3.11. Limitations and feasibility	47
3.12. Research Ethics.....	47
3.13. Conclusion.....	48
4. PRESENTATION OF FINDINGS.....	50
4.1. Introduction	50
4.2. Contribution of participants.....	51
4.3. Data analysis process.....	52
4.4. Thematic Analysis (Braun and Clarke, 2006)	53
4.5. The process of cleaning and coding the data	54

4.6.	Trustworthiness and validity of the data analysis process.....	54
4.7.	Coding process	55
4.8.	Brief analysis and interpretation of the themes generated.....	56
4.9.	Main themes generated.....	57
4.10.	Analysis of Data	58
4.10.1.	The role of leadership in women’s career progression	58
4.10.2.	Engage employees in career discussion.....	59
4.10.3.	Support through developmental opportunities.....	60
4.10.4.	The importance of life-work balance	62
4.10.5.	Efforts of the leadership team	63
4.11.	Mechanisms, policies, and structures for women’s career progression.	63
4.11.1.	Online learning.....	64
4.11.2.	Coaching and Mentoring.....	65
4.11.3.	Development programs	66
4.11.4.	The role of awareness	68
4.12.	Mechanisms, policies, and support structures	68
4.13.	Barriers to women’s career progression.	72
4.14.	Lack of work experience	73
4.15.	Male dominated environment.....	75
4.16.	Nepotism.....	76
4.17.	Pressure-work-life balance	77
4.17.1.	Stereotyping	78
4.18.	Glass ceiling	79

4.19.	Recommendations for addressing challenges faced by women at Amandelbult mine	81
4.19.1.	Mindset change in the dynamics of mining.	81
4.19.2.	Collaboration and connections within levels.	83
4.19.3.	Provision of professional programs	84
4.19.4.	Salary increases.	85
4.19.5.	Women Empowerment	86
4.19.6.	Time taken for women to progress.	87
4.19.7.	Growth and performance	88
4.19.8.	Competence and qualification.	88
4.19.9.	Long-over saturation.	90
4.19.10.	Time differences.	91
4.20.	The Mining Environment	93
4.21.	Conducive Environment	93
4.22.	Inclusive Environment.	95
4.23.	Mining as hostile environment	97
4.24.	Racial Disparities at Amandelbult Mine	99
4.24.1.	Racism.	100
4.24.2.	The importance of awareness.	102
4.24.3.	Racial disparities.	102
4.25.	Employees anonymous hotline-my voice.	103
4.26.	Diversity and Inclusion.	103
4.27.	Real you network programmes.	104

4.28.	Support systems for women’s career progression	104
4.28.1.	Women in mining Forums	105
4.28.2.	Career development meetings.....	106
4.28.3.	Training centres	107
4.28.4.	Additional study courses for women to enrol.	107
4.28.5.	The importance of awareness.....	108
4.29.	Conclusion.....	108
5.	DISCUSSION OF FINDINGS.....	110
5.1.	Introduction	110
5.2.	Discussion.....	111
5.3.	Barriers faced by women in mining.	111
5.4.	Interventions by the ALT to ensure the career progression of women in mining.	119
5.5.	Conclusion.....	132
6.	CONCLUSIONS AND RECOMMENDATIONS	135
6.1.	Introduction	135
6.2.	Conclusions of the research.....	136
6.3.	Recommendations	137
7.	Reference list	138
8.	Appendices	156

DEDICATION

To Women in Mining globally, who continue to be vocal on the notion of male-domination and advocate for equal career progression opportunities...

ABSTRACT

Post 1994, South Africa introduced several policies and practices to accommodate inclusion & diversity and measures to address inequalities in the Mining industry. In addition, these policies advocated for the opening of the mining sector to previously disadvantaged South Africans which include women as the strategic pillar of economic empowerment policy. Although this policy had good intentions, integrating women into such a traditional male-dominated industry presented various challenges, including lack of career progression, especially for women. The main objective of this study is to analyse existing support structures beyond policy that Amandelbult mine is using to ensure career progression for women in mining at its operations. The researcher adopted thematic analysis and employed a computer assisted qualitative data analysis software (CAQDAS). For this study, NVivo 12 Plus was employed to qualitatively analyse and code all the in-depth data from the eleven participants “Amandelbult Leadership Team - ALT” who took part in the study. The study revealed that women face six (6) salient barriers that impede their career progression in the mining industry. These are (i) the lack of experience in technical roles that endow them with the requisite core competences to progress up the leadership ladder, (ii) the masculinised nature of the mining industry, (iii) stereotyping (iv) life-work balance, (v) the glass ceiling and (vi) nepotism. Finally, the findings also corroborate extensive research that reveals that more women are in junior, administrative and support roles. On the other hand, a small number of women have progressed to senior, mid-senior, and executive level. This suggests that despite some policies, mechanisms and programmes in place, more work still needs to be done to ensure that the mechanisms and policies translate into tangible outcomes where we see more women in senior leadership positions in the nearest future.

ACKNOWLEDGEMENTS

I am deeply moved by the amount of assistance I received to complete my research paper, both from individuals and institutions.

This research paper has been made possible by funding I received from Anglo American's study assistance programme and the support from my team in Group People and organization.

I would like to also express my gratitude to the Amandelbult Leadership team for their invaluable insights that shaped this project. On the other hand, I greatly appreciate the approval I got from Amandelbult Senior General Managers (Patrick Morutlwa and Olaf Meijer) to conduct my research. Also, thank you to Tebogo Prisca Masipa for your support in helping arrange the interviews with the participants.

To my lovely family and friends in Johannesburg, I would like to extend my appreciation for your full and unwavering support throughout my studies. To my wife, Angela; you have been always amazing and accommodated my busy schedule. To my boys, Nethan, and Anderson; thank you for keeping me company and always asking questions during late nights.

At Anglo American, I would like to extend my sincere gratitude to my managers, Vanessa Naicker, Lizzie Da Costa and Nombulelo Zikalala for always giving me time to focus on my research. To my colleagues, Tracey Lagerwey and Romina Gambarrutta, you never got tired of listening to me complaining about how stressful this process was and for that; I am truly grateful.

To my supervisors, Lihle Ngcobozi and Dr Hlengiwe Ndhlovu; this journey has been filled with highs and lows but there was light at the end of the tunnel. It was all possible because of your guidance and support. Thank you for your openness and flexibility to talk to me and take

light evening meetings, I can truly say that the back and forth was necessary though it was a bit painful and demanding.

Finally, this research is dedicated to my family and my kids to continuously value the importance of education

CHAPTER ONE

1. INTRODUCTION

1.1. Introduction

This study is centred around the argument that despite the government's efforts to address the challenges of women inclusion in male-dominated environments, there are still several issues when it comes to dealing with traditional perceptions in relation to what women can do and can't do in the workplace. One of such environments is Mining, and its masculine culture that back dates to around 1852's. This paper pays particular attention to the issue of career progression for Women in Mining, using Anglo American Platinum's Amandelbult Mine as a case study. Although there has been progress in integrating women in mining, the findings of the research suggest that more work needs to be done to allow full participation of women in mining, especially in South African context. I further argue that to achieve full participation and thriving career progression for women in mining, issues of management accountability, procedures, policies, culture, and environmental working conditions must be investigated.

In addition, I found out that the failure of complete women in mining inclusion is necessitated by an excuse of women's lack of experience, especially in core mining roles that requires several competencies to progress. The study identified six (6) salient barriers that impede the career progression of women in the mining industry. These are (i) the lack of experience in technical roles that endow them with the requisite core competences to progress up the leadership ladder, (ii) the masculinised nature of the mining industry, (iii) stereotyping (iv) life-

work balance, (v) the glass ceiling and (vi) nepotism. A closer look into these different challenges suggests there is a misalignment between what Amandelbult Leadership Team consider as efforts to transform the mining company and the actual experiences of women at the mine. If the Amandelbult Leadership Team is committed to the transformation project that seeks to promote the career progression of women to senior leadership positions, they must take seriously the cited challenges and deliberate and intentional about addressing them.

1.2. **Background**

Over the years, researchers have developed an interest in women's career progression, especially those holding leadership positions in various countries, including South Africa (Khoza, 2015; Nkomo & Rodriguez, 2018; Connell & Claughton 2018;). According to Khoza (2015), changing dynamics in the labour market, demographics, economic and social factors, attract interest in the study of women in leadership. Moalusi & Jones (2019), Botha (2016) & Shobhana (2011) argue that this interest is due to the paradigm shift of "male governance", which historically had to do with power and control in spaces such as the army, politics, economy, and mining. Khoza (2015) notes that the exclusion or prohibition of women participating in these spaces is evident in national and international historical studies. This paradigm shift from 'male governance' to an inclusive labour force and market, has necessitated a look into institutional cultures, norms, and value systems which may contribute to barriers in women's development and career progression in the workplace.

Research shows that women face considerable challenges related to career progression within all sectors (Benya, 2018). In 2019, South Africa's deputy president David Mabuza expressed how existing policies and practices must ensure women's inclusion and fair career progression in the workplace. Mabuza continued to note that "the exclusion of women and workplace discriminatory practices are rooted in a patriarchal culture, social systems of male dominance,

and gender stereotypes that undermine the role and standing of women in society" (SANews, 2019, p. 01).

Despite the challenges outlined by the Deputy President in 2019, the South African government has shown tremendous improvement in incorporating women into governance structures and have ensured that equal representation and equitable gender representation forms part of the national government's strategy to ensure equal representation in senior government structures (StatsSA, 2021). Beyond governance, the Minerals Council of South Africa 2020 notes "The Mining industry in South Africa employs 455 000 people and women represent 12% of this number". The report further detailed that 17% is senior and top management. On the other hand, 24% is professionally qualified women and 18% is skilled technical professionals (Women in Mining, 2020, P.08).

The South African mining industry is also in question when addressing women participation in the workplace and their slow progress in moving to senior leadership roles. Acker (2012); Moalusi & Jones (2019) argue that the economic contribution, employment opportunities, and previously implemented measures to eradicate gender inequalities in the workplace is the question of interest. Following a review of the Mining Charter targets for Women in mining and other areas of transformation in 2016, the Minister of Mineral Resources reiterated the growing concern at the rate at which women progress into strategic and key operational roles at senior level and board level in the mining industry (Oxfam, 2017).

Previous research, particularly that of South Africa, shows that the apartheid system played a fundamental role in shaping and influencing gender disparities in this sector through legislation and policies characterised by racial inequality and gender discrimination (Botha & Cronjé, 2014; Madgavkar, 2016 and Vogelstein, 2016).

In South Africa, the exclusion of women was legislated in 1911 by the 1911 Mines and Works Act No. 2, which noted that "No person shall employ underground on any mine a boy apparently under the age of sixteen years or any female" (Oxfam, 2017, p. 20). When South Africa gained democracy in 1994, the Constitution of 1996 promoted the rights of all citizens - regardless of gender, class, race, and disability. The designing of various legislative documents such as the Employment Equity Act, Affirmative Action, the Promotion of Equity and Prohibition of Unfair Discrimination Act came about as measures to redress inequalities of historically disadvantaged South Africans (HDSA) – including women (Chamber of Mines, 2017; Mining Review Africa, 2019 and Creamer Media, 2020).

From a government perspective, efforts to address and act on issues of Women in Mining have been at the core of discussions when dealing with gender inequalities in the mining industries (Chamber of Mines, 2017). Moreover, one would have expected that the introduction of the Mining Charter¹ would have brought the inequalities previously discussed to an end. According to (Dlamini, 2016), It is true that in terms of numbers, the mining industry continue to show improvement in bringing in more women. However, the Mining Charter gave directives to the mining companies to improve its numbers regarding women representations, it did not provide demands on effectively managing career progression for Women in Mining to make sure they occupy critical roles² within the business (Government Gazette, 2018; Botha, 2016; Moalusi & Jones, 2019).

¹ "The Mining Charter derives from the Mineral and Petroleum Resources Development Act, 2002, (Act No. 28 of 2002) (MPRDA). The MPRDA's primary objective is to provide for transformation of the mining and minerals industry for the benefit of all South Africans. The Mining Charter III covers seven main elements, namely; ownership, mine community development, procurement, beneficiation, house and living conditions, human resource development and employment equity".

² "Roles that have a significant tangible impact on the ability of the organisation to deliver outputs, achieve milestones, or meet budget requirements".

Various studies also prove that more women are in junior, administrative and support roles. On the other hand, a small number of women have progressed to senior, mid-senior, and executive level (Government Gazette, 2018; Botha, 2016; Dlamini, 2016; Sector Skills Plan for the Mining and Mineral Sector, 2018; Moalusi & Jones, 2019; Mining and Mineral Sustainable Development (MMSD), 2020). Some scholars have pointed that several factors might hinder career progress for Women in Mining (cf. Nkomo & Rodriguez (2018), Maqubela, Ndanduleni & Nishimwe-Niyimbanira 2020). For example, under-representation of women at the senior management level, low intake of women at tertiary education institutions, as well as the dominance of an organisational culture that still upholds masculine values and behaviour. However, Carvalho, Costa, Lykke & Torres (2019) argue that women are not progressing to senior management level because of what they refer to as a glass ceiling effect.

Some research has also focused on women's struggles regarding a breakthrough to enter the mines and work underground, processing plants and open pits (Wynn, 2001; Calitz, 2004; Khoza, 2015; Woolnough & Redshaw, 2016). Much literature also paid attention to issues surrounding organisational culture transformation in the Mining sector (Fakhar, Rana, Ayesha & Lalarukh; 2012). While there is an increasing interest in the career development and progression of women in mining; however, there is a need to focus on how leadership in the mining industry ensures the proper channels are in place to assist women in progressing in their careers. Several studies have focused on how women in management positions describe their experiences and perceptions of their career progression in the mining industry – given the various interventions put in place since the democratic government in 1994 (Shobhana, 2011; Khoza, 2015; Botha, 2016; Nkomo & Rodriguez, 2018; Connell & Claughton, 2018; Moalusi & Jones 2019). As such, this study intends to explore support structures that management³ at

³ Management in this context refers to Amandelbult Mine's leadership team "ALT". This team consists of the Senior General Manager for the complex, the General manager for Open Cast, Tumela and Dishaba Mine. This team also has senior manager from Engineering, Human Resources, Finance, Operating Model, Mineral

Platinum's Amandelbult mine use to ensure career progression of women in mining, moving from (junior, middle, and senior) positions on site.

The above background provides an overview in relation to the struggles that women have faced in entering the mining environment, policies and practices introduced to accommodate inclusion and diversity and measures to mitigate inequalities at the mines. However, what is of outmost important is the slow progress of women moving into senior roles. Therefore, this study intends to explore current support structures that Amandelbult mine uses to ensure career progression for women in mining.

1.3. **Problem statement**

Despite the government's efforts in implementing policies like the Mining Charter (2004 _Section 100 "2"), Employment Equity Act (55 of 1998), Affirmative Action (1998), the Promotion of Equity and Prohibition of Unfair Discrimination Act (2000), women in mining still face barriers in career progression (Chamber of Mines, 2017; Mining Review Africa, 2019 and Creamer Media, 2020). Nonetheless, these policies have accelerated the inclusion of women in mining, and over the past decade, the number of women entering the mining environment continues to show improvement. Such improvements show the determination that the mining sector has in integrating women into all positions in its workforce, including women participation in industry transformation. However, while more women enter the mines, the more critical it becomes for mining industries to have policies and procedures that support career progression (Botha, 2016; Dlamini, 2016; Sector Skills Plan for the Mining and Mineral Sector, 2018; Government Gazette, 2018; Moalusi & Jones, 2019; Mining and Mineral Sustainable Development (MMSD), 2020). This is because policies alone cannot make any

difference. There is need for deliberate and intentional efforts to support women into positions of leadership within the mining sector.

It is important to note that Amandelbult mine does not have a gender specific policy. However, it is guided by the government's Employment Equity Plan when dealing with sexual harassment policy, recruitment policy, inclusive environment, skills development strategy and strengthening the culture of diversity. Additionally, the company has adopted the Women in Mining Strategy⁴ to enhance women's performance, allowing for meaningful opportunities to remove barriers and develop a sustainable talent pipeline of women in mining. At Amandelbult, such policies are drivers of gender equality and aim to create an environment that is conducive to the participation, development, and career growth of all women in the mining industry. The company reviews its policies and related procedures on an ongoing basis to ensure alignment with the government's EE policy and diligently submits its EE reports annually (Facts and Figures, 2021). It is important for Amandelbult to have a gender specific policy and this study intends to provide that need, both for Amandelbult and possibly for Mining globally.

The study presents several lessons to be learnt and to contribute to the knowledge gap:

- Formal forums that address policies relating to amplifying the voices of women.
- Dealing more decisively with cases or offences perpetrated against women. Escalating these to the level of criminal offences can go a long way in ensuring zero tolerance against such transgression, thereby making the workplace less toxic and, therefore, more conducive for women.

1.4. **Research Questions**

⁴ Women in Mining strategy is a pillar that drives women in mining initiatives aiming to enhance representation and development of women in mining industries.

The research will be guided by the following main question:

- What structures of support does management at Amandelbult mine use to ensure career progression for Women in Mining?

In addition, the following sub-questions will assist to unpack the main question:

- Who are the key stakeholders responsible for career development plan and what is their role in ensuring career progression for women in mining?
- What is the role of managers, both senior and line managers in ensuring career progression for women in mining?
- What factors hinder the career progression of women at Amandelbult mine?

1.5. **Research Purpose**

The purpose of this research is to analyse existing support structures beyond policy that Amandelbult mine is using to ensure career progression for women in mining at its operations to understand the extent to which the mining sector takes seriously the actual task of ensuring gender transformation and the empowerment of women at the workplace. Furthermore, the study explores some of the challenges that lead to the fact that despite the efforts of promoting gender transformation and gender equity at the Amandelbult mine, the representation of women in leadership positions remain a challenge.

1.6. **Research objectives**

Like other mining companies in South Africa, the Amandelbult mine has aligned its policies with some of the major policy such as the Mining Charter, Employment Equity Act, Affirmative Action, the Promotion of Equity and Prohibition of Unfair Discrimination Act, that

have been key for gender mainstreaming purposes within the mining sector. However, irrespective of having policies and procedures that deal with gender biases and creating an environment which aims to enable the successful careers for women in mining, there is a gap with adequately supporting career progression at Amandelbult mine. Therefore, this study aims to engage Amandelbult's Leadership Team (ALT) to identify the structures available to support career progression for women in mining. More specifically the study seeks to:

- Look at the roles and responsibilities of ALT in the career progression of women in mining.
- Investigate mechanisms, procedures and policies that enable women to thrive within the mining sector.
- Identify barriers experienced by women in mining and assess working environmental conditions for women.

CHAPTER TWO

2. LITERATURE REVIEW

2.1. Introduction

This chapter engages existing literature on and around the marginalisation of women in mining. It engages existing studies that explore issues on and around the historical development of the mining industry, with a specific focus on how this has impacted on the level of participation of women in the mining industry. The presentation of literature for review is guided by the research questions underpinning the study. Legal and cultural frameworks naturalised the historical exclusion of women from formally working in the mining industry, thereby reinforcing the masculine dominance (Sesele, Marais, van Rooyen & Cloete, 2021). Resultantly, women have largely remained in the fringes in the mining industry (Arthur-Holmes & Busia, 2020). Rickard, Treasure, McQuiiken, Mihaylova and Baxter (2017) underscore the existence of disparities in women's access to specific types of employment from both a qualitative and quantitative perspective.

To enable the nuanced interrogation of the research questions, the review of the literature is presented in three main sections which focuses on literature on the historical development of the mining industry, cultural practices in mining, and the quest for organisational transformation in the mining industry, respectively. This funnel approach to literature review enables a nuanced appreciation of the topic. In so doing, this enables the answering of the research questions. In the process, the literature review also unravels the representation of women's participation, particularly in the context of the historical development of the mining

industry and associated legislative and policy frameworks put in place to shape the participation of women, both globally and nationally.

2.2. **A historical overview of South Africa's mining industry**

Globally, women continue to encounter barriers to break into the mining industry and progress into executive management positions; notably roles such as Chief Executive Officer's (CEOs), senior executives, and board membership. Women are perceived as lacking the requisite 'qualification' to participate, let alone lead, in the mining industry, mainly due to their gender. The literature reviewed in this chapter shows that one of the many factors militating against women's participation in mining is the lack of pipeline of women to move into executive management roles (Kage, Rosenbluth, & Tanaka, 2019). This study, therefore, unravels the support structures in the career progression of women navigating career pathways in a highly masculinised mining industry.

Evidence from studies around mining suggest that globally, the mining industry is historically male-dominated (Mangaroo-Pillayn and Botha, 2020). Many governments had prohibited women from working in mines, particularly underground. In fact, the International Labour Organisation (ILO) adopted Convention 45 of 1935, which prohibited the employment of women for underground work in mines of all kinds (ILO, n.d.). Along the same vein, in 1898, the South African Republic, which ruled the Transvaal, in its Act No. 12 (XVIII:146), explicitly banned the employment of women in any mine. This was later translated word-for-word into the Union of South Africa's Mines and Works Act (No. 12 of 1911) (par.8.1). The clause stated that 'no person shall employ underground on any mine a boy apparently under the age of sixteen years or any female' (Alexander, 2007, p. 214). The Mines and Works Act (No. 27 of 1956) also forbade women to work underground. Section 11 (1) stated that 'no male person under the age of sixteen years and no female shall work, and no person shall cause or permit

any male person apparently under the age of sixteen years or any female to work, underground in any mine’ (South Africa, 1956, p. 61⁵). The South African Minerals Act (No. 50 of 1991) also forbade women from underground work (ILO, n.d.; South Africa, 1991). It emerges that the evolution of the mining industry historically institutionalised discrimination against women.

South Africa is well-known for its historical richness of natural resources, with high volumes of the world's most valued minerals below its surface (Botha & Cronje, 2015; Kwagga, 2020). Furthermore, the country's history itself is rooted in the first establishment of the copper mine around the 1850s (Kwagga, 2020). This was followed by the discovery of diamonds in 1867 and gold around the 1870s. In addition, Benya (2018) pointed out that over time, more mineral discoveries took place, and the mining industry became one of the most fundamental sectors in South Africa, adding about 13.5 billion US dollars to the country’s Gross Domestic Product (GDP).

South Africa’s mining industry dates to the 1860s. Diamonds were first discovered in 1867. According to the Minerals Council of South Africa (n.d),

in the Cape Colony – now the Northern Cape – when 15-year-old Erasmus Jacobs finds a transparent rock on his father’s farm. The rock is later known as the 21.19ct Eureka diamond.

Mining Technology (2019, May 20) adds that,

In the 1860s, two notable diamonds were unearthed; The 21-carat Eureka diamond and the 83-carat Star of South Africa, inspiring a diamond rush in the region aided by the more established coal industry.

⁵ I am mindful that this reference (South Africa, 1956, p. 61) is too old, but its relevance is still fundamental to understanding the history of Mining industry.

These discoveries gave rise to a migrant system as, by 1889, 60% of the 100 000 black labour force needed to work in the mines came from outside South Africa (Wilson, 2014). The black migrant labour was recruited by the “Witwatersrand Native Labour Association (known as Wenela)” (Alexander 2007, p. 210). Of particular interest to the present study is how this resulted in the emergence of a highly masculinised labour system. The migrant labour system was born in a highly capitalist and colonialist (which was to become later officially an apartheid) segregated system,

to restrict black people to rural areas far away from the “white” cities. As part of this system, people (mostly men) were forced to migrate to places of employment but were not permitted to do so with their families or stay permanently, resulting in a system of oscillating migrancy (Bank 2017, p. 6).

The segregation system resulted in a deplorable sexist ‘temporary’ settlement system for black migrant workers epitomised by the Kimberley Closed Compound, the Witwatersrand Mine Compound, and the migrant labour hostel (Vosloo 2020, p. 2). Alexander notes that “Whilst most white workers lived with their family in a five-roomed house, most Africans were temporary residents of single-sex barracks (something like a dhowara)” (Alexander 2007, p. 213). Thus, the mines were not a place for the family in so far as black people were concerned. Secondly, Alexander (2007) argues that the gender labour dynamics in rural agrarian South Africa, is indeed like most other countries in Southern Africa, where such men had more time on their hands than women. Women were also obliged to stay at home due to their biological and social reproduction roles (Ibid). In addition, Eldredge (1993) and Walker (1990) note that having women staying at home not only ensured that men sent back their earnings back home but also the protection of the land, which was a key form of social security. As such, it was easier for men to engage in waged labour far from home than women. In this system, control

was critical in “managing the influx of much needed “black” labour into “white” areas” (Ibid). This system was to evolve and flourish for 125 years since its inception in the 1860s to 1985.

It, however, does not mean that women did not migrate to mines in South Africa. Those who did, were mostly not directly involved in mining. As stated by Alexander (2007, p. 214),

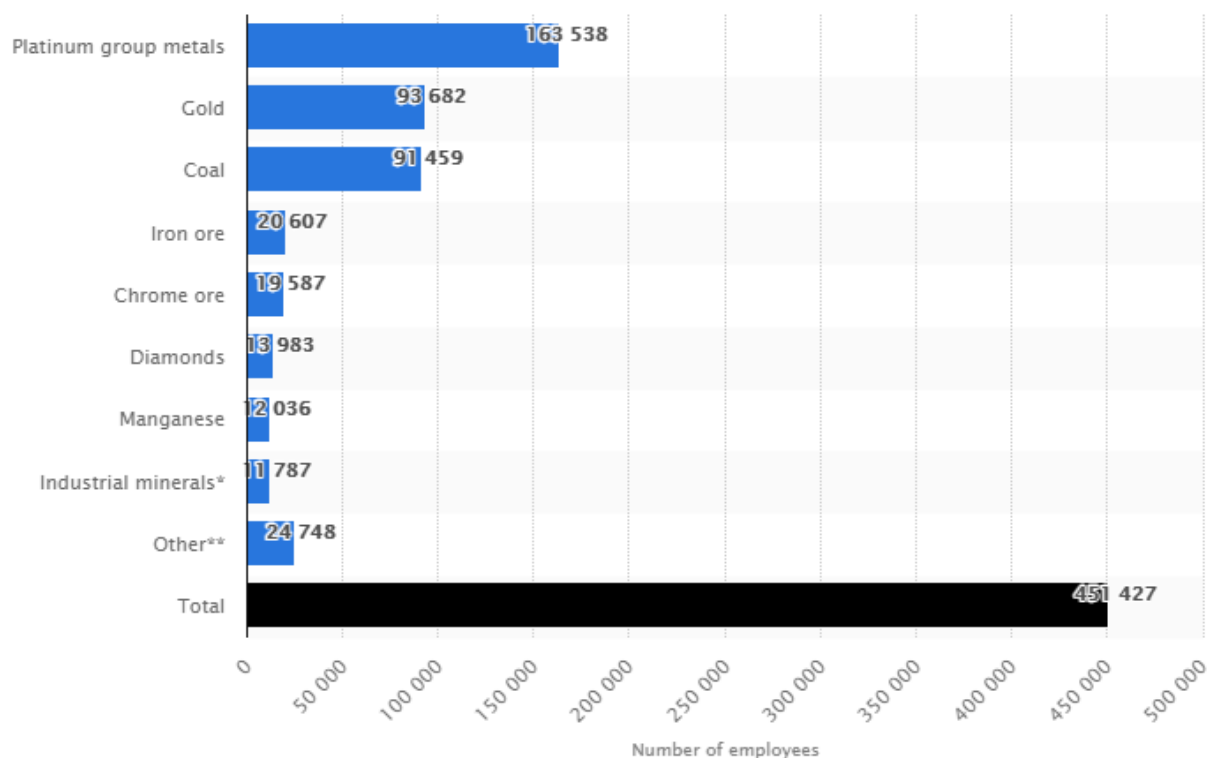
women did migrate to mining areas (not only to the coalfields, but also to Kimberley and even the Witwatersrand) ... females usually engaged in beer-brewing and prostitution and were also involved in food production. They may even have worked on the surface of the mines, though the evidence for this is slim.

This underscores Arthur-Holmes and Busia’s (2020) argument that women have largely remained in the fringes of the mining industry. Mphokane (2008, P. 12) further describes “the mining sector as a fundamental component that shaped the South African economy, contributed to the formation of the Johannesburg Stock Exchange and has more than a million people employed within the mining sector.” Furthermore, the industry falls within some of the top leaders in terms of new technology development (Brenøe & Zolitz, 2020). For example, the current transition to low carbon economy, artificial intelligence, new financing, and production models. For the year (2020,) the industry contributed an estimated 8.2% of South Africa’s GDP, and in 2017, the percentage equated to R335 billion (Skills Sector Plan for the Mining and Mineral Sector, 2020:10).

Tremendous improvements in employment by the mining sector also accompany the high contribution to the country's GDP. In 2020, the platinum mining industry recorded an estimate of 163 538 employees; this placed it as the largest employer of the country's mineral commodities (Skills Sector Plan for the Mining and Mineral Sector, 2020). Figure 4.1 below represents the number of employees per commodity beginning of 2020. According to this report calculated from South Africa and Minerals Council statistics, total employment for

permanent employees and contractors was approximately 451 427 (Minerals Council of South Africa - Facts and Figures Pocketbook, 2020: 30-52). However, this is a decline of about 3% compared to the 464 667 total employments recorded at the end of 2017 (Skills Sector Plan for the Mining and Mineral Sector, 2018:11).

Figure 2.1.1: Number of people employed by South Africa's mining industry in 2020 by commodity



Source: Minerals Council South Africa - Facts and Figures Pocketbook (2020)

Whilst the contributions of the mining industry to the country's economy, modernisation and industrialisation are tremendous; however, the cultural and industry dynamics and design has influenced socio-economic inequalities (Brenøe & Zölitz, 2020; Connell & Claughton, 2018; Doku, 2019; Fernandez-Stark, Couto & Bamber, 2019). In the 1890s, women who worked in the industry had their salaries paid to their male partners. As such, women's historical

vulnerability and economic dependency were extreme, and the law legitimised it. The context rooted in this historical background and its material consequence is fundamental for understanding the continuous, though no longer legalised, unequal treatment of Women in Mining (Benya, 2018). Fernandez-Stark, et al, (2019) note that South Africa's transition to a democratic state advocated for all discriminatory policies to cease, especially where gender is concerned.

From a South African perspective, apartheid laws that advocated for racial and gender inequalities shaped the set-up of the mining landscape. Benya (2018, p. 03) argues that:

the extent to which mining companies colluded with or underpinned the apartheid state is still a matter of debate; but most critics agree that the activities of mining houses accommodated tendencies of colonial rule and subsequent apartheid policies, through the migrant labour system.

Consequently, the industry became male dominant and as previously noted, most white males occupied managerial roles and black and other racial groups positioned in entry roles. On the other hand, women occupied administrative roles and other positions that did not require physical strength (Howe-Walsh & Turnbull, 2016; Kansake, et al, 2019). As a result of this gendered approach or division of labour, women remain at the bottom of the rank and not adequately exposed to career development. Mashiane (2009) and Benya (2018) argue that, despite the establishment of human resource development functions and employment equity policies, most mining companies are still struggling to successfully implement transformation programmes as required by the Department of Minerals and Resources (DMR).

Mining is a billion-dollar industry with the potential of significantly impacting on people's lives in a positive way. Chibba (n.d.) notes that the mining industry

... remains one of the biggest contributors to the country's economy with an estimated worth of R20.3 trillion (US\$2.5 trillion). It is the world's fifth largest mining sector in terms of gross domestic product (GDP), contributing eight percent to South Africa's GDP.

The Cardno Project (n.d.) identifies benefits revolving around issues of household well-being. These include, financial freedom, increased decision-making, and independence, among others. Thus, it also follows that the higher up the governance ladder an employee is, the more benefits they get. The gender gap in the mining industry is such that women do not benefit as much their male counterparts. There is a general trend whereby even when industry does bring benefits like jobs and infrastructure, these are not shared equally between men and women. Furthermore, taking heed of Natural Resource Governance Institute's (NRGI) (2020) observation of the relative lack of research on how a country's dependence on its natural resources can impact the lives of women, it necessitates the need to investigate how this phenomenon is manifesting in the South African mining industry at the macro level as well as what individual mining organisations are doing to redress the situation at the micro level.

2.3. **Culture dimensions: masculinisation and gendered disparities in mining**

It is imperative to appreciate that the mining industry, both globally and in South Africa, has generally been male dominated, as argued through the literature above. As noted by Mangaroo-Pillay (2020), the mining industry has been globally considered a masculine industry for many years. Consequently, jobs in the mining industry have both neither been desired as an occupation by women, nor easily awarded to women because culturally, women stayed at home and looked after families, but that was all changed since women's rights became a priority.

Importantly, the history of women's participation in mining necessitates an investigation of how both the state and employers' policies have contributed to the masculinisation of work and

sites of labour by implementation of ‘protective’ laws in the industry (Papastefanaki, 2020). . The institutionalisation of protective laws and adoption of paternalistic tendencies in mining have resulted in the exclusion of women from underground tasks, with women’s work became increasingly restricted to household work. Sarti, Bellavitis and Martini (2018) reveal how this process ran parallel to what has been labelled the ‘de-labourization’ of women since the eighteenth century (Ibid). They define de-labourization as the process by which women were increasingly excluded from formal wage labour employment by state and employer regulations (Sarti et al. 2018). They argue that the process is based on a hegemonic patriarchal breadwinner ideology which naturalises women as belonging to the private space of the home where they must be taken care of by the men. The male breadwinner ideology, led to the promulgation of paternalistic models and legal frameworks that sought to ‘protect’ women and children from working in underground mines. Thus, masculinity has historically been associated with miners (ILO, 2021, p. 18). This has resulted in the masculinisation of workplaces and work processes. More so, in mining where most of the activities are perceived as too strenuous and dangerous to be undertaken by supposedly ‘weak and delicate’ women.

Several countries have provisions in place that prohibit women from either working underground, at best, or, worse, working in the extractive sector at all (NRGI, 2020). Lahiri-Dutt (2001) and Papastefanaki (2020) argue that many of these laws, which removed women from working in underground mines, are historically traceable to the West whose ideologies and/or legislative frameworks mining industry (such as the British Mines and Collieries Act of 1842) did not encourage women’s direct participation. Papastefanaki (2020) aptly argues that domestic hegemonic patriarchal ideology in Europe and North America, which originated from eighteenth- and nineteenth-century debates on ‘women’s nature’, constructed and perpetuated a moral rationale for keeping women out of the mines and placed them in the home. Thus, taken from this perspective, and given the European and western background of the white

miners in South Africa, it can be argued that these have found it rather peculiar, and probably obnoxious, if women, certainly white women, had been permitted to work underground.

The process of masculinisation was concomitant with the development of a social welfare system in European countries, although it did not extend to the rest the world, where an increasing “informal economy” gained ground. A domestic ideology and the male breadwinner ideology, therefore, concealed the concrete meaning of the gender division of labour for women’s work in mining households. This emanated from a combination of genuine concern about the perceived inherently hazardous nature of the work and, also, because of “moral panic” about men and women working together in dimly lit underground areas. The implication is that there was a deep-seated fear the mines would lead to sexual decadence, Dutt (2001) and Papastefanaki (2020).

Noting the unsophisticated nature of early mines (which were mostly open cast), Alexander (2010) argues that there are high chances that women could have been more actively involved in the mining industry. In fact, Alexander (2007) states that not only did women migrate to coalfields, but also to Kimberley and even the Witwatersrand. However, Bozzoli (1983) rejects the view that women were not engaged as migrant labourers on the mines because the work is supposedly too arduous for them. She argues for the need to consider the labour dynamics of rural life in South Africa. In fact, there was a complimentary distribution of labour that was in such a way that, on the one hand, young men had often been involved in hunting, raiding, and fighting. Women, on the other hand were largely responsible for agricultural production (Bozzoli, 1983).

The colonial economy disrupted and reconfigured these dynamics. As such, by the end of the nineteenth century, the new colonial economy rendered men’s activities, thereby leaving them with time on their hands (Beinart, 1980). At the same time, agriculture was, however, very

much an important part of the economy. Compared to their male counterparts, this made it more difficult for women to be freed to engage in wage labour far from home. Furthermore, women's role in biological and social reproduction ensured there were further pressures on them to remain at home. Alexander (2010) argues that, on one hand, older men, who dominated rural society, used this new dynamic of the domestication of women as collateral to increase the likelihood of the men to return home to their wives with their wages. The young men, on the other hand, used this situation as a key form of social security whereby the wife remaining at home helped in protecting their access to the land.

It is also critical to point out that the challenges that women face in attempting to successfully break into and progress in a masculinised work environment emanate from traditional gender hierarchies and norms that prevail in the family and society. Despite gender equality and empowerment, the household unit has a traditional structure – and still has – that makes males the dominant gender (Hartmann, 2010). These traditional stereotyped role expectations spill over to organisational policies and practices to maintain women's marginalised work roles (Bobbitt-Zeher, 2011; Cha, 2013) and become entrenched in a gender-biased organisational culture (Prescott & Bogg, 2011). There is a huge gender gap in the mining industry in so far as participation is concerned.

Furthermore, research shows that the mining industry has the lowest number of women on company boards of any industry group worldwide. In a study involving 90 government officials from 40 countries, Iwerks (2019) asked participants to order 10 gendered issues in mining from greatest to least important. The results show that a vast majority of the participants identified the lack of voice and participation in decision-making as the top concern. This was followed by lack of access to both employment and education and increased as well as high risk of gender-based violence, Iwerks (2019).

In the context of the hegemonic patriarchal ideology pervading the mining industry, Martin, and Barnard (2013) argue that women who work in male-dominated occupations face challenges that differ from those who work in more gender-balanced and female-dominated occupations. These challenges relate to issues of both retention and career success in the industry. Whilst there are powerful economic incentives for women to move into historically male-dominated occupations (England, 2010), such as mining, women who go against conventional female career patterns and choose to pursue careers in male-dominated occupations often return to careers that accommodate their roles as primary caregivers better (Ashraf, 2007; Cha, 2013; Danziger & Eden, 2007; Frome et al, 2006).

Menard (2021) exposes the existence of bottlenecks which not only restrict women's entry into the masculinised mining industry, but also their progression towards more mid-senior roles in the industry. In an interview with Worldwide Recruitment Solutions (WRS) (2014, p.10), Manoso reveals that,

when I started as a graduate in 2005, I was one of the few ladies working in the mines. The guys were just so surprised and shocked that one day they would have to be led by women that I got so much resistance from them.

This reveals entrenched attitudes against the entry of women in mining. That is, despite their qualifications, women are still not considered qualified enough to enter the mining industry. More so, given the possibility that they would potentially progress to managerial positions in a masculinised space. Writing for *The Telegraph*, Anonymous (2015) reflects on how male-dominated workplaces can cause dangerously high levels of anxiety in women. This emphasises another dimension and dynamic in the gender gap in the mining industry. More so, in the top echelons. The study (*The Telegraph*, Anonymous - 2015) established that 'token' women working in a predominantly male environment display unhealthy patterns of cortisol

throughout the day, due to negative working conditions. This is significant given that previously much research has tended to narrowly focus on women's struggles in so far as breaking into the mines, specifically working underground, processing plants and open pits (Wynn, 2001; Calitz, 2004; Khoza, 2015; Woolnough & Redshaw, 2016). There is, therefore, need to focus on the measures that mining organisations have put in place to ensure the undeterred career progression of women.

The challenges that women face in breaking into the mining sector, as well as the difficulty with which they can progress through the organisational ladder suggests the existence of a glass ceiling. Following Carvalho, Costa, Lykke & Torres (2019) and Reiners (2021), the term glass ceiling is a metaphor for the evident but intangible hierarchical impediment that prevents minorities and women from rising to senior leadership positions in male-dominated spaces. Dlamini (2016) argues that:

Throughout all sectors, a glass ceiling was certainly in place when it came to promotions with the regressive idea that women struggled to exercise leadership holding sway in many, if not most, boardrooms.

The glass ceiling, therefore, represents the socially constructed and unseen sociocultural patterns that are conveniently used as barriers that prevent women from progressing beyond a certain level in the workplace.

From a statistical perspective, the Minerals Council of South Africa (2020) shows that South Africa's mining industry employs 455 000 people. However, women represent 12% of this number. This translates to only 54 600 women involved in this multibillion-dollar industry. The report further detailed that 17% is senior and top management. On the other hand, 24% is professionally qualified women and 18% is skilled technical professionals (Women in Mining, 2020). These figures corroborate existing studies that expose how more women are in junior,

administrative and support roles, rather than in the more influential senior management positions. Only a small number of women have progressed to senior, mid-senior, and executive level (Government Gazette, 2018; Botha, 2016; Dlamini, 2016; Sector Skills Plan for the Mining and Mineral Sector, 2018; Moalusi & Jones, 2019; Mining and Mineral Sustainable Development (MMSD), 2020). Factors militating against the career progression into senior management for women in mining include low intake of women at tertiary education institutions, as well as the dominance of an organisational culture that still upholds masculine values and behaviour (Nkomo & Rodriguez, 2018; Maqubela, Ndanduleni & Nishimwe-Niyimbanira, 2020).

It is apparent that, in strategic sectors like mining, the power-culture dimension creates unfavourable psychological safety. It demotivates women in pursuing movement to senior roles because of being ruled by fear and abuse of power. As a result, the career progression for women has no place in such a culture because decisions of the career development plan rely on influence rather than merit. Employees are afraid to report bad news to their managers. In such an economy, employees get promoted into higher positions by being loyal to their seniors; qualifications and competencies are not considered (Mesfin et al, 2020).

This led to a ‘catch-22’ situation, because women have been historically excluded from the mining sector, it serves to naturalise and perpetuate perceptions of oil, gas and mining as men’s work or the view of mining as men’s work (Natural Resource Governance Institute, 2021). This, then, serves to undermine women’s advancement in mining. Even though restrictive prohibitions on women’s work have been lifted in many countries, their legacies persist. Centuries of women’s absence on mine sites have led to cultures and norms that still impact their unequal participation in the sector. Further, women’s lack of experience working in mining undergrounds has contributed to fewer women holding management or corporate board positions.

Emerging from this section is the idea that the systematic discrimination of women in mining has resulted in the emergence of a significant gender gap that needs to be redressed at both the macro and micro levels. This, therefore, necessitates a paradigm shift in so far as redressing gender inequalities in mining. One way of effecting this is through culture transformation. The following section, thus, reviews literature that focuses on the notion of organisational culture transformation in mining.

2.4. Culture transformation in Mining

The preceding sections of the literature review have exposed the entrenchment of the patriarchal ideology in mining. As a result, it is difficult for women to not only break into this masculinised industry, but also to progress to executive management roles like CEOs, senior executives, and board membership, among others. This then necessitate the need to interrogate the structures that have been put in place to redress the gender imbalances obtaining in mining. This approach enables the answering of the four research questions informing the study. As such, present study approaches this from an organisational culture transformation perspective. On one hand, the national framework focuses on the measures put in place by the South African government to redress the historical gender imbalances obtaining in the mining industry. Organisational culture, on the other hand, is critical in either curtailing or facilitating any form of development within it.

2.5. National Culture Transformation

Dennis (1988) notes how labour history in Africa has focused on men's labour because it has concentrated upon wage labour, a labour market in which only a small proportion of African women participate. In line with this, Dlamini (2016) also argues that:

Viewed against this backdrop, apartheid was not only a racist social order, but it was also a sexist one. That is why, when democracy finally came to South Africa in 1994, lawmakers

included in legislation the imperative to stop unfair discrimination not only against black people as a class, but as women as a class of their own too.

This necessitates the urgency of engaging how the South African post-apartheid government redressed the systemic gender inequalities that existed in the mining industry.

Furthermore, Dlamini (2016) states that, from a general employment perspective, the attainment of democratic rule in South Africa in 1994, saw the enactment of laws and policies that made it imperative “to stop unfair discrimination not only against black people as a class, but as women as a class of their own too”. Section 6 of the Employment Equity Act of 1999 not only outlaws gender discrimination, but it also encourages affirmative action in favour of women so as to enable the achievement of workplace demographics reflective of the economically active portion of the population as a whole. Large employers were, therefore, expected to employ at least 50% females as part of their overall employee complement.

Worldwide Recruitment Solutions (2014) underscores how the repressive legislation, which provided the mining framework in South Africa up until the 1990s, marginalised women from working underground. As such, Dlamini (1996) points out that “One of the most skewed demographic profiles from the point of view of its male/female split is mining”. These were redressed through several legislative provisions. The Mineral and Petroleum Resources Development Act of 2002 and the Broad-based Socio-Economic Charter for the South African Mining Industry of 2004, for instance, introduced quotas obligating mining companies to employ a 10% female staff quota, which was as low as 2% in 2000. Failure to do so, resulted in the non-renewal of mining licences by the state. This led to a ‘new-found enthusiasm for female employees’ whereby,

mines have aggressively recruited female employees. Even where a suitable male candidate exists, employers would be entitled to prefer a female applicant for a job,

indeed they would end up not complying with legislation if they did not (Dlamini, 2016, p. 13).

Mangaroo-Pillayn and Botha (2020) state that the South African studies enacted laws aimed at redressing institutionalised gender imbalances prevailing in the mining sector. These statutory instruments include the 2002 Mineral and Petroleum Resources Development Act (No. 28 of 2002) (MPRDA) and the Broad-based Socio-economic Empowerment Charter, which was signed in 2002 and published in 2004. The instruments called for a mandatory 10% of the mining workforce to be comprised of women by 2009 (South Africa, 2002, 2004a). These legal initiatives resulted in the increase in women's representation in the South African mining industry increased from 3% in 2002 to 15% in 2018 (Minerals Council South Africa, 2018, p. 41).

One of the major factors militating against the career progression into senior management for women in mining is the low intake of women at tertiary education institutions. This meant that women could not develop the requisite technical and/or specialised skill needed to advance to top management roles in the mining industry. The South African government sought to redress this gender gap through the introduction of educational policies that improved women's access to mining-related education in the country. WRS (2014) state that the,

Bursaries have been introduced to attract young women to mining, allowing them to compete in this male-dominated environment and giving them the opportunities, they need to develop key specialised skills.

Resultantly, Martin and Barnard (2013) note how the South African female labour force is growing because of equity legislation and improved access to education and work opportunities (Finnemore & Cunningham, 1995; Franks, Schurink & Fourie, 2006; Mostert, 2009; Van den Berg & Van Zyl, 2008). However, progress with gender transformation and equity in the South

African workplace is still unsatisfactory (Anonymous, 2012; Du Plessis & Barkhuizen, 2012; Hicks, 2012; Lewis-Enright, Crafford & Crous, 2009).

These measures put in place by the South African government resonate with the strong,

... global momentum for interventions focused on gender equality and women's economic empowerment ... defining the integration of 'gender equality in mining policies, laws, regulations, standards and codes' as a key short-term country level goal" (Rickard et al. 2017, p. 13).

Mangaroo-Pillayn and Botha (2020) also reveal how the MPRDA, which came into effect on 1 May 2004, replaced the Minerals Act (No. 50 of 1991). This statutory instrument seeks to,

... promote equitable access to the nation's mineral and petroleum resources to all the people of South Africa' and to 'substantially and meaningfully expand opportunities for historically disadvantaged persons, including women, to enter the mineral and petroleum industries and to benefit from the exploitation of the nation's mineral and petroleum resources (South Africa, 2002, p. 18).

By specifically promoting the advancement of 'historically disadvantaged persons, including women', it is apparent that the statutory instrument is aimed at instituting positive cultural transformation at both the national (macro) and organisational (micro) levels. This highlights significant developments that are taking place in mining legislation over the past few years in many countries across the globe. These developments are aimed at attempting to redress the gender gap in the industry and thus, meaningfully bring women into the industry. While ILO (2011) revealed that the absence of a global legislation specifically pertaining to women in the mining industry, there are, however, continual legislative efforts, repeated institutional initiatives, and a growing awareness of the need to overcome discrimination in the workplace.

Apparent from these legislative and policy initiatives, is a deliberate attempt by the South African government to institute cultural transformation and, in the process, close the gender gap in mining. Often, it is fundamental to accept that culture is one of the critical issues to be changed or an aspect of priority to make the change possible (Greeff, 2020). It can be argued that most organisational change projects, if not all, navigate around culture. According to Fernandez-Stark et al. (2019) organisational culture transformation includes facing the reality of disrupting the organisation from higher performance and finding values that created the problem. With that being done, organisations must implement better solutions that will completely eradicate the problem and introduce new ways of operating (Connell et al., 2018; Doku, 2019; Fernandez-Stark, et al., 2019; Brenøe et al., 2020). In simple terms, culture may create problems and therefore must be considered.

Natural Resources Governance Institute (2020), however, questions what governments and international organisations mean when they say that they aim to advance gender equity in the context of natural resource governance. They go on to point out that, whilst governments and concerned stakeholders show positive commitment to addressing the gender gap in the mining industry, questions still linger in so far as what these commitments mean in practical terms, and the extent to which they positively contribute to changes in people's lives and livelihoods.

2.6. **Organisational Culture Transformation (OCT) in Mining**

On this section, I present studies that engage how organisational culture contributes to the transformation in the South African mining industry from a gendered perspective. With the fast-changing landscape of women in mining, it is fundamental for mining organisations to shift from power culture to role culture dimension. The shift will aid mining industries that have developed several initiatives to ensure that women have the same access to many rewarding career opportunities as those available to their male counterparts. As previously

pointed out, this is crucial because it shows the commitment mining has to human rights and the recognition of women in mining as vital contributors to economic development (Adonis & Silinda, 2021).

Much literature has focused on issues relating to organisational culture transformation in the mining sector (Fakhar, Rana, Ayesha & Lalarukh, 2012). The focus is mainly on how women in management positions describe their experiences and perceptions of their career progression in the mining industry – given the various interventions put in place since the democratic government in 1994 (Shobhana, 2011; Khoza, 2015; Botha, 2016; Nkomo & Rodriguez, 2018; Connell & Claughton, 2018; Moalusi & Jones 2019). As such, this study explores support structures that management at Platinum’s Amandelbult mine use to ensure career progression of women in mining, moving from (junior, middle, and senior) positions in the same organisation.

The above background highlights the struggles that women face in entering the mining environment, policies and practices introduced to accommodate inclusion and diversity and measures to mitigate inequalities in the mines. However, what is of outmost importance is the slow progress of women moving into senior roles. Therefore, this study investigates current support structures that Amandelbult mine uses to ensure career progression for women in mining.

Considering the historical nature of mining as a masculinised industry, the under-representation of women in mining reflects broader social inequalities. Still, gender inequality is bad for business, as well as bad for women themselves. Therefore, the role culture dimension allows the organisation to draft new policies and procedures that align with the changing landscape where women and men can work together equally as pillars, supporting each other to achieve the desired outcome (Evans & Maley, 2020; Maqubola et al, 2020).

Achievement culture dimension comes to play when the alignment of employees in terms of vision and purpose of the organisation come together, allowing everyone to realise their burning ambition and work collectively to achieve positive outcomes. In this dimension, authority or power is based on qualifications and competencies. Employees work in teams' spaces, and all opinions are valued regardless of position, qualification, or gender. It is fundamental for mining companies to adopt this kind of culture to address the gross under-representation of women in mining and how slowly women are progressing to senior roles on site (Alsaqqa, 2021).

Gender inequalities negatively impact on the opportunity for women's promotion and career progression. As previously alluded, more women in the mining industry are in support roles, and men are in core mining roles. Literature suggests that women have worked tirelessly for over 50 years to address and eradicate gender disparities in the workplace. Currently, we are experiencing a paradigm shift as more young women are joining male-dominated industries. Unfortunately, gender inequality remains a core fundamental topic when discussing male-dominated workplaces (Evans & Maley, 2020; Maqubela, Ndanduleni & Nishimwe-Niyimbanira, 2020). As such, gendered disparities remain a significant factor limiting women in terms of career progression. This is because discretionary appointments and promotions remain a privilege of men as they hold authority and use a patriarchal culture network (Marinakou, 2015; Carvalho, et al, 2019).

The traditional notion of the mining industries' association with the need to use power to influence desired behaviour from employees has not drastically changed (Claughton, 2018; Connell & Doku, 2019; Fernandez-Stark, Couto & Bamber, 2019; Brenøe & Z'olitz, 2020). As highlighted in the previous sections, the power-oriented culture in mining owes its roots to male figures and creates inequality for women regarding access to resources. This culture is authoritarian and marginalises women as the subordinate actors with very limited input in the

organisation's management (Alsaqqa, 2021). The industry becomes difficult for women to navigate career progression because of the high percentage of men occupying senior leadership roles. On the other hand, the small percentage of women who hold leadership positions are still perceived as a threat to the male dominance in mining (Minerals Council of South Africa - Facts and Figures Pocketbook, 2020).

From the discussion and definitions of organisational culture above, it is evident that mining culture is rooted in the historical values and beliefs that continuously manifest in practices reinforced over the years. Many researchers described the mining culture through the lenses of male domination, high risk working conditions and divisions of labour associated with masculinity (Botha, 2014; Lauwo, 2018; Leotaud, 2019; Pugliese, 2020; Perks & Schulz, 2020). Therefore, the aim of the study is to understand how such a culture has an impact on the career progression of women in a male-dominated organisation, focusing specifically on the mining industry.

From a policy perspective, ideas of organisational change emphasise that managers must be able to adapt in working with strategic organisational change. In addition, these managers must positively respond to changes and find alternative ways to work effectively. Most of the change involves organisational transformation in one way or the other (Ipinazar, et al., 2020).

However, it is critical that we take heed of Iwerk's (2019) warning that, in development, gender is an area that can often get trapped in good intentions and tokenistic responses. The Minerals Council (2021) demands that women working in the mining industry should have the same opportunities open to them as men and must be safe to pursue them. Organisational culture transformation is a holistic meaning shared by employees in the organisation (Greef, 2020). McClellan (2021) notes that defining organisational culture differs from person to person and from organisation to organisation. On the other hand, Ipinazar, Zarrabeitia, Rio-Belver, and

Martinez-de-Alegría, (2020) argue that all organisational culture definitions are interpretive and rotate around values, beliefs, and other factors that differentiate organisations. Organisational Culture Transformation (OCT) can also entail changing employees' hearts, skills, and mindsets through employee engagement (OCT 2018). In other words, employees need to be involved in the OCT process as this helps them gain a clear picture of the desired change and be part of shaping that picture (OCT 2018). The task of OCT is to promote the participation of the whole workforce, from management to grassroots level employees (OCT 2018). OCT often entails a radical change in bringing new values and orientations into an organisation (McClellan, 2021).

Although there have been somewhat significant efforts directed to the benefits of women, the pace at which these developments have been happening is clearly not enough. As argued by Mangaroo-Pillayn and Botha (2020), the policies that have been implemented so far are not functioning effectively. Furthermore, many organisations do not have sufficient financial and human resources as well as coherent policy frameworks that are required to ensure the closing of the gender gap in mining (Mangaroo-Pillayn and Botha, 2020). In addition, research conducted on women employed in South African mines since the inception of the MPRDA in 2002 has revealed that the employment of women remains a challenge and that women still face barriers to some extent (Botha, 2016, 2017; Botha and Cronjé, 2015; Chamber of Mines of South Africa, 2017; Hancock, 2014; Kolisi & Rithaa, 2016; Mavuso, 2015; Ntombela, 2014). This is in spite of the great efforts made to accommodate women in the South African mining industry since the inception of the MPRDA in 2002.

Women still face a number of challenges in mining. Firstly, women working in core mining areas, specifically underground, suffer rampant abuse from their male counterparts. They are often sexually objectified and, therefore, are subjected to physical, verbal, and other forms of abusive sexual conduct as well as quid pro quo harassment on a regular basis (Botha, 2016;

Botha and Cronjé, 2015; Creamer Media, 2019; Jones and Moalusi, 2019; Minerals Council South Africa, 2019; Nene, 2016; Ntombela, 2014). This, therefore, means that the mining industry still constitutes an unattractive work environment because of such issues as discrimination against women, sexual harassment, and prejudice because of their gender (Botha, 2016; Creamer Media, 2019; Jones and Moalusi, 2019; Mavuso, 2015; MHSC, 2015). Suffice to say that such negative work environments contribute towards a high staff turnover in so far as the number of women leaving their jobs. This then results in the overall slower transformation of the mining industry (Breytenbach, 2017; Mputing, 2017).

Secondly, although the quota system raised the percentage of women participating in mining from 3% in 2002 (Minerals Council South Africa, 2018,) to 6% in 2009 (DMR, 2009) and to 10.5% in 2014 (DMR, 2015), the fact still remains that these employment figures for women were low in each employment functional category (top management [board] level, senior management [EXCO] level, middle management level, junior management level, and in core skills) (DMR, 2015). That is, the grim reality is that women are still marginalised from occupying decision-making positions in the industry. This means that their voice is still being stifled despite their increased participation in the industry. It, therefore, means that the increase in their participation is more from a quantitative perspective than from a qualitative one.

Thirdly, Mangaroo-Pillayn and Botha (2020) argue that although mining companies have made considerable progress in accommodating women in so far as the provision of personal protective equipment (e.g., overalls, dust masks, and safety boots) specifically designed for women, improvements are still needed in this regard. For instance, there is urgent need for protective clothing for pregnant women (Botha, 2017; James, 2018; MHSC, 2015). This means that not all women are accommodated in mining. This automatic exclusion of pregnant women, for instance, means that they risk losing their earnings during pregnancy, thereby potentially negatively impacting on their livelihoods.

Fourthly, often, there are still mining tasks that require physical strength that precludes women's effective participation (Jones and Moalusi, 2019; MHSC, 2015; Minerals Council South Africa, 2019). Such kind of jobs may potentially pose physiological risks for women (Botha and Cronjé, 2015; Matshingane, 2017; Minerals Council South Africa, 2019; Chamber of Mines of South Africa, 2017).

Fifthly, resulting from this, female workers' negative perceptions regarding safety and the nature of equipment contribute to turnover once employees consider the accidents or consequences that are likely to occur, thereby causing them to fear injury or fatality (Matshingane, 2017; Mavuso, 2015; Minerals Council South Africa, 2019).

Sixth, most organisations are yet to adopt their infrastructure to accommodate the increased participation of women in mining. For instance, a visible lack of separate, decent, and hygienic toilet facilities underground is often reported in the literature (Botha, 2017; Matshingane, 2017; MHSC, 2015; Minerals Council South Africa, 2019).

Finally, although women have been historically excluded from mining, there is still inadequate training and career development support (e.g., bursaries, study leave, and mentoring systems) are frequently reported (Jones and Moalusi, 2019; Matshingane, 2017; Mavuso, 2015; Slater, 2018). This suggests that there is inadequate monitoring in the implementation stages of this noble framework to reintegrate women into an industry in which they have been historically marginalised. This then ends up appearing as though the promises and/or commitments to redress the gender disparities in the mining industry are nothing but superficial and lip service. It is, therefore, still apparent that despite the notable progress that has been realised in so far as instituting an increase in women's representation in the South African mining industry, the grim reality is that the industry is still masculinised.

2.7. **Conclusion**

The literature reviewed in this chapter reveals that women's participation in the mining industry is limited not only in South Africa but across the world. Studies engaged with in this review indicate that the historical circumstances in which the mining industry itself emerged play a major role in influencing the masculinisation of the industry. Culture also plays a crucial part in the creation of the gender gap in mining. The hegemonic patriarchal ideology has mainly informed attitudes that construct women as bodies that need to be protected by the men. As such, the initial legislative and policy framework that shaped the development of the industry marginalised women from breaking into this male-dominated industry. As such, women who managed to enter mining were, however, seen as inherently unqualified and could not progress to executive managerial roles. It is also shown by the literature reviewed in the chapter that despite the laws and policies put in place to redress these historical imbalances, more needs to be done to ensure the full integration of women into mining. There are barriers that still militate against the full participation of women in mining in South Africa. As such, this, therefore, necessitates the need to investigate what individual organisations, such as Amandelbult Mine, are doing to ensure that women who enter mining are given the requisite support from the organisation to rise through to senior management positions.

2.8. **Theoretical Approach**

2.8.1. **Gendered organisational theory.**

Gendered organisation theory acknowledges that workplaces are an extension of society, and their patriarchal systems can be inherited and manifest at workplaces. This theory requires scrutinising organisations as custodians that hold power and how organisations implicitly or explicitly operate within specific social arrangements (Alobaid, et al, 2020). Understanding the

organisation therefore is crucial because it allows one to understand its policies, processes, and institutional cultures (Kuykendall & Darden, 2020). Joan Acker developed gendered organisation theory which argues that organisations create environments with gendered power dynamics, and women and men thrive or regress within these environments. Therefore, gendered organisational theory produces a framework which examines different practices and gender-based factors that create inequalities between men and women in the work environment (Alobaid, et al, 2020).

Gendered Organisational Theory presents four components in assessing the gendered nature of organisations, and how these contribute to gendered inequalities in the workplace.

- ***Organising processes***

In a mining environment setting, the organising process establishes hierarchical structures that dictate authority in roles and coordination of tasks. In addition, these processes deal directly with inequalities when distributing salaries, job design, succession plans, behaviour at work and all related gendered practices at the workplace. The grouping of salary categories and gender segregations are essential elements within organising processes. As such, this process becomes a critical pillar when looking at the career progression of women in mining because if roles are created based on gender, it is implausible for a fair recruitment process to take place (Alobaid, et al, 2020).

- ***Organisational Culture***

The construction of organisational culture exists within substructures of the workplace, and beliefs of inequalities and gender differences start to manifest. Other elements of corporate culture include values, ideas, and attitudes. In many male-dominated organisations like mining, the culture of inequalities continues to prevail because of the ignorance to acknowledge the existence of gender inequalities (Alobaid, et al, 2020).

- ***Interactions on the job***

At various levels of leadership, gender inequality is created and re-created as colleagues interact in the workplace. On many occasions, these interactions tend to exclude women, especially in male-dominated organisations (Alobaid, et al, 2020).

- ***Gendered identities***

To some extent, men and women's participation in the workplace creates gender identities (Alobaid, et al, 2020). For instance, in the mining industry, women who are outspoken and strict, are to be rude and aggressive. On the other hand, women who are soft and sensitive are deemed ineffective and weak. Research shows that acute and supportive women make good managers because they put people at the heart of everything they do (Measham et al, 2019).

Examining the gendering of organisations is necessary to uncover issues impeding women from moving upward within organisations (Connell, 2014). Organisations that understand different nuances of gender roles and assumptions at work are in a better position to create an inclusive culture that appreciates unique attributes and strengths of all members.

This study will adopt a gendered analytical approach as a theoretical and conceptual framework to understand the role of Amandelbult Mine in advocating for policies and process that address problems of gender inequalities and support career progression of women to leadership positions. The study takes this approach to understand management's tactical and strategic thinking as well as practical actions for implementing policies that support career progression for women in mining.

CHAPTER THREE

3. RESEARCH METHODS

3.1. Introduction

In this chapter I discuss the research approach and methods that informed the study. I also look at the research design and strategy, data collection, sampling, data analysis, validity, and reliability. I conclude by looking at credibility, dependability, limitations, feasibility, and research ethics.

3.2. Research approach

The research investigates current support structures that management at Amandelbult mine put in place to support career progression for women in Mining. As such, the study relied heavily on transformative and pragmatist paradigm approaches. According to Romm (2015), the transformative approach focuses on marginalised groups, power dynamics that causes divisions and links the findings intending to mitigate the disparities. Mertens (2007) notes that the transformative paradigm provides such an approach for examining assumptions that explicitly address power issues, social justice, and cultural complexity throughout the research process. On the other hand, the pragmatist approach focuses on individuals' decisions in the actual world situation. The intent is to identify a problem, view it in a broader context, and ultimately lead to an investigation to understand and solve it (Kono, 2018).

The decision to rely on transformative world view is motivated by the plight of women in the mining sector, in this context as marginalised individuals. As discussed in the literature review, the current structural order within the mining industry is, in one way or the other, excluding women from gaining relevant career development exposure. Therefore, the transformative

paradigm approach addresses such exclusions, discrimination, power dynamics "in the context of gender parity" and social justice.

With that said, a transformative approach to this research became important in analysing the political agenda at the workplace and to disrupt the exclusion of women in Mining when it came to career progression. As the following chapters will show, adopting this approach became useful in thinking through ways in which management think about and view career progression for women in the mining industry. Furthermore, the transformative approach became important as a reflexive tool in engaging participants and for my personal perspective, role, and power dynamics in relation to researching and analysing experiences of women in the mining industry. As observed by Kono (2018), the transformative approach advocates for empowerment and brings to light the inequality, domination, and oppression that still exist in the mining industry.

Moving on to the pragmatist view, I employed this approach along with the transformative to understand the complexity of the current problems facing women and their career progression in the mining industry, and this presented an opportunity to offer some recommendations. In this context, this point of worldview became important for all approaches in understanding why women still face exclusions regarding career progression. Moreover, the pragmatist viewpoint became instrumental in approaching the research from a political, social, and historical basis to the conditions of and challenges faced by women in Mining (Lincoln, Lynham & Guba, 2011).

3.3. **Research design and Strategy**

In analysing the support structures in the career progression of women in mining at Amandelbult Mine, the study employed a qualitative research approach. The qualitative design became useful in understanding and record the real-life problems that address career

progression issues for women in Mining from the perspectives of women in the mining industry. Through such a qualitative approach, I was able to understand ways in which Amandelbult Mine management grapples with strategies that ensure women's development and exposure to empowerment opportunities that prepare them and facilitate their career progression within the organisation. As observed by Braun et al (2014), taking this approach also opens a way for an inductive approach and makes it possible for the researcher to link theoretical frameworks with the research. The study entails an exploration of the marginalisation of women at a broader perspective. Adopting a research approach that would allow women to speak from their personal experiences was necessary for allowing me as a researcher to understand their struggles from their subjective experiences.

From a local perspective or world viewpoint, issues around career progression for women within the mining industry are holistic. The study draws from the case study of the Anglo American's Amandelbult mine to understand ways in which the management make efforts to implement policies and practices that promote the career progression of women in the organisation and mining industry, broadly. Although Amandelbult mine was explored as a single case, there were no intentions to generalise the findings since findings from a case study cannot be generalised. However, the findings are relevant and useful to understand the position and situation of women in the mining industry. The study illuminates broader questions of the career progression of women to senior management positions, while interrogating historical legacies of the marginalisation of women and the patriarchal culture that continue to prevail at the mines, and thereby stifling the progress of women. Furthermore, the case study of the Amandelbult mine, while providing in-depth insights of the challenges faced by women at the mine, it illuminates broader questions around the role of management personnel in the mining sector to actively implement policies that ensure the inclusion of women in decision-making structures, and implementation of the development programmes that actively prepare women

to take up leadership positions in the mining sector. Throughout the research, I treat the career progression of women in Mining as a complex social phenomenon that requires in-depth investigation, as the findings demonstrate in the following chapters. I am interested in how management think differently and intentionally around implementing strategies that prioritise women's career progression. As a result, the following chapters take reader through the views and perspectives of the management of Amandelbult mine on their efforts to implement policies and practices that facilitate the promotion of women to management positions within the organisation.

3.4. **Data collection**

During the data collection process, I opted for semi-structured interviews with Amandelbult Leadership Team (ALT) and asked open-ended questions to collect data through Video interviews on Microsoft Teams platform. The interviews scheduled was for one hour for each member of ALT and 11 participants took part in those interviews. The ALT members were the most appropriate to give the relevant data as they are responsible for policy, processes, procedures, and support structures of women in mining in relation to career progression. I followed the semi-structured approach to interviews to align with the proposed thematic analysis. In addition, “interviews are considered to be the most appropriate and effective form of data collection for thematic analysis” (Nowell, Norris, White and Moules, 2006).

I was mindful that I had preconceived ideas with some issues regarding career progression in mining. However, I carefully set the scene in a way that allows respondents to answer in ways that were suitable for them (Creswell, 2014). Setting the scene in a manner that was object and without judgement gave me and the participant an opportunity to engage in a discussion wherein initial questions were modified considering the participants’ responses, and I was able to probe interesting and important areas that arise” (Smith & Osborn, 2003:57). Furthermore,

semi-structured interviews as they were found by Smith and Osborn (2003) to be useful in that they: “facilitate rapport/ empathy; allow greater flexibility of coverage; allow the interviewer to go into novel areas; and tend to produce richer data” (p. 59). According to thematic analysis researchers, these interviews also permit the researcher to make interpretations which reflect the participants’ accounts, based on the subjective responses of the participants, thereby providing descriptive insight, rather than statistical significance (Nowell, et al. 2006; Balogun & Johnson 2004).

Transformative and pragmatist views accommodate the researcher's subjective opinions. Ultimately, it allows the researcher to open enough on stance, theory of knowledge, ontology and axiological biases when gathering data (Garner, Kawulich, 2012). As previously discussed, this research will use the case study to design and adopt the qualitative approach regarding research strategy and data collection.

3.5. **Sampling**

As previously alluded, I was intentional when selecting participants, mainly because of their role as leaders at Amandelbult and their responsibilities in terms of career progression. Therefore, it was critical that I adopt non-probability Sampling, particularly purposive Sampling (Braun & Clarke, 2014). Looking at the targeted participants, it made sense to use purposive sampling because all participants were linked directly to the question and are regarded custodians of women’s career development plans, policies, and procedures for Amandelbult mine. Amandelbult Leadership Team (ALT) must implement all changes and adoptions whatsoever that had to do with women's career progression in Mining. There might be consultation with the Platinum Executive Committee (EXCO), escalation to Group Management Committee (GMC) or other relevant stakeholders during the process. The roles below represent the entire Amandelbult Leadership: There are 15 members of ALT, however,

due to business requirements; only 11 members managed to be part of the interview process. I did not foresee a huge difference in terms of results due to the three participants not being part of the interview because I had most ALT representation. The following table shows you the breakdown of Amandelbult Leadership Team.

Figure 3.5.1: Roles that form Amandelbult Leadership Team

Senior General Manager: Amandelbult Complex	Senior Manager: Operating Model
General Manager: Open Cast	Senior Manager: Mineral Resources management
General Manager: Tumela Mine	Senior Manager: Project Management Office
General Manager: Dishaba Mine	Senior Manager: Social Performance management
Senior Manager: Engineering	Senior Manager: Processing Plant
Senior Manager: Human Resources	Senior Manager: Safety, Health and Environment “SHE”
Senior Manager: Finance	Manager: Protection Services

Source: Researcher’s notes: sampling population

Purposive Sampling⁶ can be subjective, selective, and judgemental. To make provisions for these shortcomings, I selected senior leadership that represent the entire workforce. All responses will be cross-referenced as participants bring different perspectives (Alan Bryman, 2014).

⁶ **Purposive Sampling** is a way of selecting participants based on their area of expertise or their ability to give a reliable view on a particular subject.

3.6. Data Analysis

This study will adopt thematic analysis following the conceptual framework I discussed previously, and the data collected through semi-structured interviews. Moreover, I explored several elements within the research analysis—for example, taking the data from the interview transcripts, searching for similar or contradictive themes, defining them, and making sense of them (Braun et al, 2014). I recorded the interviews on Microsoft teams, then downloaded them and went through the downloaded videos, re-writing the exact responses on word document. I then employed a computer assisted qualitative data analysis software (CAQDAS) and uploaded the typed interview scripts. For this particular study, I used NVivo 12 Plus to qualitatively analyse and code all the in-depth data from the eleven participants within the mining industry who took part in the study, and some have experienced progress in their careers. I created categories and codes based on the three main objectives of the study presented below:

- To examine the roles and responsibilities of ALT in the career progression of women in mining.
- To investigate mechanisms, procedures and policies that enables women to thrive within the mining sector.
- To identify barriers experienced by women in mining and assess working environmental conditions for women.

Thematic analysis⁷ was most appropriate in this study because it allowed me to understand and decode the data received fully. Thematic Analysis is a method that I used to analyse data.

Furthermore, I had the opportunity to allow all individuals to answer according to their human experiences and then sort the data according to perceptions and feelings. I used an inductive

⁷ **Thematic Analysis** – This can be defined as a method that the researcher use to analyse data. In this case, the analysis will be applied in the interview transcripts.

primary way of thematic analysis to process the data. Why? Because I entirely depended on the data provided by participants to have a complete picture of women's career progression in Mining. The data provided also included detailed approaches or accountability frameworks supporting career progression for women in Mining.

3.7. **Validity and Reliability**

In results replication, I intentionally grouped participants to make it justifiable to attain relatively similar data. All participants interviewed for this project are subject experts in their areas and are familiar with changes and policies implemented throughout the Amandelbult complex, including those dealing directly with women in Mining's careers (Golafshani, 2003). With that said, one can argue that their responses can be considered reliable.

On the other hand, the position that all participants hold makes them central in the research question and are the only ones who will provide trustworthy data. Therefore, I was very carefully in the handling and treating of the data collected and I had to make sure that I triangulate related data to ascertain some of the facts, particularly in line with policies and practices. However, noting that the aim of the study was not to prove any claims and facts, but to understand experiences of management in implementing policies, the above sections of methodology and methods are well detailed to allow other researchers to understand the study and make it easier to follow processes for replication and/or transferability purposes. Looking at the research question is easier to decide on the relevant data and ignore that which is irrelevant (Golafshani, 2003).

3.8. **Credibility**

It is fundamental to note that there is always more than one account of a social phenomenon when conducting research. The triangulation of sources of semi-structured interviews and policy documents became very useful for this research as it allowed for cross-checking of some

of the data shared by participants in relation to company policies. Company reports were also analysed as part of document analysis to ascertain progress made thus far and for the purpose of understanding some of the challenges as presented by management. These processes became useful for enhancing the credibility of the study. As argued by John & Hugh (2019), for enhancing the credibility of any study, the researcher should abide by good practices or standards of good research. For this to be possible, the researcher be able to share the research findings in ways that will allow the respondents to validate the data as part of their contribution.

3.9. **Dependability**

For credibility purposes, I have recorded all relevant data and processes undertaken throughout the research as indicated on the sections above, for interested parties to review and validate. It is important to note that this study has been guided by ethical principles of both the University of the Witwatersrand and Amandelbult mine. As such, the data collected, and storage of the data has followed similar guidelines with emphasis on confidentiality and anonymity. However, in any case where proof of the processes of this research be required, In this case, all recordings and interview transcripts will be made available for auditing.

3.10. **Positionality**

The researcher works for the Early Talent team that looks after career development for young talent, which has also influenced my interest in career progression within Mining. It is important to note that I have worked at Amandelbult mine for two years and I have maintained a good relationship with the senior secretary. This relationship was very useful in negotiating access to the organisation to conduct this research.

However, I do not have any direct or indirect influence on the participants who were sampled for this study. All participants are senior managers and general managers that participated voluntarily based on the understanding of the study, its aims and purpose. However, as the

researcher, I had to be critically reflexive of my role as an Early Talent Officer to make sure that my own challenges and biases did not influence the views and perceptions that I hold on to career progression. To mediate this, I approached the topic from an exploratory position as someone wanting to learn and to be informed from a management perspective.

3.11. **Limitations and feasibility**

The problem of career progression for women in Mining is an international one. Therefore, I did not aim to generalize the findings internationally or local. Thus, the study will only look at Amandelbult Mine, which means that the results will be specifically for the Amandelbult mine within the platinum business of Anglo-American South Africa.

As previously mentioned, I had good relationship with the senior secretary of the General Manager's office, and this allowed for a flowless process in terms of the approval and setting up Microsoft calendar invites to conduct the research interviews. However, there were delays when it came to interviewing participants on time, mainly because of rescheduling to another available date due to business requirements.

There were several factors that caused the rescheduling; for example: urgent meetings on site, breakdown of equipment, sick leave and so on. It would have been great to have the interviews face to face but due to Covid-19 restriction to get on the mine at the time, I opted Microsoft teams. Why? Because if there is an emergency and participants wish to reschedule, it might be possible to still interview on the same day. Also, the Microsoft video interview still gives the same benefits that I would have gotten when interviewing face to face; for example, I was still able to observe facial expression, non-verbal cues, various emotional and behavioural cues.

3.12. **Research Ethics**

The data that I gathered through the interview was treated with outmost confidentiality to protect participants against any harm and mitigate misconduct. I developed a research protocol and disclosed all the process that I followed and presented it to the research committee at the University of Witwatersrand for review.

The developed research protocol I followed assured all participants that no harm will arise due to participating in the study. Their participation will remain anonymous as the survey intends to uphold confidentiality. I am mindful that Amandelbult Leadership team consists of very few individuals and as such, confidentiality and anonymity might be compromised. However, I explained that dilemma to participants and allowed for nominations of other employees at the same level of work to participate as ALT members if the current role holder was not comfortable. Therefore, to a certain extent confidentiality was guaranteed as I allowed representation of ALT role by any member in the succession plan of the leadership pipeline. Such an approach allowed the current role holder to assign another individual in the succession plan to take part in the interview and represent the role. For example, Senior General Manager can assign the next individual in the succession plan to take part in the interview.

I presented a detailed consent form to all participants and required them to sign as a form of agreeing to be participating in the study. The consent form included the objectives and the purpose of the research and made it clear that participants can withdraw from participating at any time. I made this option intentional as the participation was voluntary. All protocols in place help me to abide by sound principles of ethical research. I made sure to store collected data in a cloud-based file accessed through a password. Finally, the research ethics committee granted me the ethical clearance to continue with the study (ethics certificate number WSG-2022-26).

3.13. **Conclusion**

In conclusion, this chapter discussed the research approaches to be adopted to answer the research question. Also, the researcher discussed Sampling and the process of analysis as methods of data collection tools and their application. Lastly, the researcher highlighted the study's limitations, feasibility, positionality, and ethical considerations.

CHAPTER FOUR

4. PRESENTATION OF FINDINGS

4.1. Introduction

The report is an analysis of support structures in the career progression of women in mining at Amandelbult Mine. The researcher employed a computer assisted qualitative data analysis software (CAQDAS). For this particular study, NVivo 12 Plus was employed to qualitatively analyse and code all the in-depth data from the eleven participants within the mining industry who took part in the study, and some have experienced progress in their careers. Categories and codes were created based on the three main objectives of the study presented below:

- To examine the roles and responsibilities of ALT in the career progression of women in mining.
- To investigate mechanisms, procedures and policies that enables women to thrive within the mining sector.
- To identify barriers experienced by women in mining and assess working environmental conditions for women.

Additionally, the report assesses the importance and significance of the data provided by all the participants who took part in the discussion in relation to the objectives and literature employed to guide the analysis

The data analysis covers views provided by eleven participants who took part in the research study. At the time of the interviews, all the participants worked at Amandelbult, Dishaba and Tumela. The research population comprise of 2 black females, 3 black males, 5 white males and 1 Indian male demography as indicated in Table 1 above. Nine of participants work within Amandelbult, and the remaining two, one is from Tumela and the other from Dishaba. Interestingly only one of these participants has a minimum of diploma as the highest qualification whilst the other ten participants have degrees, masters, and MBAs. The participants have been in the mining industry for more than ten (10) years.

4.2. **Contribution of participants**

Table 2 below shows the number of participants (files) who took part in the study, the number of codes (sub-themes) each participant contributed to, and the number of references (quotations) taken from each participant to illustrate the created code.

Files	Codes	References
Participant 1	48	100
Participant 2	44	125
Participant 3	40	103
Participant 4	32	60
Participant 5	39	106
Participant 6	31	69
Participant 7	40	90

Participant 8	40	98
Participant 9	35	71
Participant 10	32	57
Participant 11	46	125

4.3. **Data analysis process**

The data analysis employed a qualitative interpretive paradigm. I conducted eleven in-depth interviews with senior management working in the Amandelbult mining complex. The interviews were recorded by myself and later transcribed by verbatim to apprehend the meaning of the data provided by the participants with regards to the available support structures in the career progression of women at Amandelbult Mine. After verbatim transcription, word documents were created. The word documents were therefore reviewed, and all the typos were removed to ensure accuracy when conducting data analysis. The reviewing process of the transcripts was important as it created a deeper familiarity with the data through careful listening, reading, and re-reading which improved trustworthiness of the study (Tuckett, 2005: 4).

Furthermore, as a way of safeguarding privacy, the names of the participants were removed. Word documents were created under the pseudonyms “Participant 1” to Participant 11” as a way of preserving and protecting their original identities (Moore, 2012: 332) while retaining the data that addressed the objectives of the study. The transcribed data was easier to study for categories and codes.

Thematic analysis was employed as the method for analysing the data. Braun and Clarke’s (2006) thematic analysis provided the conceptual frame on which data provided by the

participants was evaluated and categorised. Thematic analysis relies on an inductive and detailed process intended to identify, scrutinise and classify themes from written data in a manner that is distinct and trustworthy (Guest MacQueen & Namey, 2011:15). It assists in taking parts of texts and classify them into codes before grouping them into different categories and larger clusters known as themes. To enable this, the data collected from participants was therefore organised and uploaded into NVivo 12 Plus software for coding. The codes created were further grouped into categories. Themes were then created, refined, and finalised following the inductive process of data analysis by allowing the data to “speak for itself.”

The researcher followed five stages of data analysis suggested by Braun and Clarke (2006). I then familiarised myself with the data and transcribed it while noting important ideas. Codes were then generated through a systematic re-reading of the data with an eye for interesting views and recurring points with regards to career progression of women in mining. The data was also organised in terms of these interesting points. These stages are described in the table below.

4.4. Thematic Analysis (Braun and Clarke, 2006)

Phase 1	Description of the process
Familiarizing yourself with the data provided by the participants	Verbatim transcription of the data (if necessary), reading and re-reading through the lines and noting down initial ideas.
Generating initial codes	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.

Searching for themes	Collating codes into potential themes, gathering all data relevant to each potential theme.
Reviewing themes	Checking if the themes work about the coded extracts (Level 1) and the entire data set (Level 2) generating a thematic ‘map’ of the analysis.
Producing the report	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extract examples, final analysis of selected extracts, relating back to the analysis, the research question and literature, producing a scholarly report of the analysis.

4.5. **The process of cleaning and coding the data**

The process of cleaning and coding the data for analysis involved a systematic review of eleven transcribed interviews. During the preliminary reading, I highlighted significant and relevant sections of the text and attach labels to index them. This was for the purpose of simplifying the data analysis process (Creswell, 2015; King, 2004; Nowell et al., 2017). Using NVivo 12 Plus, at the initial stage, I scrutinised the transcripts and checked through lexical queries such as word frequency, word cloud and text search queries as a way of gathering and exploring subcategories of the data provided. The lexical queries are conducted to augment the data analysis process. (See word cloud and word trees attached at the end of the report)

4.6. **Trustworthiness and validity of the data analysis process**

Although some researchers claim that the concept of reliability is irrelevant in qualitative studies (Golfashani, 2003), for this study, however, I considered reliability and validity factors

in the design of this study. The nature of qualitative research does not lend itself to statistical calculations of validity; therefore, alternative strategies were employed to enhance the reliability and validity of qualitative findings, as recommended by Brink (1993). To ensure trustworthiness and rigor in this study, I involved a coder in the coding process as a way of checking the consistency and reliability of the data generated as argued by Webber (1990). Having a primary coder for this study, reduced flexibility in the process of coding the data, particularly interpretive and pattern coding. The primary coder also reviewed the codes and themes to determine the quality and effectiveness, based on evaluation of the transcripts, as recommended by Turner (2010).

This however, helped to evaluate the coding frame with the coder before reaching a consensus as a way of refining the coding system. Hence, adding accuracy and validity to the data extracted from the codes, categories and themes created (Bazeley & Jackson, 2013:93). Furthermore, the data were checked for representativeness by evaluating the coding categories and the examples used in the research results, as recommended by Brink (1993:35).

4.7. **Coding process**

Saldana (2015) indicates that coding is just a way of organising data through concepts emerging from the data set. This usually happens when the data is scrutinised, and the codes created are defined from the entire data collected. The coding method followed Saldana's (2015) coding manual. In this study, the researcher created themes based on the possible available structures for the career progression of women in mining at Amandelbult Mine

For this study, I employed open coding through assigning initial codes or labels. Codes are described as "tags or labels for assigning units of meaning to the descriptive or inferential data compiled during a study" (Fereday & Muir-Cochrane, 2006). By following Saldana's (2015) first cycle coding, included are coding methods such as descriptive coding which summarises

in a word the basic meaning of a passage or sentence of qualitative data. Also, in Vivo coding was used which is using a word or phrase that is short from the actual language found in the qualitative data provided by the participants. After the formation of the initial codes, I organised data systematically into a codebook according to their categories. The initial number of codes created was eighty-six. The codes were however refined, some were merged, and others collapsed, and some redundant codes were immediately deleted to avoid repetition and keep the analysis relevant. The final number of codes created was fifty-three.

4.8. **Brief analysis and interpretation of the themes generated.**

The main themes generated from the data analysis process are presented in the Table below. The table also indicates the number of sources and the number of quotations (references) extracted from the participants (files) to support the formation of each theme. As soon as the codes, the categories and the themes were identified, the following step included the interpretation of the data provided by the participants. The process of making sense of the data formed the core of this study. Importantly, I constantly read and re-reading the main research questions as a measure to check if the codes created are in sync with the objectives of the study.

It is however important to note that, to a certain extent the codes created from the analysed data are often formed by the researcher's personal interpretations, driven by "the way they view the world around them, their culture, backgrounds, history, perceptions and experiences" (Creswell, 2009:189). Hence, making sense of the data is partly made through the framework with which the researcher uses to interpret social reality. Therefore, all this put into consideration influence the nature of the final interpretations that emerges from the study (Creswell, 2009).

4.9. Main themes generated.

Category (Theme)	Files	References
Leadership role in women's career progression	11	48
Mechanisms, policies, or structures for women career progression	10	33
Effectiveness of the mechanisms, policies, and structures	11	42
Barriers to women's career progression	11	46
Time taken for women to progress	10	60
Mining Environment	11	35
Racial disparities at Amandelbult Mine	11	34
Available support for women's career progression	10	29
Solutions to challenges faced by women	9	39

The table above shows the nine main themes that emerged in the study centred around the research questions of the study. Each theme contains codes that identify connections in the data

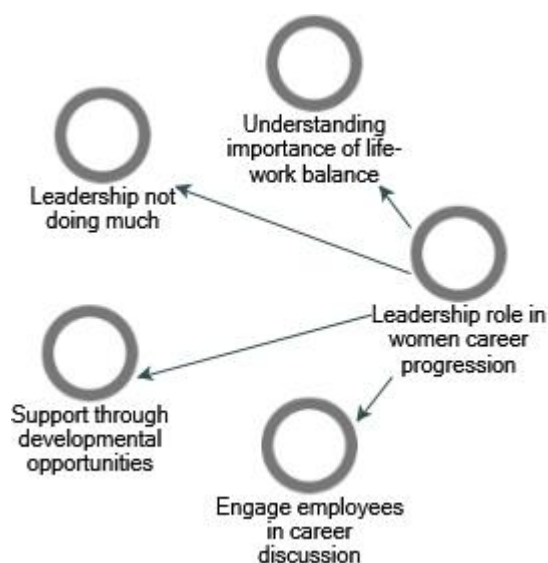
and each code contains a supporting quotation to illustrate and support the meaning of each code created.

4.10. **Analysis of Data**

This section analyses the results of the study along the nine themes (categories) and the subthemes that emerged during the coding processes. In this study, themes were designed to approximate the research questions. The discussion is therefore structured to address each of these research questions in succession. The results add to existing knowledge on the existing support structures in the career progression of women in mining at Amandelbult Mine in particular.

4.10.1. **The role of leadership in women's career progression**

Through the data analysis process, the senior management who took part in the research study indicated that the leadership team do have diverse roles that they play in the career progression of women in mining, especially at Amandelbult mine.



4.10.2. Engage employees in career discussion.

Data shows that most of the team leaders in the Amandelbult mine engage employees in career discussion. Most of these participants indicated that their role is to make sure that the development and the enablers for career progression does get followed according to procedure. This is reinforced through *Participant 1* who said that;

Remember, people must raise their hands to the occasion, and they are opportunities where they are challenges, if you see there is a gap you must step up and say I can close the gap for you here and I can help you improve here and it's a sign that shows you want to grow and that is not happening. So even when you engage in career discussion, people don't even know what their next career move is, for them is about promotion and salary increase (*Participant 1*, 08/26/2022 on Ms Teams).

From the data outlined above, it is clear that the leadership team is very critical. Participants mentioned that, at times employees become “frustrated” and that might affect their progression. Hence, team leaders are there to motivate them and engage them in career discussions. *Participant 11* asserted that,

I have started the process of Manager Once Removed conversations (MOR) with employees of my direct reports. So, let me engage from the leadership level, personally. This helps so that I can get to understand what the frustration of each individual is or what is the biggest challenge that each individual have. There are those that says I am okay with where I am you

know? Take me through the internal programmes that you have for me to be somewhere, I am happy (*Participant 11*, 08/26/2022).

Supporting the assertions above is *Participant 5* who said that the role of a good team leader is creating conversation and “Giving people the right development to enable them to progress through the ranks but our role also includes not to promote women into a role when they are not yet ready or the best for that role” (*Participant 5*, 07/19/2022).

It is however clear that engaging employees in career discussion is one big role that is played by the leadership team. *Participant 8* emphasised that “So, I’m a big fan of making sure that there’s constant engagement between myself and all members and the finance team about career development” (*Participant 8*, 08/30/2022). This data assist in taking employees through internal programmes where leaders get to identify suitable programmes that gives employees “a bit of confidence that will be able to equip them with certain skills that we feel will help you accelerate faster than the way you are doing” echoed (*Participant 11*, 08/26/2022).

4.10.3. Support through developmental opportunities

Data shared by the participants showed that another role of the leadership team in career development of women in mining and in particular at Amandelbult mine is supporting employees through development programmes or opportunities that they might not be aware of. Therefore, it is an element of providing support to employees to cope in their various roles and journeys at Amandelbult as indicated through *Participant 3* who said,

So, my responsibility is to develop the people, especially the ladies to make sure that when I appoint them that they will cope and luckily, I was for many years in the police the first 12 years in my career I was involved in training and also the head of training at one of the training centres. So, development and training were also always very close to my heart when I arrived at

Amandelbult's Protection Services. So, it was very easy for me to make that switch to make sure that I'm taking them with, and I developed them as good as I can, so from the two ladies that I've got now is 2 D band one's. I can appoint one of them anytime as I need to (*Participant 3*, 08/31/2022).

Buttressing on the above point is *Participant 7* who is of the opinion that women in mining should be encouraged to study as a way of developing their selves and careers. The participant said,

oh, as a leader, for me education is more important. I've always lived by that, you know, philosophy that education surrounded, liberates you. So, I'm always encouraging people to study and I'm always, you know, when there are issues around the budget, I'm always in terms of technical, I believe technical should not compromise in terms of training because it's always at the forefront of everything and we always develop because things are always changing on the technical front. So, for me technical and training goes hand in hand. You cannot say, you know, we need to cut costs and cut costs and the training on the technical (*Participant 7*, 08/26/2022).

Concurring with the above point is *Participant 9* who also indicated that "Look, I think what is more important is that we need to ensure that women are given equal developmental opportunities as their male peers when it comes to issues of development. We try to give them exposure to learning opportunities and also being allowed to act, you know, and decision-making roles. And to make them feel comfortable in their roles by ensuring that their inputs are valued within the business" (*Participant 9*, 08/30/2022).

It is important to note that it is the responsibility of the leadership team to develop their own employees, to get them on standard and to appoint them as well so that they will continue to

work at Amandelbult and grow. As reinforced through *Participant 10* who said, “I only appoint a few people from the outside in my time here because I strongly believe that I must look after my people first, even if the others are also from platinum, doesn't matter” (*Participant 10*, 08/31/2022).

4.10.4. The importance of life-work balance

Through the analysis process, some of the participants highlighted that understanding the importance of work-life balance is one of the most challenging roles they have when it comes to women career progression in the mining industry. Participants indicated that it is unquestionably that women who are working in mining have a lot on their plates compared to their male counterparts. Hence it is significantly important for leaders to understand that these women need that work-life balance for them to progress well in the industry and in particular at Amandelbult mine. *Participant 6* said that,

I'm not sure if I fully understand, but obviously my role is to ensure that the talent management process works correctly and that's sort of we identify, we review and we make sure that people are given equal opportunities depending on their needs in their career progression but are given the support to have a balance between work and family life (*Participant 6*, 09/13/2022)

Participant 8 concurred that;

I think the other role, I mean specifically I guess to the point of females is just being understanding to the dynamics. I think for the most part, I think if something has come on my desk, I have the understanding of what it's a family situation? Or, you know, someone asking to work from home? You know, because they've got other commitments which they need to, you know, involve themselves into. So, it's at a minimum that's the role that I play,

understanding that females need to balance work and family situations especially when they get pregnant and when they give birth (*Participant 8*, 08/30/2022).

It is important from the data provided to note that social dynamics of women working in the mine be understood as a way of creating a pathway for them to progress at Amandelbult mine.

4.10.5. Efforts of the leadership team

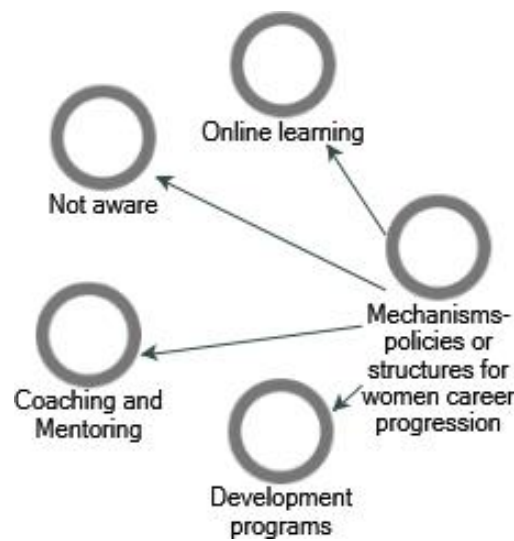
It is interesting that one of the participants admitted openly that leadership team is not doing much in terms of career progression of women at Amandelbult. *Participant 1* stated that:

No...We are not doing much; I have realised that Anglo American communicates, like now; its women's month – everyone is driving Gender Based Violence (GBV). It will be done and dusted next month when we do culture and heritage. So, it's not an agenda item that you will always have, like your people agenda is not an agenda. In every meeting, where I come from you are supposed to have succession planning on every management item, you are supposed to do your performance management with the employees. You are supposed to have your performance update with your team – that is not happening (*Participant 1*, 08/26/2022).

4.11. Mechanisms, policies, and structures for women's career progression.

Data extracted from the senior management who participated in the research study showed that they are several mechanisms, policies and structures available for women's progression at Amandelbult mine. The participants mentioned the following mechanisms, policies and structures in place: online learning, coaching, development programs and mentoring. It is also

important to note that some of the senior management interviewed are not aware of any of these existing structures as shall be illustrated below.



4.11.1. Online learning

Data provided by some of the participants indicate that online learning is a structure in place to assist women to further their studies through enrolling for short courses, for them to be certified. These platforms according to the participants gives women more time to study. This data is supported by *Participant 11* who mentioned that, “If they are opportunities for us, we give them additional time to go study, let’s have those support structures in place, we have online learning where they do not need to go anywhere but they can study while at work or at home” (*Participant 11*, 07/19/2022). Reinforcing on this point is *Participant 1* who stated that:

We have the online learning. But I don't think we understand the application part of it. And also, with the educational, where you find people; I will give you a typical example: A person wanting to do a master's degree but if you look at the cracks of the person; in their simple jobs that they have to do, they can't even apply their minds like a master's students (*Participant 1*, 08/26/2022).

It can be noted that these structures are indeed available but some of the employees are failing to utilise them to their advantage as indicated by the excerpt from *Participant 1* above. This is also buttressed through *Participant 8* who emphasised that structures are there on paper but in reality, there is nothing tangible that is helping women to progress in their careers. The participant indicated that,

They are these Anglo-American online courses available. So, I think on paper there may be structures. But outside of people going on courses, there's nothing that I'm aware of that's tangible and one can point to and speak to and say because you're on the talent pipeline, you know from the Mine HR team, this is kind of been your progression and the Mine supports you, that I haven't seen. So, I haven't seen any action with that (08/30/2022).

4.11.2. Coaching and Mentoring

Another existing structure mentioned by participants is availability of coaching and mentoring of employees in general and women in particular as a way of enhancing their career progression pathway. According to the data provided, this coaching and mentorship structures are there to prepare employees properly for next step and next level. *Participant 3* pointed out that;

I have seen it so many times in our organisation, especially at protection services where there was total lack of succession planning because the

moment that the manager is leaving, he leaves a hell of a gap. And then it's clear that failure is actually due to him because he didn't prepare anyone. Since I arrived here at Amandelbult, my motto is always - I will only appoint people from other platinum operations in extreme cases. 95% of the time, I want to appoint my own people, that I coached, otherwise I will see myself as a failure (08/31/2022).

Reinforcing on the above point, *Participant 4* noted that, “We ensure that we track and monitor progression from women by mentoring and developing talent two layers below us.” And *Participant 9* further asserts that,

Look, I think the structure that I have encountered at Anglo American it's the mentorship program. I think you know, one of the agreements you know is to really support people by mentoring them and Anglo American does, if you know, provide that service, you know and that structure for one to go through a formal mentorship program. So that's basically the one that I'm aware of, you know that I can use as a supporting tool. The rest I have not come across some of these tools that we can use to assist (*Participant 9*, 08/30/2022).

4.11.3. Development programs

Data from Amandelbult mine shows that development programs are another available structure used by the organisation to enhance career progression of women. Most of the participants indicated that in these development programs, senior management do identify different talent and they do nominate employees for different programs and post nominations. *Participant 10* explained that,

In terms of our development programs, we have development programs within Anglo American, not just Amandelbult, but um, definitely it's part of our discussions and considerations when we do talent identification and Amandelbult to look at candidates for those programs and nominations. I have nominated two of my direct reports and manager once removed reports for those programs, those are some mechanisms we have (*Participant 10*, 08/23/2022).

Supporting the above claim, *Participant 11* clarified that,

There are a whole lot of other development programmes, but it's not something like for instance: they go through the current programmes that we have through the company; I am trying to remember the names (07/19/2022).

The above points are supported by *Participant 2* who echoed that, “For example, we have structures that assist women to have informal conversations around their different interests of career development – so I think that is happening already so that light is definitely being shined at site” (10/06/2022). From the data provided, it is the leadership’s responsibility to develop employees through programs available as pointed out by **Participant 4** who stated that;

We have women in mining targets that we set and strive to achieve. We also have fast tracking programmes that gives women the opportunities to progress faster than normal through their career paths (09/05/2022).

Furthermore, contributing on the idea of the role of leadership in advocating for the career development of women through development programs, *Participant 7* pointed that, “one of the structures that I love, yeah is the programs that we have, the development programs you know” (08/26/2022). Importantly, some of the participants mentioned the existence of

transformational policies as a way of enhancing career progression of women. *Participant 10* highlighted that,

In terms of policies, we have our targets for transformation um within Amandelbult. And we have structures on Amandelbult as a whole, we also have the transformation forum that looks specifically at these targets and identifying, you know, gaps and discrepancies and opportunities for everyone (*Participant 10, 08/23/2022*).

4.11.4. The role of awareness

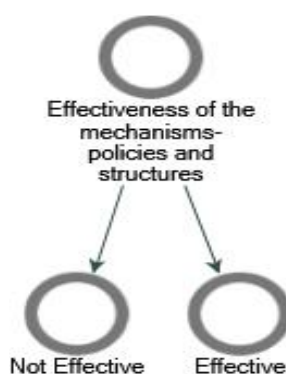
Evidence from Amandelbult mine suggests that awareness also plays an important role in informing employees about programs that are available for development within the organisation. One of the participants indicated that they were not aware of any mechanisms, structures or policies that are in place at the mine for career progression of women. *Participant 8* noted that,

I'll be honest, I'm not. I'm not aware of anything to be honest. Umm, I'm not aware. I know this is like there's a Human Resource Department team and there's mention of people that are on the pipeline. But I'd be lying if I said that means anything, or I've seen it mean anything or translate into anything (*Participant 8, 08/30/2022*).

4.12. Mechanisms, policies, and support structures

Understanding the effectiveness of mechanisms, policies and support structures is key for understanding challenges associated with the career progression of women at the Amandelbult mine and the mining industry broadly. One participant unpacked the different mechanisms,

policies, and structures in place at Amandelbult mine that are essential for understanding their effectiveness in the career progression of women in mining. Data shows that some of the participants were of the opinion that these aspects are effective and are helping women to progress. Others opined that they are not effective as they are not contributing anything towards progression of women in mining, in particular at Amandelbult mine.



Evidence shared by some participants suggests that some of the policies, mechanisms and support structures have been effective in terms of enhancing career progression of women at the Amandelbult mine. *Participant 2* mentioned that:

Yes, yes, the structures are working well. So, we have the Manager Once Removed “MRO” system. This system helps us to log all the career development conversations and the training and also career progression planning for the employee. That system sits on our Talent Management profiles “Navigator+” and myself as the MOR of my team, I have the functionality in my profile to log the agreed commitments in the profiles of employees who are in my team structure (*Participant 2*, 10/06/2022).

It is clear there is anxiety around sending women to some of these development programs as some of the leaders fear that once they are equipped with skills, they might lose their team members through promotion. As indicated by one participant that the women are sent to “Connect Programme and now they have this label on them that they are top talent and it’s a matter of few months now before I lose them to Head Office” (*Participant 2*, 10/06/2022). Echoing the above point, *Participant 3* indicated that the programs are working, however, to a lesser extent. “Yeah, I think the structures are working. As I say, I think the only thing is I don't think there's so many opportunities for all women to utilise” (*Participant 3*, 08/31/2022).

Furthermore, *Participant 4* reinforces the above assertion by stating that:

We have seen good results from these structures. Good career progression made by many good women. I have dedicated fast tracking programs for women where we recruit more women than what we have positions for. So, a good example in the recent past years is we were looking for production manager in mining, which is a 3.1 appointee. And we went out to the market to find 3 ladies that we didn't have a production manager position for, but the company opted to carry these people over complement (*Participant 4*, 09/05/2022).

Participant 9 concurred that,

I think mentorship program does work. Again, it goes with the eagerness and that hungriness in terms of what one wants out of the program. It does help, you know to help someone to progress in their careers in that they get to have a Big Brother, so to speak, you know, to guide them in their careers rather than them trying to do it on their own.

Interestingly, although some participants have indicated that the mechanisms, support structures and policies in place are effective, some have suggested otherwise as they cite

challenges associated with processes. Some of the participants are of the opinion that these structures are there and they are not effective as leadership and management struggle with implementation. *Participant 1* pointed out that,

we struggle with implementation, and we need to be intentional on the execution side to make sure that all the learnings presented by various structures are applied on a practical level which is not being done now. They are lacking application (*Participant 1*, 08/26/2022).

Surprisingly, *Participant 11* added:

Having all those structures doesn't guarantee promotion in the Mining industry and I think honestly, there's still quite a lot of room for improvement. I think we all have good intentions, but I don't see that, and I think maybe it's because everybody gets married on what they're doing, and everybody goes in and figure out if this work (*Participant 11*, 07/19/2022).

This statement above is supported by *Participant 2* who also contended that the structures and policies in place are not effective in the progression of women. The participant argued that indeed, women are being looked after and valued at Amandelbult because of existing committees that are created for that. However, the participant reiterated that:

.... if are you asking me if that makes women get the next role? I would say probably not. I think the reason why women are not moving quicker is because the pace at which Anglo American is moving is slow. So, it's like the same as the poverty discussion. You can't say now yes, but we now 50 years down this line of the equality thing, why are we still having inequality? Because the top portion is not moving quick enough for the bottom portion to be pulled up (*Participant 2*, 10/06/2022).

It is important to note that most of the participants acknowledged that structures are there at the mine but there are still inadequate in assisting women to move forward. As *Participant 5* argued, the numbers of women moving up the ladder are disheartening as shown through a “4%” increase from “10% to 14%” after being away for many years. The participant said, “I think structures are there but are they effective? No”. The participant further explained the reason behind the big “NO” by stating that,

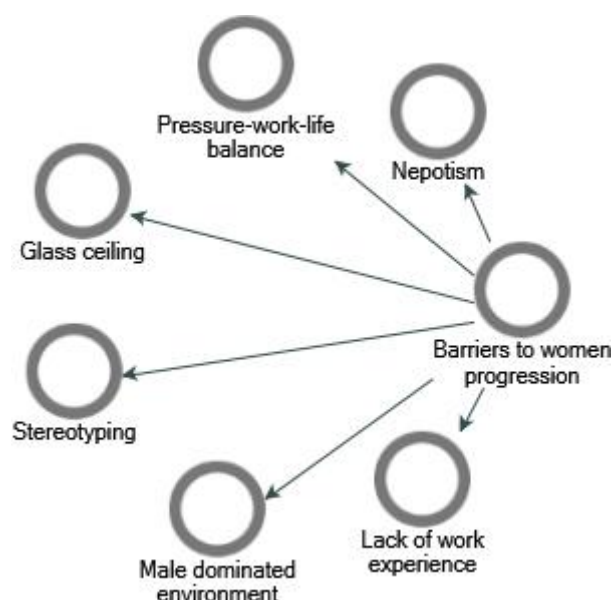
I would like to see in an environment where we have what 50% female. I would like to see that manifesting itself in the workforce and all that. So, I think our targets now is what is 30% but am not sure. Umm, I know the last time it was something like 10% or so, but I think now either up to 30% I have to be corrected and I think we're sitting at what 13, 14% women representative in the work. The last time when I was in Anglo, it was around that 10% after so many years of being there come back with only moved by about 4%. So, to me this is yes. There is work that is being done and which is good. But we need to do more (*Participant 5, 08/30/2022*).

From the evidence presented on the above section, one can already map the contradictions presented by policies, support structures and mechanisms that are meant to support women for career progression to senior leadership positions. While some participants have indicated that these mechanisms are effective, evidence suggest that there is need for improvement. Other participants have outright indicated that the polices and mechanisms have not been effective at all.

4.13. **Barriers to women’s career progression.**

Senior management interviewed for this study highlighted a couple of barriers which are regarded as huge career progression stumbling blocks for women at the Amandelbult mine.

These challenges include, but not limited to lack of work experience, male dominated environment, nepotism, pressure of trying to balance work and family time, being stereotyped and glass ceiling as shall be explained further below.



4.14. **Lack of work experience**

The views shared by the participants suggest that lack of work experience for some women employees in mining is a barrier when it comes to their career progression especially in technical roles. The participants were of the opinion that women do flourish in non-technical roles as they bring the balance they need when it comes to work and family life. *Participant 4* emphasised the argument by stating that:

You know, I think so. I think attracting women in a technical role is definitely a bit of a problem because I think it's much easier for ladies to also get good progression through a non-technical role. And at least you have a lot more flexibility in terms of time, managing your family, all of those things. Where- in the technical roles does put a limitation on that because it's difficult for a

lady to every second day on the technical role where you manage Operations for instance to not be able to be out for a month or two or three for different reasons that comes with women and the experience needed, most they do not have (*Participant 4*, 09/05/2022).

The views shared by the participant above were also echoed by *Participant 6* who also noted that there is a gap when it comes to work experience in technical areas for women at the mine.

The participant claimed that,

Well, I think it's for me. It's just a lack of time and actually experience that is affecting women. But I think generally here the leadership doesn't know quite well what all these procedures are to support women in mining through their careers (*Participant 6*, 09/13/2022).

Concurring with the challenge on lack of work experience, *Participant 2* stressed that competency is key to career progression and if women are not competent there is no chance for progressing in their careers. The participant said,

Look for me, it always comes down to core competencies. So, I will not. I will not appoint a female that can't do the job that doesn't have the core competencies. So, I would definitely say the females coming through now must have the core competencies. I think core competencies will remain a big thing (*Participant 2*, 10/06/2022).

It is clear that for women to progress into senior management positions, there is need to invest in skills development so that they could acquire the technical needed for them to occupy these critical positions. However, evidence from the participants provided earlier suggests that there are still challenges when it comes to skills training at Amandelbult mine. This makes it interesting for understanding the efforts of the management and leadership team where they

seek to apply policies that seek to empower women to be promoted into senior leadership positions.

4.15. **Male dominated environment.**

The extensive literature reviewed earlier has shown that historically, the mining industry evolved as a male-dominated space, and it continues to be even to date. Evidence provided by participants for the study shows that the mining industry has not progressively evolved to accommodate women especially in leadership positions. As many participants have noted, mining is still being regarded a male “job” hence the environment is male dominated. This becomes a barrier for women to progress because some of these men have not accepted that equality is real in the workplace, and they continue to fail to integrate women and accommodate them on what they consider to be their spaces. As stated by *Participant 2*:

So as long as it's still men in those positions and they haven't moved yet or men don't get the opportunity to go somewhere else, the men now block that career progression of the women. So, I'm told that sort of takes time to move through. You will probably struggle a bit to fill the vacancies with women (*Participant 2*, 10/06/2022).

Supporting the above claim, *Participant 6* mentioned the prevalence of prejudice in this male dominated environment that affects the progression of women to senior level of management. The participant noted:

I like to say that sort of from a policy and official point of view, there should not be barriers, but I think there is still quite a lot of...you call it prejudice, maybe. You know, sort of generally male dominant environment, that sort of women are not automatically seen as sort of progressing to higher levels. Umm, so I think there is let's say bias as well. But that is something that I

think Anglo American is really trying to breakthrough (*Participant 6*, 09/13/2022).

From the above excerpt, it can be noted that there still exists some sort of unconscious barrier, where often men maintain the privilege of deciding on a promotion. Furthermore, *Participant 8* claimed that,

Yes, I think the barriers are maybe sometimes...Look, I think the reality of it is that we still live in a very kind of patriarchal kind of world. Where, you know, women are considered caregivers, you know. The wife...Umm, she looks after the children (*Participant 8*, 08/30/2022).

As argued earlier, male dominated environments have not been easy for women, however, some participants still have hope that Amandelbult will transition to “open more opportunities for women to occupy, you know...roles within Amandelbult mine” echoed *Participant 9*, 08/30/2022).

4.16. **Nepotism**

Nepotism remain one of the major challenges cited by participants as hindering the progression of women to senior positions at Amandelbult mine. As noted by two participants interviewed for this study, nepotism is one of the challenges that some of the women at Amandelbult mine are facing resulting to them being stagnant in the same positions for years. *Participant 11* stated that,

And, I think those dynamics of nepotism, if you need to put it in that way, will always be there but we need to really deal with them as they are affection some of the women here. So how do we deal with them? Is that we need to put our processes right, to be, that is, through the interviewing process, which

sometimes it becomes very subjective. You know because it's really not full proof type of thing (*Participant 11*, 07/19/2022).

Supporting the idea of nepotism as a challenge, *Participant 6* also believe there is that form of bias when it comes to opportunities within the mine. The participant mentioned that “But I still believe there is an unconscious barrier, where often its males deciding on a promotion. With unconscious sort of...well, it's a bit biased” (*Participant 6*, 09/13/2022).

Leaving the privilege of deciding on promotion in the hands of men would certainly continue to perpetuate structures of inequality as men have not fully accepted the presence of women in mining, particularly in strategic positions. It is therefore not surprising that promotion opportunities will favour men while being biased against women. Men will certainly promote their own, while landing themselves to forms of unconscious biasness.

4.17. **Pressure-work-life balance**

Data provided by the senior management who took part in the research study indicated that the pressure of trying to create a balance between work and family life for most women is a stumbling block when it comes to career progression. Evidence provided suggest that most women working in mining feel overwhelmed with work and experience the pressures when they get home. Some of these women are struggling to focus on their studies and some of the managers are trying to “understand that the role of women at home and the role of men at home differs drastically” echoed *Participant 1*, 08/26/2022).

Reinforcing on the above point, *Participant 2* emphasised that:

Women in technical field prefer to go to roles that are not heavy lifting, ideally roles that you must sit behind a computer. You have women that just say they have kids to raise, I can't be in production, it's just too long hours.

Can't put my kids at like, 2:00 o'clock or 3:00 o'clock or 4:00 o'clock in the morning bus or having someone take them to school because I need to be able to go to the mine because I'm working production. Because of this, a lot of women don't make it to production manager or General Manager level (*Participant 2*, 10/06/2022).

Participant 4 concurred that,

I think attracting women in a technical role is definitely a bit of a problem because I think it's much easier for ladies to also get good progression through a non-technical role. And at least you have a lot more flexibility in terms of time, managing your family, all of those things. Where-in the technical roles does put a limitation on that because it's difficult for a lady to every second day on the technical role where you manage Operations for instance to not be able to be out for a month or two or three for different reasons that comes with women (*Participant 4*, 09/05/2022).

4.17.1. Stereotyping

Stereotype surfaced as another barrier that some of the women working in the mine face when it comes to career opportunities of progression. Most of the participants indicated that some of the technical roles require male stamina in comparison to women. As expressed by *Participant 1*,

Okay, let's be realist, in the mining environment, some jobs are still mining related in terms of the stamina required to do them. When we said we wanted women underground, we didn't have a plan in terms of what would that mean. The issue there is around work, remember when we said we wanted to be equals? We want to be equals in everything, not only when it suits us. So,

these are the barriers, to say, some roles are for men... (*Participant 1*, 08/26/2022).

The excerpt presented above shows that indeed women are stereotyped into roles that will discourage them from progressing professionally. Basically, women occupy positions that require soft skills such as finance and human resources. *Participant 11* explains that:

I think women in mining are much more populated into those spaces which are finance and human resources world and all those. We dominantly sort of like you know, put them in those roles. So, I don't want to focus on those because they are pretty much obvious, ... (*Participant 11*, 07/19/2022).

The views expressed on issues of women occupying positions that require soft skills is also shared by *Participant 3* who maintained that women in mining are stereotyped as weak and they are not entirely accepted on the same levels as men. The participant said,

No, I don't really think so. I think the biggest stumbling block for me and that is not another thing about my department itself, I'm talking about what I know - I don't think that women are accepted all over on the same level yet due to previous believes or traditions. I think it's still a little bit of a challenge for females. But I must say from management side, I think they get all the support that they need and the opportunities (*Participant 3*, 08/31/2022).

4.18. **Glass ceiling**

The challenge related to the concept of glass ceiling as a barrier to women's career progression also surfaced as a major issue at the Amandelbult mine. Some of the participants indicated that there seem to be no restrictions for women to progress but in reality, numbers are showing that not many women are in top positions. *Participant 10* supported the claim by stating that,

To be honest, I can't think.... Except for Mogalakwena mine, I can't think of a female electrical or mechanical engineer here at Amandelbult. Which makes it also difficult, but I'm so, so the other part that I can compare to is your normal operational roles within processing or mining. You don't tend to see a lot of females in the upper ranks of those frontline operational roles, say up to D1. So, I would say there's definitely a difference there. If I think about the ladies that I know in in those level of roles that I've interacted with, I would still say something close to ½ times the span for career progression (*Participant 10, 08/23/2022*).

Buttressing the point above, *Participant 5* echoed that:

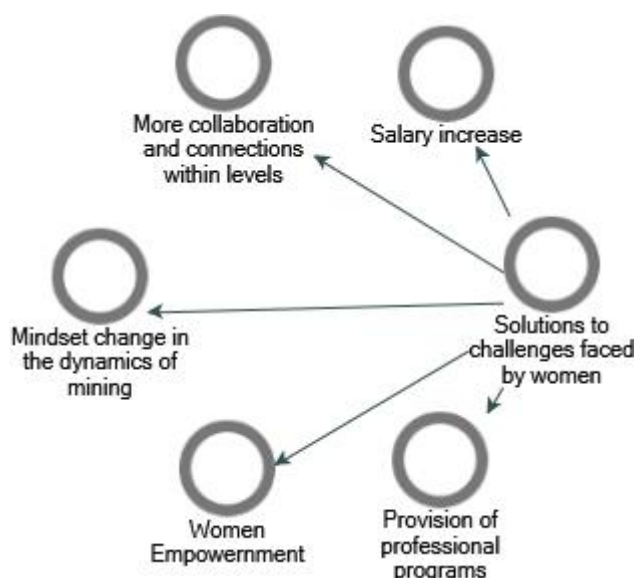
I think the first few years I've moved quite fast. And then after that, it's sort of like stagnated. Where I sort of like reach a glass ceiling, if we can put it that way. But if I am to compare with my fellow Geologist women, it's been quite tough to see movement, really. Because you find that majority have spent more than 10 years in the same positions' others 15 years now still the same positions and it's been quite tough. I mean, even if you look at Amandelbult as a whole, for instance (*Participant 5, 08/30/2022*).

It is clear to note that glass ceiling is a huge problem for most women. Interestingly, *Participant 5* mentioned that,

But the truth is that I think in the past that was what has been happening that women are just a number. crunching business. Where you say, look, I have 10% of women in this level. 1% of women in this level and also even the colour itself plays a role. It is quite a bit cold because as you go higher and higher. The colour of black women come lighter and lighter, If I may put it that way, you know? (*Participant 5, 08/30/2022*).

4.19. **Recommendations for addressing challenges faced by women at Amandelbult mine.**

As part of a secondary contribution, the study aims at providing some of the possible recommendations to the solutions for barriers that are impacting of the career progression of women in Amandelbult mine. Participants mentioned a number of solutions such as mindset change in the dynamics of mining, more collaboration and connections within levels, provision of professional programs, salary increase and finally women empowerment. All these possible solutions will be explained in detail below.



4.19.1. **Mindset change in the dynamics of mining.**

There is need for mindset change in the dynamics of mining whereby women are seen as equals and deserving to be in the leadership positions the same way men are. And confirmed by some of the participants, women have put much effort for them to be engineers hence they are deserving for opportunities that might come their way and men should acknowledge that.

Participant 5 noted that:

Those who develop women always are running the risk of those women being pushed if I can put it that way, where you find that look, in the market. Uh, yeah, there are 10 women who are engineers and men start thinking like I was made a favour. Like, no. If it wasn't for us, you wouldn't be here kind of thing. But forgetting that I actually went to school and worked very hard, you know, spend a lot of time investing in this career and developing the skills and learning and all that for me to be just regarded as a number (*Participant 5*, 08/30/2022).

The above quote suggests the need for a mindset change in terms of how women are viewed in mining. Some participants mentioned that it should be an inhouse thing, whereby women are encouraging to take more technical roles instead of the softer skills because they are deserving. *Participant 9* contended that,

It's not really an Anglo type of question, but I must say, you know, over time I've seen new women, you know, moving more towards being technical and then taking, you know, the soft skills type of roles. I think what Anglo needs to be doing to encourage more women to participate in this, you know, is to try and influence...you know from the early stages, you know when people enter the universities, you know provide bursaries, you know, to encourage people, you know, to participate in these technical streams (*Participant 9*, 08/30/2022).

Commenting on the idea of the change of mindset, *Participant 8* also noted that there is a need for mindset change in the dynamics of the mine as they exist - not everyone is equal. The participant said,

I think the reality is that even though you know the look and feel of the Mine is different to what it could have been, you know 10, 20 years ago; it's still hierarchical. The General Manager is the boss. Everyone looks up to him and what he says goes, etcetera, etcetera. You get the sense that not everyone is equal. You know, depending on rank, you know. And it's considered like a physical hardcore you know, kind of, you know, working environment so I think there's potentially work around changing that dynamic which isn't going to happen, you know, overnight (*Participant 8*, 08/30/2022).

It is however clear, that mindset change is one of the ideal solutions to career progression of women at Amandelbult.

4.19.2. Collaboration and connections within levels.

Evidence from Amandelbult mine also suggests the need for more collaborations and connections within levels as a possible solution for progression of women in mining. *Participant 11* contended that there is a room for improvement if people from different levels work together and collaborate together in making sure that women are given equal chances as men. The participant said,

I think honestly, there's still quite a lot of room for improvement. I think we all have good intentions, but I don't see that, and I think maybe it's because everybody gets married on what they're doing, and everybody goes in and figure out if this works and they would just say we will do it at Amandelbult. I think sometimes we need not only talk to the General Manager; we need to talk to the General Manager and maybe a level below and 2 levels below the General Manager. People that if we are making a programme which is maybe for Shift supervisors, talk to the Mine Overseer and the Section Manager.

Let's say when you a Shift Boss, what were those things that you felt maybe could assist you better? And then just get more input on that level, just rather than just talking, that's it (*Participant 11*, 07/19/2022)

Supporting the above statement, *Participant 2* explained that there isn't a room for lower levels to create conversations about progression. The participant is calling for employees of all levels to connect. The participant said,

I think, again at a certain level, yes, there are conversations that take place. But I don't think at the lower levels that the room or breeding space is being created for them to have those conversations about progression and this need to be changed. Employees need to engage in all levels (*Participant 2*, 10/06/2022).

Participant 5 mentioned that there some limited evidence of collaboration happening in the company coming from different departments. The participant urged the need to collaborate as it will assist in changing the culture of the company as that stand as the only challenge being faced. The participant indicated that, so there is a little bit of collaboration that is coming in through different departments, but I think it's also in that space where before, let me say, we haven't been taught how to do that (*Participant 5*, 08/30/2022).

4.19.3. Provision of professional programs

Data provided by some of the participants indicated that there is a need for provision of professional programs in Amandelbult so that employees should enrol. The participants argue that through these programmes, employees are taught and being made aware of what they should do to enhance themselves in mining without being bullied or side-lined. *Participant 5* emphasised that,

Like I said, sometimes you don't realize that you are being bullied. The other thing that I think needs to be looked at is also our side in terms of having, you know when you are assertive; it's quite an important thing. But in relation to what can be done to help women. What can be done is to make the system easier and doable for everyone. The system where you can raise your voice without fear, put them in place and the empowerment system, where they capacitate our people for real capacity (*Participant 5, 08/30/2022*).

This is supported by *Participant 9* who mentioned that they are training programs which focuses on compliance at the moment. The participant wishes to see more as he argued that the training programs are not able to empower people to move forward. The participant further explained,

If you are looking at only compliance driven you know, training programs, the chances are that you might not be able to empower someone to move into the next level, but you want to retain the status quo, you know which is where I believe it becomes a bit of a challenge (*Participant 9, 08/30/2022*).

4.19.4. Salary increases.

Salary increase is one of the recommendations developed from the findings for the study. As argued by salary can be a possible solution to career progression of women by *Participant 2*, increasing salary can be a possible solution to career progression of women. The participant said, "you must pay them more, that's the long and short answer". The participant went on to explain that:

Right ... so think about it, if you want to send someone to Postmasburg in the Northern Cape, you will have to pay them such that they can either buy a decent house in Postmasburg and create a nice climate for themselves to live

in. Or they must be able to get flexibility to travel, you know? Let's say I want to go see a Rock concert for example, I must have enough money to travel and fly to go see things. On the other hand, employees in the cities have got all those things, you know; they have woollies food and multiple shops that the employees on site don't have... (*Participant 2*, 10/06/2022).

The excerpts presented above show that if good incentives such as salary increase could be implemented, women are most likely to benefit from this and thereby aspire for senior management position.

4.19.5. Women Empowerment

The senior management who were interviewed for this research cited deliberate and intentional efforts towards women empowerment as the useful investment that can see women progressing to senior management levels, specifically at Amandelbult mine. Participants mentioned that women need to be empowered. *Participant 1* indicated that, "Our women want to be men in that space and that cannot be. So, we need to also empower them and let them know that they don't need to be men. They are fine when they are women in that space" (*Participant 1*, 08/26/2022). The participant clarified that at times, women are bullied, and they can only be helped through empowerment. They noted that:

sometimes you don't realize that you are being bullied. The other thing that I think needs to be looked at is also our side in terms of having, you know when you are assertive; it's quite an important thing. But in relation to what can be done to help women. What can be done is to make the system easier and doable for everyone. The system where you can raise your voice without fear, put them in place and the empowerment system, where they capacitate our people for real capacity (*Participant 1*, 08/26/2022).

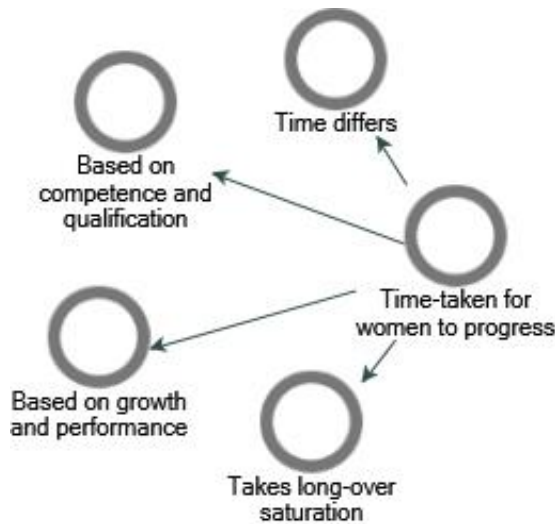
The views on the need of women to be empowered are share by *Participant 9* who contended that,

So, I think that's one. And the second one is that we need to be running campaigns. You know, we've got women in mining that are technical by nature, you know, so we need to use them internally to send the message out there to say...It's like in the in the army, you know if you go to these. I mean, you know, they do this (*Participant 9, 08/30/2022*).

In a male dominated industry as indicated throughout this report, it is clear that women in mining need to be empowered for them to progress. This can be done in different forms such as training, acknowledgements, creating conversations with them and giving them technical roles that used to be given only to men.

4.19.6. Time taken for women to progress.

Also, important for this study, I was interested on the pace of transformation on how long it would take to begin to see transformational change in terms of the amount of time taken for women to progress. Remarkably, participants shared diverse views, with some saying the length of time differs from one department to the other and from one level to the other. Some of the participants mentioned that it takes longer for women to progress, some said the progression is based on growth and years of experience they possess, based on the type of skills and qualification they have and finally, participants perceive that it is based on the workforce planning programs as supported below.



4.19.7. Growth and performance

Data provided by the participants indicated that length of time taken for women to progress to the next level is based on their personal growth and performance at work. Data shared showed that for some positions one has to be ready to fill the post. *Participant 9* (08/30/2022) said that; “You know, if it happens that an opportunity does, you know, open up and you are ready for the opportunity you know, and it's aligned with you with your development area then by all means you move” (*Participant 9*, 08/30/2022). This is echoed by *Participant 3* who also acknowledged that, “Performance and availability of roles are core in career progression for women in mining” (*Participant 3*, 08/31/2022). It is however clear that promotion comes with growth and readiness and *Participant 3* emphasised that, “You cannot promote somebody if he's not ready” (*Participant 3*, 08/31/2022).

4.19.8. Competence and qualification

Furthermore, the data collected showed that competence and qualifications are also key for the amount of time taken by women to progress. In short, findings show that women become so complacent in their current roles and complain that there is no money, but they don't make an

effort to learning new skills and there is quite a lot of learning opportunities in your Learn+ and online courses. However, people don't do that, and they don't have time for that. "They do firefighting or compliance courses so that is why it becomes challenging for us to move them around" (*Participant 1*, 08/26/2022). Supporting the above assertion is *Participant 11* who indicated that:

It's quite a tricky question, I will tell you why? It's quite tricky because on the Mining room like the line that I am in now – which is more Production and General Management of the Mine, you need certain qualifications along the way for them to go on the next level (*Participant 11*, 07/19/2022).

The participant is of the view that the progression for women becomes long because at times they do not have the right certifications for them to move forward. For instance,

for you to become a miner, you need a blasting certificate, so without the blasting certificate; it doesn't matter whether you've got a doctorate in Mining or anything. But if you don't have a blasting certificate, you cannot assume the role of a Miner or a Shift boss" (*Participant 11*, 07/19/2022).

More so, the participant went on to say,

And then after that, you then go to the second role which is a Mine Overseer, which then requires an individual to complete the Mine overseer Certificate. Without the Mine overseer certificate, you cannot progress from Shift boss to Mine overseer without those qualifications. From Mine overseer certificate, you then require the Mine manager certificate, for you to progress to become a Mine manager (*Participant 11*, 07/19/2022).

Participant 2 concurred that,

Look for me, it always comes down to core competencies. So, I will not. I will not appoint a female that can't do the job that doesn't have the core competencies. So, I would definitely say the females coming through now has definitely got the core competencies. So, those three ladies that I appointed, they were the best. That's why they're being appointed. So, they're not being appointed because they are females. I think core competencies will remain a big thing. But I do think the females are definitely having the core competencies (*Participant 2*, 10/06/2022).

It is important to note that competency and the right qualifications/certifications will give women a “ticket” to progress to the next level in the expected amount of time.

4.19.9. Long-over saturation.

For some of the participants, progression time for women takes long than expected because of lack of mobility in most positions. *Participant 1* clarified that,

I think it takes long, I think the problem is, there is no mobility in positions. And why am I saying there is no mobility in positions? You will have to wait for somebody to either resign or dies, for a person to get a promotion – because that is a reality. There is no way by like – ohh okay when I was working for GE (*Participant 1*, 08/26/2022).

This claim is reinforced by *Participant 11* who mentioned that career progression for both men and women should be at least 3 years. However, it takes longer than that. The participant said, “So, the rule of thumb in terms of progression should be at least three years if we are taking all these qualification into consideration; then we should be in a position to progress you however, it takes more than that at times” (*Participant 11*, 07/19/2022).

Participant 5 who is in geology buttresses the above assertions and argued that it takes long for women to progress to next levels. The participant said,

It is quite long and for me, I've been one of the lucky few if I can put it that way. Because as I said when I came in, I was a graduate for about three months and on the fourth month I was appointed. Generally, women stay between two and five years as graduates (*Participant 5*, 08/30/2022).

This assertion assumes that clearly, that “there is no space for people to progress” especially for women geologist. This is supported through the following quote,

“I think yes, we do have a lady who is now in a higher position in Geology, but all the ladies who have been here, have been in the same position for more than 10 years. Uh, no movement, none whatsoever. So, which I should say, I find it quite a big issue, but I would also have looked in other departments, where you find that movement of women is quite rare if you put it that way” (*Participant 5*, 08/30/2022).

4.19.10. Time differences.

The analysis process showed that the amount of time taken for women to progress differs from one individual to the other and from one department to the other. *Participant 1* cemented the argument by stating that, “Career progression differs from individual to individual – duration differs when it comes to cementing core foundational competencies from employees” (*Participant 1*, 08/26/2022). Supporting the above claim is *Participant 2* who also indicated that in their department it can take 2 years for employees to progress to the next level. The participant said,

Look, I will answer it just from my department's point of view. I think that's the best. You know, I can't talk for other departments etc... But I will say in my department, probable two years. To give you an idea, I have got five individuals reporting to me. Yeah, five individuals, of which two of those are women. By the end of the year, I will have 6 roles in my team and three of those will be women (*Participant 2*, 10/06/2022).

Reinforcing the data above is *Participant 3* who also agreed that it is difficult to specify the time as time of progression differs from one individual to the other. The participant said,

Yeah, I think it's very difficult to make it really specific. I think it all depends on person to person. Obviously, I will not allow anyone – It doesn't matter if you're male or female, to jump too quickly because at the end of the day I don't think it will be fair because if you fail then I'm the one that help you to fail, especially at the very large and difficult operation like Amandelbult (*Participant 3*, 08/31/2022).

The participant further stated that:

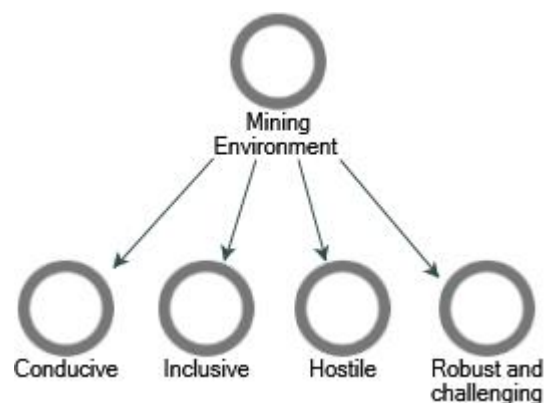
My level was the highest except for a gentleman who is our boss on a band 4 level “Head of Protection Services for Anglo American Platinum”. So, there was a huge gap, there was no Band 5 appointed for five years in protection services. You understand? That's why I said. And you will get the D1 and then the D2 and then the D4. And only now they created E2 two level position this year (*Participant 3*, 08/31/2022).

Participant 7 concurred that progression of women is also vary from one employee to the other and it is also depending on the available positions. The participant said, “So, in terms of how

long does it take for a female to progress? I mean it depends on the person I suppose and then whether the position is available” (*Participant 7*, 08/26/2022).

4.20. **The Mining Environment**

Participants shared different opinions when describing Amandelbult mining for women. Some indicated that the environment has improved drastically and is conducive for women, other indicated that the environment inclusive and women feel welcomed and being part of the Amandelbult family. Contrary others mentioned that the environment is robust and challenging for both men and women, whilst others said it is hostile towards women due to the fact that it is a male-dominated environment as shall be discussed further.



4.21. **Conductive Environment**

Participants mentioned that Amandelbult mine aim to create an environment that is conducive to the participation, development, and career growth of all women working at the mine. Participants further highlighted that the leadership and management try to create an environment which enables the successful careers for women in the industry. Data conveyed showed that the working environment has improved drastically though there is still room for improvement when it comes to women participation. *Participant 1* commented that,

Working environment has improved but there are some things that needs to be done. But it has improved drastically. Sometimes you are being invited to the table, but you are not participatory in that table. They just invite you because they want you to be just a number. Which is what I gave feedback to my team, to say “you are inviting us here to your table, but we are just numbers on your table, we don’t participate”. Even though we participate sometimes, you put limits on where we participate (*Participant 1*, 08/26/2022).

Furthermore, participants mentioned that they are measures being taken to guarantee women safety during night shifts. *Participant 10* indicated the presence of panic buttons and monitors to ensure safety of women in mining. The participant said:

On the concentrator, I think there's a lot that's being done to make sure to ensure women's safety, especially on night shifts. There are systems in place to make sure that they feel safe wherever they work on site. We have tried and installed the panic buttons in areas of the plant where people aren't allowed to go in alone. We have good monitors, so from a safety point of view I think that it's pretty well taken care of. The good thing about the Concentrator, It's mostly unsurfaced and easily accessible (*Participant 10*, 08/23/2022).

Supporting the contention above, *Participant 4* mentioned that the environment is just the “best”. The participant said, “I feel that it is one of the best and certainly an example for others to learn from”. This is echoed by *Participant 5* who shared that, Amandelbult in comparison to other platinum sites, it is making big strides in ensuring safety to women. The participant said,

I'm... So far so good. I think it's good. But I think it depends also in terms of levels. But there was a woman in mining tripartite meeting about two weeks or so ago where different mining industries within the platinum gather together and there were certain discussions in terms of safety, health and when we didn't talk about progression as such, but it was about, you know, challenges that are facing women in the mining industry and all that especially in the platinum within the sites. From all that, and the presentation and the statistics and all that, you could see that Amandelbult is ahead of the curve, if I may put it that way (*Participant 5, 09/05/2022*).

Participant 7 conceded that mining environment is not the best working environment however, there is support for women working underground so that they won't face challenges such as sexual harassment and violence. The participant pointed out that,

mining is not the easiest environment to work in, especially underground” but we do have support in place to deal with any form of harassment. We have had issues of rape and the likes, and some people have been fired before for such conduct. Hence, I say – I don't think underground is an easy environment for women to work it... (*Participant 7, 08/26/2022*).

4.22. **Inclusive Environment**

Some participants shared that at Amandelbult mine the mining environment is now inclusive in terms of job roles. The data communicated shows that the inclusivity is not only on job roles but also on the demographic ratios. *Participant 7* mentioned that:

In terms of women in mining, looking throughout my career, there's been, uh, you know, you've seen more movement coming in very much. So, when I started my mining career, basically, you know, the only Indian that was

there and then we had a couple of other Indians that came through. So, over time I mean you know we changed the colour and non-whites joined the professional ranks (*Participant 7*, 08/26/2022).

The inclusiveness of Amandelbult mine was shown through racial diversity as the participant was the only Indian in the mine but later on other races joined in. Data extracted from the analysis shows that men and women are seen as equals in terms of the roles they can perform. *Participant 3* said.

over the years I've never ever like saw a difference between a woman or a man in terms of the job that's been done. So very early on in the career I knew that I had to employ, you know, I was given the opportunity to get a female geologist and I knew at that stage... It was in my early days with harmony gold, and they said no but you know you can't bring her (*Participant 3*, 08/31/2022).

Participant 9 concurred that Amandelbult mine in an inclusive environment looking at women participation in the Amandelbult forums. The participant said,

Look, I think being here for this period of 19 months, I see Amandelbult being inclusive operation for basically all its employees, including the women's forums... You know that are in place like the women in mining you know those types of forums that are in place to help women you know and to engage in certain platforms (*Participant 9*, 08/30/2022).

It can be noted that at Amandelbult mine women engage in male dominated teams without facing any challenges. However, data provided shows that the engagements might vary from one level to the other as supported through the quotation from *Participant 9* who said:

So, I think we are on the right track in terms of being an inclusive operation.

Yes, the scales might not be balancing at the moment, but I think over time you know we will be able to see you know the scales balancing (*Participant 9, 08/30/2022*).

4.23. **Mining as hostile environment**

Data extracted from the analysis shows that Amandelbult mining environment is “Hostile” for most women especially the ones working underground. Participants mentioned that the underground working environment is tough in nature and most women are not able to cope. *Participant 2* indicated that “at the underground working environment is tough for women in mining – definitely. So, your mine overseers - your physical, physical level of work one and two - I think it is tough underground” (*Participant 2 Participant 2, 10/06/2022*).

Results show that the mining working environment at Amandelbult is hostile to women in particular because there is constant bullying, violence and harassment taking place. Participants mentioned that women are prone to “victimisation and unequal treatment” hence they might struggle to get opportunities echoed (*Participant 2, 10/06/2022*).

The above argument is also supported by *Participant 8* who also mentioned that the environment can be hostile because of the presence of some male colleagues. The participant said, “Yeah, it can be a bit hostile because of the characters around you, and naturally, there's also misdata, right? The environment is OK, but it has elements of hostility because there's some difficult people on the Mine across the various stakeholder groups” (*Participant 8, 08/30/2022*).

Lastly, some of the participants contended that the mining environment for women is robust and challenging hence their career progression is compromised at times. They are a vast number of challenges that women face ranging from clothing gears to policy drafted.

Participant 11 mentioned that the environment is even tough for women working at Amandelbult, by stating that the dynamics at the mine were quite challenging in the beginning especially. The participant said,

I think that the one most important thing was our policies, in terms of accommodating women, you know? pregnancy policy, underground policy when a woman gets pregnant, you know? When you pull them from underground, where do they go for the next 6,7, 8, and 9 months during their pregnancy, whichever time frame it is, you know? So, when they come back maternity leave, they need to breastfeed, how do you deal with this?
(*Participant 11*, 07/19/2022).

The participant further indicated that women faced clothing challenges as overalls and gumboots were designed to fit men structures only. The participant asserted that

It's quite tough because when we started recruiting the first batch of women, we realised that we need change outfits that are different from our nature. Quite different from us men, we needed to redesign those overalls so that they can be able to fit women structure properly. Then the other thing that I found in this quite challenging situation was the gumboots, you know...
(*Participant 11*, 07/19/2022).

For *Participant 3*, though it is a challenging environment, it is however robust. The participant indicated that,

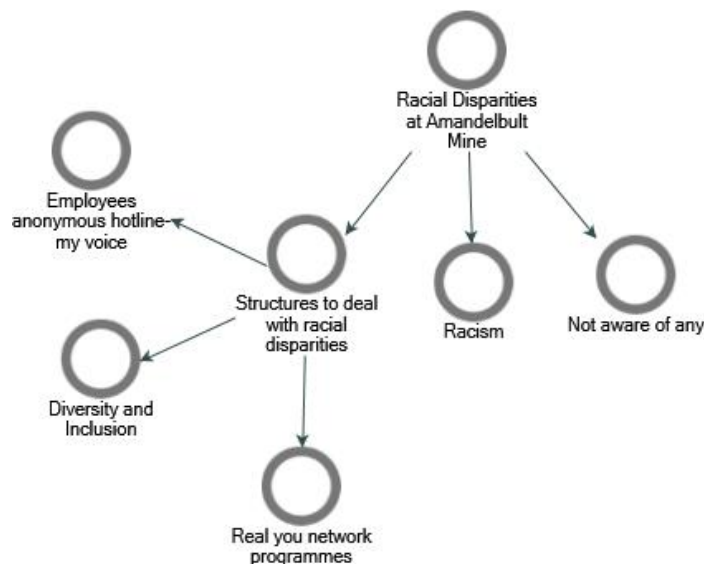
I think it's a very robust environment, in my view. Remember, there is a huge difference between employees in the process division and employees in the mining division. We all know for instance, here at the concentrator at Amandelbult. You need to have a certain level of education and you must

have science and maths and I don't know what else in the mining space. In Protection Services, you have to do criminal screening and everything. But in Mining division there's no such things, majority of the people underground, they haven't got any formal type of education (*Participant 3*, 08/31/2022).

Results also show that Amandelbult mining environment is not the easiest place to work with due to the huge number of employees here. And secondly, due to the high level of not well-educated people. Some of the data extracted through the analysis shows that the environment is challenging due to the presence of continuous strikes. Also, it is quite challenging for women as most have to deal with “uneducated men” especially in the Protection Services. *Participant 3* further stated that, “I said I don't think it's easy, it's difficult. Very difficult and challenging working environment compared with other type of mining operations” (*Participant 3*, 08/31/2022).

4.24. **Racial Disparities at Amandelbult Mine**

As part of the transformation progress, in this research also sought to find out the role of racial dynamics in the career progression of women at the Amandelbult mine and the kind of structures that are in place to deal with those issues. Results indicated that some participants mentioned presence of racism at the mine with many indicating that they were not aware of any.



4.24.1. Racism

Results shows that the mining culture and the way of doing things are still pretty much traditional and hierarchical. *Participant 1* pointed out that, “There is still a racial issue in terms of black and white, we might say it’s not there, but racism is happening guys” (*Participant 1*, 08/26/2022). The participant further explained that there is lack of racial integration at Amandelbult mine. The participant said,

And sometimes we use race when we want to be victims when we are not doing what we are supposed to be doing. So, it’s a thin line on that one but that’s the culture – also the culture, like you know the culture where people as blacks stay on the one corner and white people on their white corner – integration it’s a difficult one but we will get there (*Participant 1*, 08/06/2022).

Participant 2 further reinforced the claim above stating that most of the women working underground are blacks compared to other races. The participants highlighted that it might be happening “unconscious”. The following quotation supports the assertion.

Look, I think it's probable unconscious, but I think what the black ladies get exposed to in conventional underground mining – I am speculating, but I think it's tougher than other races. I don't even know what am basing it on, but I think a lot of our underground employees are black and I think blacks will take more chances to blacks as opposed to other races (*Participant 2*, 10/06/2022).

Additionally, *Participant 5* reinforces the above point that the composition of women working underground and the women working on the surface are quite different which is alarming looking at Amandelbult mine as a fair inclusive and conducive working environment. The participant said,

If you were to look at the qualifications and also the makeup of women who are literally underground those who are doing the manual Labour, whatever the case might be. And if you were to look at that composition so far, I haven't seen a white lady. Umm. and then when you come to surface, or should I call it surface work? If I were to put it that way, the composition is quite different. That automatically says something... (*Participant 5*, 08/30/2022).

It is however, that a lot of racial tensions were aired out through the senior management who took part in the study. *Participant 8* mentioned that the struggles of Black women versus White women in the company are different. The participant contented that,

And I'd argue as well that there's also a racial element. I honestly think black women and white women are different. I think the struggles are different. Umm, and yeah, and I think they may not equal, I think what I'm saying. I think the other barriers could be I think dealing with some of the difficult

people or dealing with people that have poor people skills (*Participant 8*, 08/30/2022).

4.24.2. The importance of awareness

Data collected shows that some participants were not aware whether these racial disparities existed or not. *Participant 6* is amongst those participants who mentioned that, “Well, that would be difficult for me to answer because I don't have enough sort of experience with that. But obviously from my point of view, definitely the answer is no”. *Participant 4* concurred saying, “I would say not sure from my perspective.” (*Participant 4*, 09/13/2022).

However, on the contrary some participants boldly mentioned that these disparities do not exist. *Participant 10* looking at the higher-level leaders said,

I don't think there's any real disparities between races in female held roles. I was going to use the example of one of our Senior managers here at Amandelbult. It's probably the opposite of what I said before. She lives in the single quarters and her family is back home in Johannesburg, so that really breaks the stereotypes, right? (*Participant 10*, 08/23/2022).

Participant 7 agreed that there exists no racial discrimination at Amandelbult mine but a certain “discrimination to a certain level”. The participant claimed that, “I don't see the racial discrimination, to be quite honest. I just feel sad for some of my colleagues you know...my black colleagues that have been in the company for many years and added...it's not racial discrimination but it is a discrimination to a certain level because we are finding that the females are passing them” (*Participant 7*, 08/26/2022).

4.24.3. Racial disparities.

Results revealed that they are structures I place to deal with racial disparities and any other form of discrimination that might arise in the organisation. Participants mentioned three structures that are in place which are; Employees anonymous hotline-my voice, diversity and inclusion and real you network programme. These structures are available for everyone employee who might fall victim to racial discrimination, sexual harassment, violence and other form of disparity as indicated below.

4.25. **Employees anonymous hotline-my voice**

Data shows employee anonymous hotline called “My voice” is one of the structures put in place at Amandelbult mine to give employees a voice to air out their concerns without any fear of being labelled. *Participant 7* clearly specified that, “We have an anonymous hotline called “my Voice” for people to anonymously report any form of racial, harassment” (*Participant 7*, 08/26/2022). Though the hotline anonymous is available, some of the participants indicated that employees are not using it effectively to report racial disparity matters. *Participant 1* said, “Structures are there “your voice” but I don’t think people are reporting it, you know people are not reporting it because racism is not an easy thing and people are not free to talk about” (*Participant 1*, 08/26/2022).

It is however clear that women are encouraged to use the structures to speak up if they face any form of challenges that they feel they are too personal. *Participant 2* cited that, “there's a confidential speaker hotline where you can log your complaints and it will be investigated” (*Participant 2*, 10/06/2022).

4.26. **Diversity and Inclusion**

Participants also shared that there is diversity and inclusion programmes available for employees to attend. However, *Participant 8* indicated that the focus is mainly on women. The participant conveyed that,

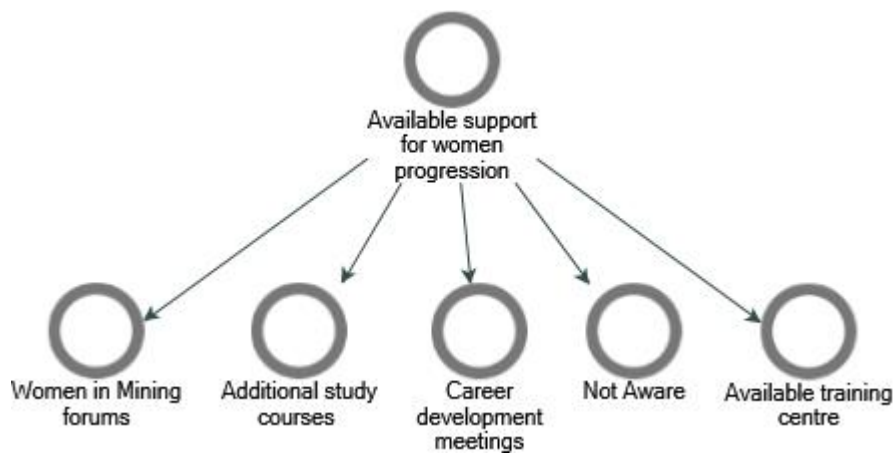
I think we've got Diversity and Inclusion, but I think the focus is more on females, which is not a bad thing, but I think the focus is more on females. I think our colleagues in London and look, alternately let's we head off with this, right. I think our colleagues in London are maybe they don't understand or appreciate the racial nuances as much as we do. And I don't think there's as much support...Umm to deal with maybe some of these issues. And again, I really hope I'm wrong, but that's just my view (*Participant 8*, 08/30/2022).

4.27. **Real you network programmes.**

Interestingly, findings show that there exist network programmes such as “real you network” which is created to help employees deal with these disparities. *Participant 11* stated that, “Real You network programmes in Anglo American that addresses those issues” (*Participant 11*, 07/19/2022). Reinforcing on the point above is *Participant 2* who mentioned that “Culture in action, Transformation and treating each other with care and respect. Apart from that I am... are network programmes used here...” (*Participant 2*, 10/06/2022).

4.28. **Support systems for women’s career progression**

Findings showed that there are a number of available support structures in the career progression of women navigating career pathways in a highly male-dominated mining industry such as Amandelbult mine. Data exhibited that the following support is available; women in mining forums, career development meetings, training centres and additional study courses for women to enrol. However, a handful of the participants honestly mention that they were “not aware” if those support structures do exist at the mine as shall be discussed later.



4.28.1. Women in mining Forums

Data indicated that the majority of women at Amandelbult mine occupy the administrative and support roles rather than the influential senior management positions. Data conveyed shows that just a handful of women have progressed to senior level positions. Hence, the formation of women in mining forums to encourage and give advice to women that it is possible for them to be at senior management position if they can push and fulfil the requirements needed. *Participant 11* support the assertion by stating that, we have “Women in Mining forums” (*Participant 11*, 07/11/2022). This is also reinforced through *Participant 1* who mentioned that;

We have our Women in Mining Lunch and Learn and Women in Mining forums to break the PHD syndrome they have. The other thing is having to have support structures of building themselves. They are being motivated but you are only motivated when you want that edge to be motivated (*Participant 1*, 08/26/2022).

Participants also mentioned that women in mining is definitely having a different focus than a few years back. They argued that women in mining forum are there to discuss issues pertaining to women promotions or what can be done to progress women especially the ones that are qualified but end up taking the supportive roles. *Participant 2* said,

Women in mining is a very topical conversation and currently there is women in mining forums. Even in the region, there is a lot of talk and get together in terms of what are we doing to promote women in mining etc...so I think that's happening and that awareness and focus is there. Through these informal/formal channels we also talk about health and wellbeing of women in mining on continue shining light in that front. There is a big movement of women in mining taking place (*Participant 2*, 10/06/2022).

4.28.2. Career development meetings

Through the analysis some of the participants mentioned that at Anglo American platinum mine they have career development meetings designed to enhance women empowered career progression. However, participants highlighted that at Amandelbult, they do not have those development programs yet. *Participant 2* said,

Obviously, we've got the leadership development programs in Anglo American. But we don't have specific something on site. Those programmes are specifically designed by Group Functions to be implemented across Anglo American, including Sites. Therefore, we pull quite heavily on that. In terms of the career progression and career development, so lot of my females are entered into the "Amplify program" where it's developing, specifically females for leadership positions in Anglo and then the normal leadership development programs that's there as well (*Participant 2*, 10/06/2022).

It can be noted that these development meetings are there to prepare and develop women into leadership positions as echoed through *Participant 3* who claimed that "I think it depends on the manager at Amandelbult itself, I think. There are definitely giving ladies a very good

opportunity to be developed, not only in the Protection Services. I can see it all over the mine” (*Participant 3*, 08/31/2022). *Participant 7* reinforced the assertion by stating that,

We do have, uh, you know, our career development meetings. Look, in terms of career progression. Apart from the formal structures that we have on site, we also have these periodic meetings where we look at our staff and say OK you know where this person sitting, you know... are they capable of moving up one level, are they at level, are they capable of moving up two levels (*Participant 7*, 08/26/2022).

4.28.3. Training centres

Availability of training centres was also mentioned as one of the additional supports that is provided at Amandelbult mine in support of women progression. These training centres gives specialised training which would have been approved by head of department. *Participant 3* argued that,

I am lucky actually because some is in the hands of our training centre and some is actually in my hand to send them on training to get a proper specialised training in our occupation, and we get proper service providers that has been approved by our head of protection services and then we can send people for training. Luckily, all these years Harm Steenkamp “Commercial Manager” was also assisting with approving these specialised trainings (*Participant 3*, 08/31/2022).

4.28.4. Additional study courses for women to enrol.

As part of the empowerment programme, participants indicated that women at Amandelbult mine have additional study courses at their disposal as way of building their professional

confidence. *Participant 1* said, “And, having additional courses that build their confidence. So those will be the things that I think they will support them and engagement that is another good thing that needs to be done” (*Participant 1*, 08/26/2022). Data showed that there are studies done at Amandelbult mine that are used as a way of getting data about fast tracking women for promotion out there as more common knowledge.

4.28.5. The importance of awareness

Despite the fact that participants mentioned additional support for enhancing progression of women at Amandelbult mine, they are some few participants who declared that they do not have any knowledge of any form of additional support available for women in mining at Amandelbult. *Participant 5* openly said,

Umm, I haven't heard about anything of that sort since I arrived. In terms of that, but maybe I'm, as I say, I've not been long enough to actually know all the structures that are out there and I know that in terms, especially in terms of the gender-based violence (*Participant 5*, 08/30/2022).

This data is also reinforced through *Participant 8* who argued that “Nothing that I am aware of.

4.29. Conclusion

The data analysis has explained the process that was followed. This included a description of the how data provided by participants on the support structures in the career progression of women in mining at Amandelbult Mine, was carefully studied in order create themes and attendant codes. The coding process was explained, including how the data was cleaned and the measures taken to ensure credibility and trustworthiness. The data analysis was organised

to speak directly to the research questions. On the basis of the codes generated from the data set, the data was analysed, and participant views were used to illustrate all points raised.

CHAPTER FIVE

5. DISCUSSION OF FINDINGS

5.1. Introduction

The previous chapter presented findings and analyses of the data collected from in-depth interviews held with eleven (11) participants at Amandelbult Mine. Emerging from the thematic content analysis of the data are the following nine (9) salient themes: (1) Leadership role in women's career progression, (2) Mechanisms, policies, or structures for women career progression (3) Effectiveness of the mechanisms, policies, and structures, (4) Barriers to women's career progression, (5) Time taken for women to progress, (6) Mining Environment, (7) Racial disparities at Amandelbult Mine, (8) Available support for women's career progression and (9) Solutions to challenges faced by women. The discussion of these research findings proceeds in a manner that speaks to the three research questions guiding the study. That is, the discussion is aimed at:

- Identifying the barriers experienced by women in mining and assessing the working environmental conditions for women in mining.
- Interrogating the structures of support put in place by the Amandelbult Leadership Team (ALT) to ensure the career progression of women in mining.
- Assessing the roles and responsibilities of ALT in the career progression of women in mining.

The discussion section is followed by a suggestion of recommendations on what still needs to be done to enhance the career progression of women in mining. This section is then followed by a conclusion to the study.

5.2. **Discussion**

The study explores the support structures that the Amandelbult Leadership Team (ALT) has put in place to ensure and enhance the career progression of women in mining. That is, the transition from junior, middle, and senior leadership positions. Specific attention is placed on evaluating the policies, practices and structures introduced by ALT to ensure meaningful inclusion and diversity. This necessarily involves an assessment of the interventions put in place to mitigate the inequalities in mining. As alluded to in the preceding chapter, the nine main themes that emerged in the study centred around the research questions of the study. The themes were designed to unpack the research questions and engage major findings from the study. The discussion of the findings is, therefore, structured to address each of these research questions stated above. The discussion, however, proceeds by focusing on the barriers faced by women in mining first before proceeding to discuss the interventions put in place to mitigate against these challenges.

5.3. **Barriers faced by women in mining.**

This section speaks to the factors (barriers) that hinder the career progression of women at Amandelbult Mine. It discusses the stumbling blocks that impede women's career progression in the mining sector. These are taken as microcosm of the challenges that hinder the progression of women in South Africa's mining sector in general. Six salient barriers emerge from the analysis of the data. The first pertains to the lack of experience in technical roles, especially in core competences that enable women to progress to top leadership positions. Analysis of the data reveals that women's lack of experience in technical roles such as operations management. Emerging from the data is the idea that women avoid technical roles since these present numerous challenges for women. The first challenge cited by participants on technical roles is that women are not afforded the same level of flexibility as non-technical roles (*Participant 4*).

Secondly, women cannot afford to be out for protracted periods, such as with the case when they are engaged in production as they can be occupied for up to two or three months. Thirdly, women are inclined to go for roles that do not entail a lot of heavy manual labour. As a result, women are relegated to roles where they ‘sit behind the computer’ and tend not to be deployed to the roles that entail heavy lifting. In addition, non-technical roles are also more flexible. The impact of this is that women end up not having any experience in critical areas of technical management which is actually a core competence they cannot be promoted without. This speaks to deliberate and intentional forms of the exclusion of women that has led to their marginalisation from core competencies, and by extension, promotion to senior management positions.

The second barrier that women face in so far as their progression in mining is concerned pertains to the fact that mining is still a male-dominated sector. That is, in spite of the inroads that have been made to promote inclusivity in this critical sector of the economy, mining is still being regarded a male ‘job’/space. This is mainly due to the fact that men are yet to fully accept genuine equality in the workplace and the fact that women are in the industry to stay and to work towards their career progression. Resultantly, men fail and/or refuse to integrate women in their work. More so, when it involves the elevation of women to top and influential leadership where they are perceived as dominating, or wielding power over men. Consequently, these ‘prejudiced males’ then actively block the career progression of women.

These results presented here corroborate with earlier findings advancing the argument that the patriarchal ideology plays a critical role in the marginalisation of women in mining. Extensive research has engaged the institutionalisation of protective laws, which has then led to the adoption of paternalistic tendencies in mining. The patriarchal ideology constructs women as a physically weak gender, thereby informing ways in which they are engaged and dealt with at the workplace. As a result, they are excluded from the public space, especially those that

involve manual labour. Consequently, women have been historically excluded from underground tasks, for instance, with women's work became increasingly restricted to the private sphere where they engage in household work and taking tasks that are more aligned with the reproductive and/or care labour. Lahiri-Dutt (2001) and Barragan-Romano and Papastefanaki (2020) argue that many of these laws, which removed women from working in underground mines, are historically traceable to the ideological and legislative frameworks of the Western mining industry. For example, the British Mines and Collieries Act of 1842 prohibited women's direct participation in underground mining. As literature review has shown, the emergence of the mining industry in South Africa has borrowed largely from this international framework, and therefore reproducing the same structural systems and injustices that continue to marginalise women and their career progression to senior management positions and areas that are considered to be of sophisticated expertise.

Many governments across the globe prohibited women from working in mines, particularly underground. As stated earlier, the International Labour Organisation (ILO) adopted Convention 45 of 1935, which prohibited the employment of women for underground work in mines of all kinds (ILO, n.d.). Along the same vein, in 1898, the South African Republic, which ruled the Transvaal, in its Act No. 12 (XVIII:146), explicitly banned the employment of women in any mine. This was later translated word-for-word into the Union of South Africa's Mines and Works Act (No. 12 of 1911) (par.8.1). The clause stated that 'no person shall employ underground on any mine a boy apparently under the age of sixteen years or any female' (Alexander, 2007, p. 214). The Mines and Works Act (No. 27 of 1956) also forbade women to work underground. Section 11 (1) stated that 'no male person under the age of sixteen years and no female shall work, and no person shall cause or permit any male person apparently under the age of sixteen years or any female to work, underground in any mine' (South Africa, 1956, p. 61). The South African Minerals Act (No. 50 of 1991) also forbade women from

underground work (ILO, n.d.; South Africa, 1991). It emerges that the evolution of the mining industry historically institutionalised discrimination against women.

Both literature and findings of this study confirm that the emergence of the mining industry has been historically problematic in ways that has made it difficult to integrate women into the system and ultimately ensuring their smooth transition to progression to senior management positions. Writing on historical emergence of the mining industry and the historical laws that excluded women, Sarti, Bellavitis and Martini (2018) reveal how this process ran parallel to what has been labelled the ‘de-labourization’ of women since the eighteenth century (Ibid). Sarti et al (2018) defines de-labourization as the process by which women were increasingly excluded from formal wage labour employment by state and employer regulations. They argue that the process is based on a hegemonic patriarchal breadwinner ideology which naturalizes women as belonging to the private space of the home where they must be taken care of by the men. The male breadwinner ideology, led to the promulgation of paternalistic models and legal frameworks that sought to ‘protect’ women and children from working in underground mines. Thus, masculinity has historically been associated with miners (ILO, 2021, p. 18). The findings presented on the previous chapter have shown how the legacies of these laws continue to be a harmful factor in the career progression of women, despite the efforts by the Amandelbult mine management and leadership team to implement policies that seek to transform the company and facilitate the career progression of women.

It is apparent that paternalistic tendencies reflected in these laws equated grown women with children. Barragan-Romano and Papastefanaki (2020) aptly argue that domestic hegemonic patriarchal ideology in Europe and North America, which originated from eighteenth- and nineteenth-century conceptualization of the nature of women, constructed and perpetuated a moral rationale for keeping women out of the mines and restricted them to the domestic space of the home where they are stereotyped as breadwinners.

In fact, the data reveals stereotyping as the third barrier faced by women that hinders their progression to top leadership positions in mining. In this case, the belief that one needs stamina to work underground excludes women from being accepted as having the rights to work and take up top leadership positions in mining. Seemingly developing from acceptance of women as ‘weak’, as expressed by some participants, and a view that the call for equality between men and women in mining as ‘a huge mistake’, it is important to interrogate the legacies of the discriminatory laws and how they have been used to justify gate-keeping and further marginalisation of women in the mining industry and the Amandelbult mine in particular. More so, in mining where most of the activities are perceived as too strenuous and dangerous to be undertaken by supposedly ‘weak and delicate’ women, these have led to harmful stereotypes that have relegated them into softer roles, such as finance and human resource management as presented in the findings.

Thus, taken from this perspective, and given the European and western background of the white miners in South Africa, these laws found it rather peculiar, and probably obnoxious, if women, certainly white women, had been permitted to work underground. It also sprang from a combination of genuine concern about the perceived inherently hazardous nature of the work and, also, because of “moral panic” about men and women working together in dimly lit underground areas (Romano and Papastefanaki 2020). However, at the center of all these assumptions, there are genuine deep-seated fears around the safety of women under ground as there has been reports on sexual harassment and other forms of gender-based violence and problematic behaviour against women.

The fourth barrier identified as hindering the progression of women in mining is the life-work balance dynamic. This dynamic revolves around the concession that males and females have different roles and, therefore, pressures at home. More importantly, these differential roles have a big impact on how men and women negotiate or balance between the demands of their private

home life and public mine work. As already alluded to above, some roles, such as in production, demand that women be away for very long periods. Given the centrality of the reproductive about and how this continues to be largely a responsibility of women, and single-headed households in particular, the mining shifts are bound to present challenges for women due to these challenges. As stated above, women are thus forced to opt for non-technical roles as these are more flexible. These responsibilities therefore preoccupy the center of discussion around promotion of women in the mining sector and Amandelbult mine in particular, as they forego some of the opportunities that count as core requisites for other competences that they tend to be excluded from.

The responsibilities for reproductive labour and care work levied on women are an important dynamic that has been characterised as the effect of nature. That is, whilst the mine leadership might make efforts towards the inclusion of women in mining, participants felt that nature makes it very difficult to effectively integrate them without incurring financial implications. For instance, some participants questioned the feasibility of truly integrating women and wondering where women would go after spending four (4) months under ground during their pregnancy. Furthermore, questions are raised as to how the mine would deal with women who come back from maternity leave as they need to breastfeed. These questions are very important and should be understood as a concession that nature does not make it easy for the full inclusion of women in mining. These very challenges are therefore exploited to justify why mining remains a masculine space designated for men despite the best efforts of the ALT as outlined earlier. That is, nature does not allow it, unless women choose or sacrifice to reproductive labour and care work. Suffice to point out that this perpetuates marginalising tendencies that border misogyny and a total disregard of women and has implications for their career progression. Reflecting on the conditions of women in the South African platinum belt, Benya (2009) explains how the South African mining, and its associated migrant labour system were

predicated on a spatial separation between presumed male formal ‘productive’ work and feminine home reproductive work contributed to the ostracism of women from the public spheres. Thus, perpetuating the de-labourization of women from mining work. Taken together, this points to the perpetuation of the historical masculinisation of the workplaces and work processes in mining.

The fifth barrier emerging from the participants’ responses pertains to the existence of a glass ceiling for women in mining. Following Dlamini (2016), Carvalho et al (2019) and Reiners (2021), the glass ceiling represents the socially constructed and abstract sociocultural patterns that are conveniently used as barriers that prevent women from progressing beyond a certain level in the workplace. This is evidenced by the lack of women who go on to be electrical or mechanical engineers as well as frontline operational roles, say up to D1 (*Participant 10*) and Geologists (*Participant 5*) – as indicated in *Chapter 4*. As such, women can get stuck to the same position for as much as up to fifteen years, despite having progressed very fast in the first years of their careers. Moreover, there are racial dynamics at play given that it is especially more difficult for black women to move into strategic positions more than white women. This is backed up by the hierarchical policies that governed the entry of women into the mining industry where black women became the last group to enter and continue to be marginalised and excluded to date.

Furthermore, there are also instances whereby progression time for women takes longer than expected given lack of mobility in most positions. As explained by one of the participants, “You will have to wait for somebody to either resign or die, for a person to get a promotion – because that is a reality” (*Participant 1*, 08/26/2022). As a result, career progression takes longer than the expected or ‘normal’ three (3) years for both men and women owing to the reluctance around opening up space for women. Despite the qualifications that women at Amandelbult mine have acquired, the levels of marginalisation and side-lining for career

progression continues to be unabated. Evidence presented on the previous chapter has pointed to the realities that women are still faced with, that women still take longer than men to be promoted to senior positions. One participant noted that,

I've been one of the lucky few if I can put it that way. Because as I said when I came in, I was a graduate for about three months and on the fourth month I was appointed. Generally, women stay between two and five years as graduates (*Participant 5, 08/30/2022*).

Whilst conceding that the time taken for individuals to progress up the leadership ladder differs from individual to individual and from department to department.). In extreme cases, the lack of promotion for women, especially in roles such as geology, gives the impression that:

there is no space for ... progress ... all the ladies who have been here, have been in the same position for more than 10 years. Uh, no movement, none whatsoever. So, which I should say, I find it quite a big issue, but I would also have looked in other departments, where you find that movement of women is quite rare if you put it that way (*Participant 5, 08/30/2022*).

However, other participants believed that this is linked to growth and development where particular training and skills allowed particular individuals to progress. However, evidence presented on the findings chapter suggests that despite the existence of the skills development programmes, the communication, access and other barriers still prevented women to acquire the skills that are necessary for their career progression.

Despite the best intentions of legal frameworks such as ones that advocate for women to have a clear path to progress up the corporate ladder, there is still evidently very few women in top leadership positions. Writing on histories of legal invisibility and exclusion of women in the mining industry, Menard (2021) exposes the existence of bottlenecks through a gatekeeping

process which not only restrict women's entry into the masculinised industry, but also their progression towards more mid to senior roles in the industry. This reveals entrenched attitudes against the entry of women in mining whereby they are considered inherently unqualified to engage in mining regardless of the qualifications they hold.

The sixth barrier raised by the participants through the interview responses pertains to the issue of nepotism. Some participants alluded to the practice of rampant nepotism at the Amandelbult mine. However, implicit in the participants' responses is the idea that nepotism is a one-dimensional vice that only results in the unfair elevation of men at the expense of women. That is, it appears as if the vice of nepotism only works for the advantage of men, which discriminating against women. It is unclear how it takes place and, crucially, how it is implemented, however, as shown in *Chapter 4*, it has been cited by participants of the study as one of the major impediments for the career progression of women in mining. Nonetheless, questions have to be raised pertaining to whether women do not have relatives at the mine who will use nepotism to the advantage of women. This therefore reveals the entrenched patriarchal values and the patriarchal privilege that continues to value men and recognise them for leadership positions in mining at the expense of women.

5.4. Interventions by the ALT to ensure the career progression of women in mining.

Having teased out the barriers that impede the career progression of women in mining, this section evaluates the interventions put in place by ALT to mitigate against them. Thus, the section simultaneously interrogates the efficacy of the structures of support put in place by the ALT and, in the process, its role and responsibility in the career progression of women. Interventions put in place by the ALT to ensure the progression of women include enforcing a favourable life-work balance for women, instituting a mindset change that ensures genuine equality, instigating synergies as a form of social capital that ensures the upward mobility of

women, improving the remuneration of women in mining, and the provision of a positive mining environment among others.

It has been already noted that the mining environment is toxic, not only for the exclusion of women in mining, but also for their career progression. The mining environment is characterised by rampant sexism, racism as well as sexual abuse, amongst other forms of abuses. There is no doubt that the mining industry needs to adopt policies that ensure a positive and supportive mining environment for women in mining. Adonis and Silinda's (2021) have called for the mining organisations to shift from power culture to the role of culture dimension in the context of the fast-changing landscape of women in mining. This shift is position to motivate mining industries to developed initiatives that will ensure that women have the same access to as many rewarding career opportunities in mining as those available to their male counterparts. As previously pointed out, this is crucial because it shows the commitment mining has to human rights and the recognition of women in mining as vital contributors to economic development. However, the conditions of women suggest that there is more work that needs to be done and that those who are in management and leadership positions should be intentional about, and committed to the project of transformation that seeks to open up the industry for women to progress to senior positions.

Emerging from the data presented on the previous chapter, there is a general acknowledgement of the efforts being made thus far to make the mining environment conducive for both the inclusion of women as well as ensuring their career progression. The ALT has created an environment which enables women to successfully pursue careers in the industry. Furthermore, data has shown that the mine is making efforts to move away from the historical silencing of women in the industry, and is now recognising women as equal participants with men. Evidence shows that women at the Amandelbult mine are now being invited to participate in spaces that ensure the amplification of their voices, and this promises to transform the culture

in ways that will give women in mining a voice. These spaces include round table forums where more women are now participating in decision-making processes. As one participant pointed to the participation of women in the recently held *Women in Mining Tripartite* meeting, where different mining industries within the platinum industry gathered to hold discussions on critical issues such as safety and health, that impact on the participation and welfare of women within the industry – as one of the many examples of inclusion. However, the critical question is on the impact of that participation on whether it translated to tangible outcomes that seek to advance women's needs and challenges. It is apparent that women are being regarded as important stakeholders in the mining sector and are, thus, contributing to the shaping of the industry in so far as the positive transformation of the environment is concerned. Women can now speak out about the challenges they are facing, from their subjective experiences, and, in the process, contribute to possible resolution of these challenges in a manner that is relevant to their existence in the industry. In this way, the resolutions are least likely to be tokenistic as there is an apparent commitment from the ALT to improve the working conditions of the women at the mine.

However, the responses also reveal that there is still more that needs to be done as there is still room for improvement when it comes to genuine participation by women. The participants noted that although the working environment has improved significantly, there is still a lot that needs to be done. As presented on the previous chapter, participants lamented how women are sometimes invited to the round table forums but are not afforded the opportunity to meaningfully participate in the discussions. That is, the women are invited just to make up the numbers. In instances where they participate, there are limits placed on the extent of the participation. In such instances, the inclusion of women in these critical round table forums becomes superficial and tokenistic, largely for cosmetic purposes so that the leadership gives

the illusion of doing something to improve the mining environment and appearing to ensure the career progression of women.

Ensuring safety measures has also been at the heart of the ALT efforts to improve the experience of women at the Amandelbult mine. Mining has been until now, regarded as an uncomfortable and dangerous space that is not conducive for the participation of women (Moodie, 1994), leading to the emergence of a ‘macho’ occupational culture in the South African mining industry (Benya, 2009). However, evidence from the interviews with participants at the Amandelbult mine suggests that the management has been taking some measures to ensure that they put in place some measures that will improve the safety of women. A case in point is whereby the mine has taken steps to guarantee women safety during night shifts. This is evidenced by the presence of panic buttons and monitors to ensure safety of women in mining. As one participant revealed, systems have been put in place to ensure that women feel safe whenever they work on site. The allusion to the mine’s efforts of the installation of panic buttons in areas of the plant where people are not allowed to go in alone points to the deliberate efforts to ensure the safety of women in mining. In addition, the amount of work that has been put into ensuring the safety of women at the concentrator, particularly on night shifts, as well as the putting in place of good monitors justifies *Participant 10*’s confidence that “from a safety point of view I think that it’s pretty well taken care of” ((*Participant 10*, 08/31/2022)). In fact, *Participant 4* was so confident in the progress made by the mine to improve and guarantee the safety of women at the mine that they declared that they felt the mine was “one of the best and certainly an example for others to learn from” (*Participant 4*, 09/13/2022). All these efforts point to ALT’s recognition that, from a safety perspective, there was a lot that was left to be desired, and it made significant efforts to improve them for the benefit of women.

The harassment of women has been one of the top toxic behaviours that made mining an unsafe space for the participation of women in mining. Also emerging from the participants' contributions is the acknowledgement that the mine is making concerted efforts to eradicate the harassment of women, particularly for those women who work underground. Whilst *Participant 7* conceded that underground is not the best environment for women to work in, they explained how the ALT has put in place support structure in place to deal with any form of harassment. Of particular interest to the present research is how issues of rape, and other cases of sexual harassment perpetrated against women, have led to the firing of the offenders. The firing of perpetrators of sexual harassment and rape against women shows that the mine is gravitating towards a 'zero-tolerance' policy against such toxic behaviours that have previously made mining an unsafe working environment for women.

Racial discrimination was also cited as one of the challenges in the mining sector, particularly the Amandelbult mine. However, as participants have shown, Amandelbult mine management is putting measures in place to eliminate racial discrimination to make sure that the company becomes more inclusive to allow non-white women to work in this critical and lucrative economic sector. As noted by one participant, the mine has been committed to 'changing colour' of the employee profile as evidenced by the existence of non-whites in the professional ranks" (*Participant 7*, 08/26/2022). This is to say, black women in mining were only restricted to working underground and in other menial jobs. Thus, from a racial diversity perspective, black women could not pursue their career and progress within the mining sector. The mine's efforts to eradicate racial discrimination is evidenced in the putting in place mainly three platforms or spaces/structures. Employees *anonymous hotline-my voice* -, to air out their concerns without any fear of being labelled. One participant clearly specified that, "We have an anonymous hotline called "my voice" for people to anonymously report any form of racial, harassment" (*Participant 7*, 08/26/2022). Women are also encouraged to use the structures to

speak up if they face any form of challenges that they feel they are too personal. Considering this, one participant cited that, “there's a confidential speaker hotline where you can log your complaints and it will be investigated” (ibid.).

The challenge of associated with racial discrimination in the mining sector has been explored before. For instance, Benya (2009) argues that race is an ascribed characteristic that has played a significant role in the allocation of jobs in South Africa. She goes on to argue that blacks typically were domiciled in blue-collar jobs whilst whites were in management positions. It is this dynamic that is perpetuated in mining that shows how the racial hierarchy was perpetuated and legitimised (Webster et al. 1999; Webster & Von Holdt, 2005). Despite these positive steps in the Amandelbult mine's efforts to dismantle racial inequalities, participants' responses reveal the persistence of inequities at the mining industry as black women still constitute the majority, if not the entirety, of women who are employed to work underground. *Participant 2* wondered if black women continue to find it tough to break into the mining industry compared to other races as evidenced by the preponderance of black women working underground in mining as compared to the other races. Another participant added that they are yet to see any white woman working underground, and this validates the notion of white privilege in mining where working underground appears to be still considered to be beneath white women. Implied in this racial dynamic is the suggestion that black women are the brawn whilst white and coloured women are the brains in the mining industry. Thus, black women are still starting at a disadvantage whereby they have to work twice as much to earn the privilege of working in the more professional surface jobs. Hence the less than subtle remark by *Participant 5* that the racial profile of women involved in both underground and ‘surface work’ “automatically says something” (*Participant 5*, 08/30/2022). This is a somewhat open admission of the continued racialised nature of the mining industry. Thomas (2021) characterises this as racial microaggressions against black women in the workforce towards black women despite the

protracted history of the fight for both gender and racial equality. Glenn (1991) argues that people of colour were generally given dangerous, demeaning, and unstable jobs. In this case, it is black women working underground whilst white women are employed in surface work.

Additionally, the responses suggest that women are now doing the same roles that men are doing as admitted by *Participant 3* who noted that they are yet to see “a difference between a woman or a man in terms of the job that's been done” (*Participant 3*, 08/31/2022), suggests that the ALT is making positive strides towards the ‘de-masculinisation’ of the mining industry. The term de-masculinisation is in this case mobilised in reference to the inclusion of women in occupations that have been traditionally typed as inherently masculine. This unlike in the old days when women would not be employed in mining regardless of their qualifications. *Participant 3* recollection of how they were forbidden to hire a female geologist point to the perpetuation of the myth of the mining industry as a masculine space. It is from this perspective that the participation of women in the Women in Mining forum is seen as a positive move towards women inclusivity in mining. Furthermore, the participants’ responses also indicated that a fair majority of women at Amandelbult Mine occupy the administrative and support roles rather than the influential senior management positions. Data conveyed shows that just a handful of women have progressed to senior level positions. Hence, the formation of women in mining forums to encourage and give advice to women that it is possible for them to be at senior management position if they can push and fulfil the requirements needed. The Women in Mining forum is meant to break the PHD syndrome they have. They argued that such platforms and structures as the Women in Mining forum are specifically aimed at discussing critical issues pertaining to women promotions or what can be done to progress women especially the ones that are qualified but end up taking the supportive roles, as acknowledged by *Participant 9* noting how such structures are aimed at enabling women to “engage in certain platforms” (*Participant 9*, 08/30/2022).

Protective clothing gear goes a long way in alleviating the immense physical discomfort that miners work under. This has been recently raised in relation to Covid 19 where women also complained that the protective closing gear is designed in ways that completely to put women at a risk. Similarly, due to the masculinisation of the mining industry, protective gear has been almost exclusively designed for men. Women who broke into mining were therefore forced to use protective gear that was not designed to cater for their specific physiological needs. As such, this gear fell short of offering the full extent of protection that women deserved. It is from this perspective that the ALT's efforts to design protective gear specifically for women suggest a commitment towards the genuine of women in mining. *Participant 11* reveals that,

when we started recruiting the first batch of women, we realised that we need change outfits that are different from our nature. Quite different from us men, we needed to redesign those overalls so that they can be able to fit women structure properly. Then the other thing that I found in this quite challenging situation was the gumboots, you know... (*Participant 11*, 07/11/2022).

The designing of protective gear specifically for women suggests that there are considerable efforts for inclusion of women in mining as a long-term goal at the Amandelbult mine. However, the efforts for inclusion should go together with efforts to open up space for the career progression of women in the industry.

In spite of the positive strides made by the mine to achieve inclusivity and make the working environment better for women, there is, however, still a lot to be done before women feel safe and that they also truly belong in this critical sector of the economy. The mining industry continues to be 'hostile' especially for women working underground. Not only are women subjected to constant bullying, violence, and harassment, "they are also prone to "victimisation

and unequal treatment”). Thus, these challenges continue to hamper the career progression of women despite the positive gains that have been noted.

The study concludes that full and genuine inclusion of women is not only about their inclusion in mining per se. However, genuine inclusion of women in mining should be about much more than a numbers game. That is, inclusion is much more than the mere meeting of the requirement by the Mining Charter of women constituting at least 10% of the mining organisation’s labour force. This kind of inclusion is superficial and tokenistic. Being a critical sector of both the national and global economy which contributes billions of dollars to the economy. There is a need for a mind-set shift in the dynamics of mining to instigate genuine change that brings about genuine inclusivity in mining. Such a paradigm shift in mind set is realised through the introduction and promotion of such initiatives as the provision of professional programs and the encouragement of more collaboration and connections aimed at staff development and the establishment of synergies as a form of social capital, respectively, amongst women working in the mining industry. These programmes are specifically aimed at sensitizing women working in different departments and/or roles, such as General Manager, Shift Supervisor, Mine Overseer and Section Manager, so that they can enhance themselves and advance in mining without being bullied or side-lined.

If the Amandelbult mine is to take seriously the transformation projects, it should be intentional and deliberate about the true application of regulations and putting right systems in place that will truly facilitate the career progression of women in the mine. Benya (2009) points to the need for companies to identify talented people from the designated historically marginalised groups, such as women in mining in this case, and expedite their progress through accelerated training and development programmes (TDP). Such TDP involve taking women through programmes aimed at preparing and empowering them with the required qualifications for them to take up higher and more powerful and influential leadership roles in the future. Thus,

Amandelbult mine management has put in place some programmes that are meant to ensure the career progression of women in mining. These include online learning, coaching, development, and mentoring programs targeted at furthering their education through such initiatives as online learning (at work and/or home) and other learning opportunities to further their progress on the ‘talent pipeline’ and ensure that they are certified with the requisite qualifications and skills – as cited on the data presented in *Chapter 4*. Over and above these initiatives, the ALT has put in place promotion mechanisms, policies and structures that are meant to ensure that women progress through the pipeline. That is, priority is given to women who are already within the system rather than taking from outside as an approach to ‘succession planning.’ This form of affirmative action involves the tracking and monitoring the progression of women two levels below their position of employment (*Participants 4 and 9*). In some cases, the Mine has put in place “fast-tracking programmes that give women the opportunities to progress faster than normal through their career paths” (*Participant 4*). The ALT engages in ‘talent identification’ whereby potential candidates are then taken through training and mentorship programmes (*Participants 2 and 10*).

A critical part of the talent identification process necessarily involves the Mine engaging employees in career progression, or advancement, discussion. In *Chapter 4*, in the presentation of data participants have stressed the importance of engaging employees in career discussion so that they are not only equipped with the pre-requisite skills but also to be more aware of what is expected of them should they qualify to be promoted to higher managerial positions. These discussions are aimed at demystifying leadership at the mine as something that women can attain and executing as well as, therefore, ensuring that women are ready to step up to the leadership place should the opportunity arise. It is apparent that when applied with sensitivity and care, this initiative has a potential to ensure that women who are already in the system are

not overlooked thereby given their full opportunity. Thus, no leakages should occur in the pipeline.

To ensure the career progression of women at the Amandelbult mine, availability of training centres was also cited as one of the additional supports that is provided in support of women progression. These training centres give specialised training which would have been approved by head of department. Women at Amandelbult mine have additional study courses at their disposal as a way of building their professional confidence. This suggests that the mine is doing the bare minimum, that is ticking the necessary boxes that are meant to ensure the career progression of women through the setting aside of massive resources to make sure that these TDP achieve the desired organisation's goals of helping women progress up the leadership ladder. However, as evidence has suggested in *Chapter 4*, there is still a long way to bridging the gap between existing programmes and the actual career progression of women to senior management positions at the Amandelbult mine.

However, despite evidence showing that not enough has been done to ensure the translation of policies and mechanisms into tangible outcomes, women are sometimes blamed for their lack of career progression. That being said, there are, however, instances where women are accused of complacency (getting comfortable in their current roles, seeing it as a comfort zone from which they do not want to risk getting out of). According to the participants' responses, women do not want to work towards attaining the core competences that are needed for them to progress up the ladder. As *Participant 11* puts it:

for you to become a miner, you need a blasting certificate, so without the blasting certificate; it doesn't matter whether you've got a doctorate in Mining or anything. But if you don't have a blasting certificate, you cannot assume the role of a Miner or a Shift boss ... And then after that, you then go

to the second role which is a Mine Overseer, which then requires an individual to complete the Mine Overseer Certificate. Without the Mine overseer certificate, you cannot progress from Shift boss to Mine overseer without those qualifications. From Mine overseer certificate, you then require the Mine manager certificate, for you to progress to become a Mine manager (*Participant 11*, 07/11/2022).

In the case that the women do not have the requisite qualifications, *Participant 2* maintains that “So, I will not. I will not appoint a female that can't do the job that doesn't have the core competencies. ... I think core competencies will remain a big thing” (*Participant 2*, 10/06/2022). Thus, the underlying question raised by the participants is whether the women who want to be promoted can identify the gap they want to fill (gap you must step up to) beyond the need to just get promoted and the associated increase in salary that comes along with it. *Participant 5* reiterated that they try to ensure “not to promote women into a role when they are not yet ready or the best for that role” (*Participant 5*, 08/30/2022). Thus, emerging from the participants’ responses is the idea that women are not only somewhat ignorant of the demands of the higher managerial positions they want to be promoted to but they also critically lack the desire and drive to work towards attaining top leadership positions. As such, the suggestion is that they, therefore, do not deserve to the promotions. Be that as it may, one cannot help but question the sincerity of such ‘concerns’, especially given that they are emerging from male managers who act as gatekeepers in so far as who ‘deserves’ to be promoted or not. The reality is that these concerns are reflective of the paternalistic tendencies that have been responsible for the historical marginalisation and ostracization of women in mining. Benya (2009, p. 15) accounts for this gender-marginalising tendencies by explaining how males, in their quest:

To propagate the feminine mentality in workplaces, supervisors use their authority to sexualise the workplace, to favour men and characterise women as lacking the necessary characteristics to succeed.

Little wonder that participants find such paternalistic tendencies ‘frustrating’, thereby further hampering their progression up the corporate ladder.

Another critical intervention made by the ALT to ensure the career progression of women is through a paradigm shift in its conceptualisation of the life-work balance. That is, the recognition that, compared to men, women have a lot more on their plate which impede their full and fair participation in the mining industry. As a result, the ALT is ensuring that women do not get unduly prejudiced as they try to strike a balance between their home and work lives. A case in point pertains to how women are, for instance, afforded time off during pregnancy and birth and allowed to work from home “because they've got other commitments which they need to, you know, involve themselves into” (*Participant 8*, 08/30/2022).

Nevertheless, the participants bemoaned the tokenistic approach with which issues critical to women, such as gender-based violence, are taken on the mine. These are treated just like events on the mine’s calendar, which are then forgotten as soon as another event, heritage, and culture day for instance, comes up on the calendar. The implication is that critical issues that impact on women’s performance in the mining sector must become a part of the organisational culture. It is only then that such transformational policies can truly enhance the career progression of women in mining. In addition, there are also however instances whereby there seems to be a gap amongst the ALT itself. A case in point is whereby some leaders professed ignorance of some of these critical policies aimed at ensuring the progression of women in mining. As indicated by *Participant 8*, the participants left everything in the hands of the Human Resources Department.

Lastly, the offering of competitive remuneration packages is also another form of intervention put in place to encourage the inclusion of women in mining and also ensure their career progression up to the top leadership positions. Being typically located in rural areas or far away from the urban areas, the mine offers competitive remuneration packages to entice potential employees so that they do not avoid get involved in mining out of fear of losing out on the privileges offered by the urban areas. It is apparent that such kind interventions challenge and dismantle what has been referred to as the ‘cult of domesticity’ in the literature. Benya (2009) defines the cult of domesticity as the socially constructed myth that women do not need high-waged work. Rather, they are fine with low wages as these are assumed to be merely complementing their male partners’ earnings. Thus, Benya (2009, p. 16) argues that “consequently, men tended to expect and assume that they had a right to higher wages than women”. The offering of attractive remuneration packages this ensures that women are economically independent in the mining industry and, as such, their decision to work in the industry must not be predicated to supplementing their male partners’ earnings.

5.5. **Conclusion**

This section concludes the findings of the study conducted for the analysis of the support structures in the career progression of women in mining at Amandelbult Mine. The preceding section is a discussion of the research finding that emerged from interviewing eleven (11) participants from the mine. The study is predicated at on three overarching objectives. These are (1) identifying the barriers experienced by women in mining and assessing the working environmental conditions for women in mining, (2) interrogating the structures of support put in place by Amandelbult Leadership Team (ALT) to ensure the career progression of women in mining and (3) assessing the roles and responsibilities of ALT in the career progression of women in mining. Ultimately, the aim of this research was to evaluate the efficacy of the

intervention made by the ALT to alleviate the barriers faced by women in mining in order to make recommendations on the way forward.

This study has revealed that women face six (6) salient barriers that impede their career progression in the mining industry. These are (i) the lack of experience in technical roles that endow them with the requisite core competences to progress up the leadership ladder, (ii) the masculinised nature of the mining industry, (iii) stereotyping (iv) life-work balance, (v) the glass ceiling and (vi) nepotism. As a way to resolve these barriers, the ALT has instituted the structures and support that aim to minimize leakages in the pipeline of women's progression in this critical industry. These include the institution of such policies, frameworks and programmes that revolve around improving the mining environment, training and development programmes as well as offering competitive remuneration packages, among others.

The introductory and literature review chapters revealed that the mining industry is historically a masculinised and racialized space in which women have been marginalised, at the very least, or ostracised at the extreme. This has mainly been legitimized legal provisions that are traceable to the International Labour Organisation as well as through the patriarchal ideologies. Together, these have worked to construct the mining industry as a 'macho' space. It was also revealed that governments have worked towards repelling these repressive frameworks as way to redress the gendered inequalities subsisting in the mining industry. Of particular interest to the study are such laws as the Employment Equity Act, Affirmative Action, the Promotion of Equity and Prohibition of Unfair Discrimination Act enacted by the South African government since the end of Apartheid. Previous research, particularly that of South Africa, shows that the apartheid system played a fundamental role in shaping and influencing gender disparities in this sector through legislation and policies characterized by racial inequality and gender discrimination (Botha & Cronjé, 2014; Madgavkar, 2016 and Vogelstein, 2016). It is within the framework of what these legal instruments seek to achieve that the interventions made by

Amandelbult Mine are evaluated. Both the analysis and discussion chapters reveal that although the mine has made massive strides in redressing historical marginalisation of women in mining, as well as their career progression, there is still room for more action and/or commitment from mining organisations themselves for genuine inclusion to be attained. The findings of the study support Dlamini's (2016) assertion that, whilst it is true that in terms of numbers, the mining industry continues to show improvement in bringing in more women. The findings also corroborate extent research that reveals that more women are in junior, administrative and support roles. On the other hand, a small number of women have progressed to senior, mid-senior, and executive level (Government Gazette, 2018; Botha, 2016; Dlamini, 2016; Sector Skills Plan for the Mining and Mineral Sector, 2018; Moalusi & Jones, 2019; Mining and Mineral Sustainable Development (MMSD), 2020). This still points to the existence of a glass ceiling which women in mining cannot break beyond.

CHAPTER SIX

6. CONCLUSIONS AND RECOMMENDATIONS

6.1. Introduction

This chapter presents my conclusions on this paper based on the research questions, purpose, objectives, and the interpretation of my findings. The purpose of my research was to analyse existing support structures beyond policy that Amandelbult mine is using to ensure career progression for women in mining at its operations to understand the extent to which the mining sector takes seriously the actual task of ensuring gender transformation and the empowerment of women at the workplace. It aimed to engage Amandelbult's Leadership Team (ALT) to identify the structures available to support career progression for women in mining. More specifically the study intended to:

- Look at the roles and responsibilities of ALT in the career progression of women in mining.
- Investigate mechanisms, procedures and policies that enable women to thrive within the mining sector.
- Identify barriers experienced by women in mining and assess working environmental conditions for women.

My personal experience of working at Anglo American were important in understanding the dynamics of the mining industry, therefore making it easier to interpret the findings. It is fundamental to understand that this research used Amandelbult as a case study and as such, these findings are only applicable for Amandelbult mine. However, some of these findings

might assist in shaping the structures of support for women's career progression in the broader mining industry.

6.2. **Conclusions of the research**

I conclude that though there is an increase in women entering the mining industry, lot of work still needs to be done in ensuring that these women have meaningful careers. For the notion of meaningful careers to become a reality, a number of things must be done, including a re-look at structures available to support career progression, policies, practices and a culture that values inclusion and diversity.

The findings show that, there are several employees who are currently frustrated in their current roles, mainly because they feel stagnant in their current positions. On the other hand, it is the role of managers and manager once removed to engage those employees and make sure that they get meaningful roles. In contradiction, it is also the responsibility of each individual to own their career, hence having functional and intentional structures that supports those individuals becomes critical. Fundamentally, there is still a perception that development pathways favour men over women. Surprisingly, the culture of masculinity and elements of racial discrimination still exist within the sector and as such, other races get preference over the other when it comes to career progression.

The mining industry still has a long way to go in fully incorporating women in such a way that they have work life balance. My findings made a number reference to different challenges that women come across, and unfortunately those challenges negatively impact their career progression. For example, one participant mentioned an incident of one lady that goes to continuous menstruation circle due to longer term of driving underground locomotive. Another example is around the flexibility of women in operations, especially after birth and still

breastfeeding. These are some of the continuous issues that makes it even more difficult to attract women in the mining sector.

6.3. **Recommendations**

Developing from the noted inadequacies of the interventions instituted by the ALT, the study makes the following recommendations:

- To put in place more platforms and forums that genuinely amplify the voice of women in mining. The setting up of a women's division in the mining industry can go a long way in ensuring that this is achieved.
- Mining organisations need to deal more decisively with cases or offences perpetrated against women. Escalating these to the level of criminal offences can go a long way in ensuring zero tolerance against such transgression, thereby making the workplace less toxic and, therefore, more conducive for women.
- That government and associated stakeholders work towards increasing the quarter of women working in the mining industry to at least 50%. In any case, women constitute more than half of the global population.
- The honours are therefore left upon the mines themselves to develop technologies that ensure the full and efficient participation of women in the industry. If the designing of protective gear that is specifically for women is anything to go by, then it is also possible to come up with the appropriate technologies that enables their full participation in the industry.
- That further studies make comparative studies with especially the developed economies so as to enable a cross-cultural appreciation of the barriers faced by women in the mining industry.

7. Reference list

- Acker, J. (2012). Hierarchies, jobs, bodies: A theory of gendered organisations. *Gender and Society*, 4(2), 139–158. Retrieved from <https://doi.org/10.1177/089124390004002002>
- Adonis, C., and Silinda, F. (2021). Institutional culture and transformation in higher education in post-1994 South Africa: a critical race theory analysis. *Journal of Critical African Studies*. Vol. 13, No. 1, 73–94. Retrieved from <https://doi.org/10.1080/21681392.2021.1911448>
- Alexander, P. (2007). Women and coal mining in India and South Africa, c1900–1940. *African Studies*, vol. 66, no. 2/3. pp. 201–222. doi: 10.1080/00020180701482701.
- Alexander, P. (2010). Women and Coal Mining in India and South Africa, c1900-1940. *African Studies*, 66 (2-3: Issue 2-3: Transnational and Comparative Perspectives on Southern African Labour History), 201-222.
- Alobaid, A.M; Gosling, C; McKenna L. & Williams, B. (2020). Gendered organisational theory and glass ceiling: Application to female Saudi paramedics in the workplace. Retrieved from https://www.researchgate.net/publication/346754344_Gendered_organisational_theory_and_glass_ceiling_Application_to_female_Saudi_paramedics_in_the_workplace
- Alsaqqa, H.H. (2021). Assessment of organisational culture types, leadership styles and their relationships within governmental and nongovernmental hospitals in Gaza Strip of Palestine. *Journal of BMC Health Services Research*. Retrieved from <https://doi.org/10.1186/s12913-021-06351-1>
- Amor, B., Susanti, H. & Herlusia, S. (2020). Gender mainstreaming in Indonesia's mining industry. Retrieved from <https://blogs.worldbank.org/eastasiapacific/gender-mainstreaming-indonesias-mining-industry>.

Anonymous (2015, August 27). Being a 'token' woman in a male-dominated office made me ill with stress. *The Telegraph*. <https://www.telegraph.co.uk/women/womens-business/11826078/Stress-Women-in-male-dominated-offices-can-get-ill-from-anxiety.html>

Ashraf, M. (2007). Factors affecting female employment in male-dominated occupations: evidence from the 1990 and 2000 census data. *Contemporary Economic Policy*, 25(1), 119–130. <http://dx.doi.org/10.1111/j.1465-7287.2006.00022.x>

Bank, L. (2017). Migrant labour in South Africa. Paper presented at Migrant Labour in South Africa: *Conference and Public Action Dialogue*, 7-8 February, University of Fort Hare, East London Campus.

Barragan Romano, R. and Papastefanaki, L. (2020). Women and Gender in the Mines: Challenging Masculinity Through History: An Introduction. *IRSH*, 65, 191-230.

Beinart, W. 1980. Labour Migrancy and Rural Production: Pondoland c.1900–1950, in P. Mayer (ed), *Black Villagers in an Industrial Society: Anthropological Perspectives on Labour Migration in South Africa*. Cape Town: Oxford University Press.

Benya, A. (2018). Women of the mines: apartheid and post-apartheid lived realities of South African women. *Storia Delle Donne*, 13(1), 79-101. Retrieved from <https://doi.org/10.13128/SDD-23957>

Benya, A.P. (2009) Women in Mining: A Challenge to Occupational Culture in Mines. Unpublished Masters Dissertation, University of the Witwatersrand.

Botha, D & Cronjé, J.K (2014). The physical ability of women in Mining: Can they show muscle? *Journal of the Southern African Institute of Mining and Metallurgy*. vol.115 n.8. Retrieved from http://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S2225-62532015000800004

- Botha, D (2014). Workplace Opportunities for Women Employed in Core Mining Activities. *Mediterranean Journal of Social Sciences*, Vol 5 No 23. Retrieved from [file:///C:/Users/PeSingo/Downloads/Workplace Opportunities for Women Employed in Core.pdf](file:///C:/Users/PeSingo/Downloads/Workplace_Opportunities_for_Women_Employed_in_Core.pdf)
- Botha, D. & Cronj'e, J.F. (2015). The physical ability of women in Mining: can they show muscle? *J. S. Afr. Inst. Min. Metall* 115 (8), 659–667.
- Botha, D. (2016). Women in Mining still exploited and sexually harassed. *SA J. Hum. Resour. Manag.* 14 (1), 1–12.
- Botha, D. (2017). Barriers to career advancement of women in mining: A qualitative analysis. *South African Journal of Labour Relations*, vol. 41. pp. 15–32.
- Bozzoli, B. (1983). Marxism, Feminism and Southern African Studies'. *Journal of Southern African Studies*, ...
- Bradley, H. (1989). *Men's Work, Women's Work: A Sociological History of the Sexual Division of Labour in Employment*. London: Polity.
- Braun, V & Clarke, V (2014). *Successful Qualitative Research, a practical guide for beginners*. Sage publication. Thousand Oaks, California.
- Brenøe, A.A. & Z'olitz, U. (2020). Exposure to more female peers widens the gender gap in stem participation. *J. Labor Econ.* 38 (4), 1009–1054.
- Breytenbach, M. (2017, August 4). Women representation increases from 'extreme minority' to 13%-plus of SA's mining workforce. *Mining Weekly*. <https://www.miningweekly.com/article/women-representation-increases-from-extreme-minority-to-13-plus-of-sas-mining-workforce-2017-08-04>.

Brink, H. I. L. (1993). Validity and Reliability in Qualitative Research. *Curationis*, 16, 35-38.

<https://doi.org/10.4102/curationis.v16i2.1396>

Buhlungu, A., and Bezuidenhout, A. (2008). The Case of the National Union of Mineworkers in South Africa. *Journal of Labour studies*, Vol 33 No 3, 262 – 287. <http://lsj.sagepub.com/>

Calitz, P.L. (2004). Experiences of Women in the Platinum Mining Industry. Unpublished Masters Dissertation, North West University.

Cardno Project. (n.d.). Women's Participation in the Sustainable Development of Mining Project.

Cardno Project. <https://www.cardno.com/projects/women-s-participation-in-the-sustainable-development-of-mining-project/>.

Carvalho, I; Costa, C; Lykke, N & Torres, A. (2019). Beyond the glass ceiling: Gendering tourism management. *Ann Tourism Res.* Retrieved from

https://www.researchgate.net/publication/329988285_Beyond_the_glass_ceiling_Gendering_tourism_management

Cha, Y. (2013). Overwork and the persistence of gender segregation in occupations. *Gender & Society*, 27. <http://dx.doi.org/10.1177/0891243212470510>.

Chamber of Mines of South Africa (2017). MINE SA 2017: FACTS AND FIGURES POCKETBOOK.

#MiningMatters #ItAddsUp. Retrieved from <file:///C:/Users/PeSingo/Downloads/com-mining-facts-2017.pdf>

Chibba, S. (n.d.). A history of mining in South Africa. southafrica.net/gl/en/travel/article/a-history-of-mining-in-south-africa.

Connell, C. & Claughton, D. (2018). Women in Mining: dig the changing face of Australia's mining industry. Retrieved from <https://www.abc.net.au/news/2018-05-22/dig-the-changing-face-of-mining-as-women-make-inroads/9786020>.

Creamer Media. 2019. Sexual harassment has become a serious issue. *Mining Weekly*, 27 September.

https://www.miningweekly.com/article/sexual-harassment-has-become-a-serious-issue-2019-09-27/rep_id:3650.

Creswell, J. D. (2009). *Qualitative, Quantitative and Mixed Method Approaches* (2nd ed.). Los Angeles/London: SAGE Publications

Creswell, J.W (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approa*

Creswell, J. D. (2015). *Qualitative, Quantitative and Mixed Method Approaches* (Fourth ed.). Los Angeles/London: SAGE Publications

Creswell, J.W. (2007). *Qualitative Inquiry and Research Design: Choosing among Five Approaches* (2nd edition). Thousand Oaks, CA: Sage.

Danziger, N. and Eden, Y. (2007). Gender-related differences in the occupational aspirations and career-style preferences of accounting students. A cross-sectional comparison between academic school years. *Career Development International*, 12(2), 129–149. <http://dx.doi.org/10.1108/13620430710733622>.

Deal, T.E., Kennedy, A.A. (1982), *Corporate Cultures*, Reading MA, Addison- Wesley. Retrieved from <https://pdfs.semanticscholar.org/fcdf/a28558deaadd6a0ce1f4c355212e138df5ec.pdf>

Dennis, C. (1988). Women in African Labour History. *Journal of Asian and African Studies*, 23(1-2), 125-140.

Dlamini, T. (2016). Gender in the Mining Industry. *Review of African Political Economy*. Retrieved from <http://roape.net/2016/02/10/gender-in-the-mining-industry/>

DMR (Department of Mineral Resources). (2009). Mining Charter impact assessment report. https://www.gov.za/sites/default/files/gcis_document/201409/mining_charter_impact.pdf.

- DMR (Department of Mineral Resources). (2015). Assessment of the Broad-based Socio-economic Empowerment Charter for the South African Mining Industry (Mining Charter), 2015. <http://www.dmr.gov.za/mining-charter-assessment-report.html>.
- Eldredge, E. A. (1993). *A South African Kingdom: The Pursuit of Security in Nineteenth-Century Lesotho*. Cambridge: Cambridge University Press.
- Evans, K.J. & Maley, J.F. (2020). Barriers to women in senior leadership: how unconscious bias is holding back Australia's economy. *Asia Pac. J. Hum. Resour.* Retrieved from <https://doi.org/10.1111/17447941.12262>.
- Facts and Figures (2021). Anglo American makes Bloomberg's Gender-Equality Index. Retrieved from <https://www.angloamerican.com/about-us/our-stories/bloomberg-gender-equality-index>
- Fakhar S., Rana A.L., Ayesha R.K. & Lalarukh S (2012) Impact of Organisation al Culture on Organisation al Performance: An Overview, *Interdisciplinary Journal of Contemporary Research in Business*, Volume 3, Number 9, Pakistan, 2012. p. 976. Retrieved from https://www.researchgate.net/publication/323906766_Organisation_al_Culture_Leadership_Styles_and_Organisation_al_Performance_A_Literature_Review
- Fereday, J. & Muir-Cochrane, E. 2006. Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods*, 5 (1), pp. 80-92.
- Fernandez-Stark, K., Couto, V. & Bamber, P.S. (2019). Background paper for WBG-WTO global report on trade and gender: how can twenty-first-century trade help to close the gender gap?- industry 4.0 in Developing Countries: the Mine of the Future and the Role of Women. The World Bank, p. 22. No. 141574.

- Finnemore, M. and Cunningham, P. (1995). Women and the workplace. In A. van der Merwe (Eds.), *Industrial Sociology: A South African Perspective*, (pp. 177–210). Isando: Lexicon Publishers.
- Franks, K., Schurink, W., and Fourie, L. (2006). Exploring the social construction of life roles of career-oriented women. *South African Journal of Industrial Psychology*, 32(1), 17–24.
- Frome, P.M., Alfeld, C.J., Eccles, J.S., and Barber, B.L. (2006). Why don't they want a male dominated job? An investigation of young women who changed their occupational aspirations. *Educational Research and Evaluation*, 12(4), 359–372. <http://dx.doi.org/10.1080/13803610600765786>.
- Glenn, E.N. 1991. Cleaning up/kept down: a historical perspective on racial inequality of “women’s work”. *Stanford Law Review*, 43(6):1333-1356.
- Golafshani, N. (2003). Understanding Reliability and Validity in Qualitative Research. *Journal of the qualitative report*, Vol 8, No. 4. https://nsuworks.nova.edu/tqr?utm_source=nsuworks.nova.edu%2Ftqr%2Fvol8%2Fiss4%2F6&utm_medium=PDF&utm_campaign=PDFCoverPages
- Government Gazette (2018). BROAD -BASED SOCIO- ECONOMIC EMPOWERMENT CHARTER FOR THE MINING AND MINERALS INDUSTRY. Retrieved from https://www.gov.za/sites/default/files/gcis_document/201809/41934gon1002.pdf
- Government Gazette (2018). RSA (Republic of South Africa) 2010a. Amendment of the Broad-based Socio-economic Empowerment Charter for the South African Mining and Minerals Industry. Retrieved From <http://www.dmr.gov.za/publications/summary/108-mining-charter-downloads/128-amendedofbbseecharter.html>

Government Gazette (2018). RSA (Republic of South Africa) 2010a. Amendment of the Broad-based Socio-economic Empowerment Charter for the South African Mining and Minerals Industry.

Retrieved From <http://www.dmr.gov.za/publications/summary/108-mining-charter-downloads/128-amendedofbbseecharter.html>

Greeff, W.J. (2020). Managing Contestation in Organisational Culture: Lessons Learned from the South African Mining Pidgin Fanagalo. The International Journal of Knowledge, Culture, and Change Management: Annual Review Volume 20, Issue 1, 2020, <https://organisation-studies.com>

Guest, G., MacQueen, K.M. & Namey, E.E. 2011. Applied Thematic Analysis. Sage Publications, Inc., Thousand Oaks.

Guest, G., Namey, E. E., & Mitchell, M. L. (2013). Qualitative research: Defining and designing. Collecting qualitative data, 1-40. doi:<https://dx.doi.org/10.4135/9781506374680.n1>

Howe-Walsh, L., & Turnbull, S. (2016). Barriers to women leaders in academia: Tales from science and technology. Studies in Higher Education, 14(3), 415–428. Retrieved from: <https://doi.org/10.1080/03075079.2014.929102>

ILO (International Labour Organisation). 2011. Equality at work: The continuing challenge. http://www.ilo.org/ilc/ILCSessions/100thSession/reports/reports-submitted/WCMS_154779/lang--en/index.htm.

ILO (International Labour Organisation). Not dated. Ratifications of C045: Underground Work (Women) Convention, 1935 (No. 45). https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C045.

Ipinazar, A., Zarrabeitia, E., Rio Belver, R.M., and Martinez-de-Alegría, I. (2020). Organisation al Culture Transformation Model: Towards a High-Performance Organisation . Journal of Industrial and Management. JIEM, 2021 – 14(1): 25-44 – Online ISSN: 2013-0953 – Print ISSN: 2013-8423, <https://doi.org/10.3926/jiem.3288>

Iwerks, R. (2019, February 11). An Opportunity to Walk the Talk: Making Gender Disclosure Part of the EITI Standard. Natural Resources Governance Institute. <https://resourcegovernance.org/blog/opportunity-walk-talk-making-gender-disclosure-part-eiti-standard>.

Jagaa, A., Arabandib, B., Bagraima, J., and Mdlongwaa, S. (2018). Doing the ‘gender dance’: Black women professionals negotiating gender, race, work, and family in post-apartheid South Africa. Journal of community, work and family, VOL. 21, NO. 4, 429–444, <https://doi.org/10.1080/13668803.2017.1311840>

James, N. (2018, 3 August). Number of female mineworkers gradually increasing as technology and conducive policies are introduced. *Mining Weekly*. [https:// www.miningweekly.com/print-version/recruitment-policies-technology-boost-number-of-women-in-mining-2018-08-03](https://www.miningweekly.com/print-version/recruitment-policies-technology-boost-number-of-women-in-mining-2018-08-03).

Jaques, E. (1951). The changing culture of a factory. Tavistock Institute of Human Relations. (London): Tavistock Publications. Retrieved from <http://www.invistaperforms.org/the-origins-of-organisation al-culture/>

John, R & Hugh, P. (2019). Establishing the credibility of qualitative research ®ndings: the plot thickens. Journal of Advanced Nursing, 1999, 30(2), 374±380. Retrieved from <file:///C:/Users/PeSingo/Downloads/cutcliff-and-mckenna-1999-credibility.pdf>

Jones, C.M. and Moalusi, K.P. (2019). Women’s prospects for career advancement: Narratives of women in core mining positions in a South African mining organisation. *SA Journal of Psychology*, 45, 1–11.

Kansake, B.A., Kaba, F.A., Dumakor-Dupey, N.K. & Arthur, C.K. (2019). The future of Mining in Ghana: are stakeholders prepared for the adoption of autonomous mining systems? *Resour. Pol.* 63, 101411.

Khoza, N (2015). Women's Career Advancement in the South African Mining Industry: Exploring the experiences of women in management positions at Lonmin Platinum Mine. Retrieved from https://ukzn-dspace.ukzn.ac.za/bitstream/handle/10413/13777/Khoza_Nompumulelo_2015.pdf?sequence=1&isAllowed=y

Kolisi, B. and Rithaa, M.K.M. (2016). User-centric design considerations for women's functional protective wear for the construction industry in southern Africa. *Ergonomics SA*, 28(1), 1–11.

Kono, S. (2018). From Pragmatist Discussion to Pragmatist Projects in Leisure Research. *Journal of Leisure Sciences*. Vol 40, NO. 3, 216-227. Retrieved from <http://dx.doi.org/10.1080/01490400.2016.1256797>

Kwagga, M. (2020). Interventions to promote gender equality in the mining sector of South Africa: The Extractive Industries and Society. Retrieved from <https://doi/10.1016/j.exis.2019.03.015>.

Lahiri-Dutt, K. (2001). 'From Gin Girls to Scavengers: Women in Indian Collieries'. Working Paper 28. Canberra: Resource Management in Asia-Pacific Project, Research School for Pacific and Asian History, Australian National University.

Lauwo, S. (2018). Challenging Masculinity in CSR Disclosures: Silencing Women's Voices in Tanzania's Mining Industry. *Journal of Business Ethics*. Retrieved from <https://doi.org/10.007/s10551-016-3047>

Leotaud, V.R., (2019). Still a Way to Go to Achieve Gender Balance in the Mining Industry. Retrieved from <https://www.mining.com/still-way-go-achieve-gender-balance-mining-industry/>.

- Mangaroo-Pillay, S. and Botha, D. An exploration of women's workplace experiences in the South African mining industry. *The Southern African Institute of Mining and Metallurgy*. doi.org/10.17159/2411-9717/1099/2020
- Maqubela, L.N. (2016). Mothering the 'other': the sacrificial nature of paid domestic work within Black families in the post-Apartheid South Africa. *Gender and Behaviour*, 14(2).
- Maqubela, L.N; Ndanduleni, D.H. & Nishimwe-Niyimbanira, R. (2020). Destabilizing Masculinities: Perceptions on The Gendered Division Of Labour In The Mining Sector In Phalaborwa, Limpopo Province. *Gender & Behaviour*, Vol. 18(4), 2020.
- Marinakou, E. (2015). The Glass Ceiling and Women in Management in the Middle East: Myth or Reality. Retrieved from https://www.researchgate.net/publication/281238334_The_Glass_Ceiling_and_Women_in_Management_in_the_Middle_East_Myth_or_Reality
- Martin, P. and Barnard, A. (2013). The experience of women in male-dominated occupations: A constructivist grounded theory inquiry. *SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde*, 39(2). <http://dx.doi.org/10>
- Marusic, K. (2016). People Still Believe Women Belong in the Kitchen and Men Belong at the Office Good grief. It turns out gender stereotypes are just as bad today as they were 30 years ago. Retrieved from <https://www.womenshealthmag.com/life/a19934409/gender-stereotypes-study/>.
- Mashiane, B.R. (2009). Transformational Barriers against Women's Advancement in South African Platinum Mining Companies. Unpublished Masters Dissertation, North West University.
- Matshingane, L.B. 2017. Experiences of women working underground at a coal mine in Mpumalanga province. MA dissertation, University of the Witwatersrand, Johannesburg.

- Mavuso, Z. (2015). Mining sector exceeds 10% female employment target but sexual harassment, other challenges linger. *Mining Weekly*, 11 December. <https://www.miningweekly.com/article/mining-sector-exceeds-10-female-employment-target-but-sexual-harassment-other-challenges-linger-2015-12-11>.
- Mbeki, T. (1998). Statement of Deputy President Thabo Mbeki at the Opening of the Debate in the National Assembly, on "Reconciliation and Nation Building, National Assembly Cape Town, 29 May 1998. Retrieved from <http://www.dirco.gov.za/docs/speeches/1998/mbek0529.html>.
- McClellan, J.G. (2021). Organisational Culture, Discipline, and the Politics of Self: Transformation Through Responsive Conversation. *Journal of international Business Communication*. Vol. 58(2) 152–168. Retrieved from <https://doi.org/10.1177/2329488420927775>.
- Measham, T.G. & Zhang, A. (2019). Social licence, gender and Mining: moral conviction and perceived economic importance. *Resour. Pol.* 61, 363–368. Retrieved from <https://doi.org/10.1016/j.resourpol.2018.11.001>.
- Menard, W. (2021, January 27). Women in Mining: A History of Legal Invisibility and Exclusion. Natural Resources Governance Institute. <https://resourcegovernance.org/blog/women-mining-history-legal-invisibility-and-exclusion>.
- Mertens, D. M. (2007). Transformative Paradigm: Mixed Methods and Social Justice. *Journal of Mixed Methods Research*. Volume 1 number 3. Sage Publications 10.1177/1558689807302811. Retrieved from https://www.researchgate.net/publication/240730451_Transformative_Paradigm_Mixed_Methods_and_Social_Justice?enrichId=rgreq-d92e03aaa490b3d682c275869def27f6-XXX&enrichSource=Y292ZXJQYWdlOzI0MDczMDQ1MTtBUzoxNTg0MDA5MDIwODI1NjBAMTQxNDc3NzEyNjczNQ%3D%3D&el=1_x_2&esc=publicationCoverPdf

- Mesfin, D., Woldie, M., Adamu, A., and Bekele, F. (2020). Perceived organisational culture and its relationship with job satisfaction in primary hospitals of Jimma zone and Jimma town administration, correlational study. *Journal of BMC Health Services Research*. Retrieved from <https://doi.org/10.1186/s12913-020-05319-x>
- Mfolo, Y. (2015). Anglo American Press Release: KUMBA INSTITUTES CLOSING PROCEDURES FOR THABAZIMBI MINE. Retrieved from <https://www.angloamericankumba.com/media/press-releases/2015/16a-07-2015>
- Minerals Council South Africa (2021). Latest Facts and Figures: Facts and figures 2020. Retrieved from <https://www.mineralscouncil.org.za/industry-news/publications/facts-and-figures>
- Minerals Council South Africa. 2018. Fact and figures. Pocketbook 2018. <https://www.mineralscouncil.org.za/downloads/send/18.../682-facts-and-figures-2018>.
- Mining Review Africa, (2019). The barriers that barred women from the mining industry. Retrieved from <https://www.miningreview.com/gold/the-barriers-women-faced-in-the-mining-industry-in-south-africa/>
- Mining Technology. (2019, May 20). History of mining in South Africa. <https://www.mining-technology.com/analysis/history-of-mining-in-south-africa/>.
- Moalusi, K.P., & Jones, C.M. (2019). Women's prospects for career advancement: Narratives of women in core mining positions in a South African mining organisation . *SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde* 45(0),a1564. <https://doi.org/10.4102/sajip.v45i0.1564>
- Moodie, T.D. (1994). *Going For Gold: Men Mines and Migration*. Johannesburg: Wits University Press.

- Moore, N. (2012). The politics and ethics of naming: questioning anonymisation in (archival) research. International journal of social research methodology, 15(4), 331-340.
- Mostert, K. (2009). The balance between work and home: The relationship between work and home demands and ill health of employed females. *South African Journal of Industrial Psychology*, 35(1), Art.#743, 8 pages. <http://dx.doi.org/sajip.v35i1.743>
- Mphokane, M.S. (2008). Profiles of Successful Managers held by Male and Female Managers in the Coal Mining Industry. Unpublished Masters Dissertation, North West University.
- Mputing, A. (2017). Progress has been slow in mining sector regarding promotion of gender transformation. Parliament of the Republic of South Africa. <https://www.parliament.gov.za/news/progress-has-been-slow-mining-sector-regarding-promotion-gender-transformation>.
- Nene, T. (2016, October 3). Mining discontent: How women miners are raped, and become sex skivvies to get ahead. *Mail & Guardian*. <https://mg.co.za/article/2016-10-03-00-mining-discontent-how-women-miners-are-raped-and-become-sex-skivvies-to-get-ahead>
- Nkomo, S.M & Rodriguez, J.K. (2018). Joan Acker's Influence on Management and Organisation Studies: Review, Analysis and Directions for the Future. *Gender, Work & Organisation* .
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic Analysis: Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*, 16 (1), 1-13. Retrieved from <http://ojs.aishe.org/index.php/aishe-j/article/viewFile/335/553>
- NRGI (Natural Resources Governance Institute) (2020, June 23). How Can Extractive Sector Laws and Policies Contribute to Gender Equality? Natural Resources Governance Institute. <https://resourcegovernance.org/blog/extractive-sector-laws-policies-contribute-gender-equality>.

Ntombela, D. (2014). Women in mining: Women in mining face challenges. *Inside Mining*, 6, 30-31.

O'Donovan, G. (2015), *The Corporate Culture Handbook, How to Plan, Implement and Measure A Successful Culture Change*. Retrieved from <https://www.ipa.ie/fileUpload/Documents/CPMRDP40UnderstandingManagementOfOrganisationalCultureTransformationBottomUp.pdf>

Organisational Culture Transformation Bottom Up: Experiential Learning – Scripts. (2018, September 17 - 28) Anglo American Platinum – Care and Respect Toolkit, 1.

Organisational Culture Transformation: My Culture Story, Every Story Unique. Every Story Significant. (2019, June 6) Anglo American Platinum – Our Journey to Significance, 1.

Oxfam, T. (2017). *Position paper on gender justice and the extractive industries*. Retrieved from: https://www.oxfam.org.au/wpcontent/uploads/2017/04/EI_and_GJ_position_paper_v.15_FINAL_03202017_green_Kenny.pdf

Perks, R. & Schulz, K. (2020). Gender in Oil, Gas and Mining: an Overview of the Global State-Of-Play. Retrieved from <https://doi.org/10.1016/j.exis.2020.04.010>.

Reiners, B. (2021) What is the glass ceiling and how do we break it? A guide to understanding the glass ceiling metaphor. <https://builtin.com/diversity-inclusion/glass-ceiling>.

Rickard, S., Treasure, W., McQuiiken, J., Mihaylova, A. and Baxter, J. (2017). Can a mining law unlock the potential of women? *Women in Mining*. Adam Smith International.

Romm, N. (2015). Reviewing the Transformative Paradigm: A Critical Systemic and Relational (Indigenous) Lens. *Journal of Science and Business Media. Syst Pract Action Res* (2015) 28:411–427. DOI 10.1007/s11213-015-9344-5. Retrieved from https://www.researchgate.net/publication/281576901_Reviewing_the_Transformative_Paradigm_A_Critical_Systemic_and_Relational_Indigenous_Lens?enrichId=rgreq-

[c97b8219684325df81ec0ef90e8cccb0-XXX&enrichSource=Y292ZXJQYWdlOzI4MTU3NjkwMTtBUzoNDUzNTY1Mzg3OTM5ODhAMTQ1OTM1MDgyMzYwNQ%3D%3D&el=1_x_2&esc=publicationCoverPdf](https://www.researchgate.net/publication/325519684325df81ec0ef90e8cccb0-XXX&enrichSource=Y292ZXJQYWdlOzI4MTU3NjkwMTtBUzoNDUzNTY1Mzg3OTM5ODhAMTQ1OTM1MDgyMzYwNQ%3D%3D&el=1_x_2&esc=publicationCoverPdf)

Saldaña, J. 2015. *The Coding Manual for Qualitative Researchers* (5rd ed.). Arizona State University, USA.

SA News (2012). SA Strives for Women Empowerment (2012). Retrieved on the 26 April Tuckett, A, (2005). Applying Thematic Analysis Theory to Practice: a researcher's experience Contemporary nurse: a journal for the Australian nursing profession 19(1-2):75 DOI:10.5172/conu.19.1-2.75

Sarti, R., Bellavitis, A. and Martini M. (Eds). (2018) *What is Work? Gender at the Crossroads of Home, Family, and Business from the Early Modern Era to the Present*. New York.

Sector Skills Plan for the Mining and Mineral Sector (SSP) 2019-2020 (2018). Mining Qualification Authority, Johannesburg.

Sesele, K., Marais, L., van Rooyen, D. and Cloete, J. (2021). Mine decline and women: reflections from the Free State Goldfields. *The Extractive Industries and Society*, 8(1), 211-219.

Shobhana, P. (2011). The adaptation and evaluation of a measure of organisational culture in the mining industry in South Africa. Unpublished MA Dissertation: University of South Africa.

Slater, D. (2018, 13 July). SA mines relying heavily on unskilled workers despite Industry 4.0 gaining traction. Mining Weekly. <https://www.miningweekly.com/article/sa-mines-relying-heavily-on-unskilled-workers-despite-industry-40-gaining-traction-2018-07-13>.

Smith, J.A. & Osborn, M. (2003). Interpretative Phenomenological Analysis. In: Smith JA (Ed). *Qualitative Psychology: A Practical Guide to Research Methods*, 53-80. London, Sage.

Smith, J.A., Flowers, P. and Larkin, M. (2009). *Interpretative Phenomenological Analysis*. London: Sage.

South Africa. (1956). *The Mines and Works Act (No. 27 of 1956)*. Pretoria: Government Printer.

South Africa. (1991). *The Minerals Act 50 of 1991*. Pretoria: Government Printer.

South Africa. 2002. *Mineral and Petroleum Resources Development Act 28 of 2002*.

<http://www.dmr.gov.za/publications/summary/109-mineral-and-petroleum-resources-development-act-2002/225-mineraland-petroleum-resources-development-actmprda.html>.

Stamarski, C.S. & Son Hing, L.S. (2015). Gender inequalities in the workplace: The effects of organisational structures, processes, practices, and decision makers' sexism. Retrieved from <https://www.frontiersin.org/articles/10.3389/fpsyg.2015.01400/full>

StatsSA (2021). Realizing women's rights for an equal future on Women's Day. Retrieved on the 9th August 2021 from: <http://www.statssa.gov.za/?p=14559>

Thomas, M. D. (2021). *racial microaggressions against black women in the workforce*. Masters Thesis. The City University of New York. United States of America.

Turner, D. W. (2010). Qualitative Interview Design: A Practical Guide for Novice Investigators. *The Qualitative Report*, 15(3), 754-760. <https://doi.org/10.46743/2160-3715/2010.1178> 2012 from: www.sanews.gov.za

Vosloo, C. (2020). Extreme apartheid: the South African system of migrant labour and its hostels. *Image and Text*, 34, 1-33.

Walker, C. (1990). Gender and the development of the migrant labour system, c.1850–1930: An overview. In, Walker, C. (ed), *Women and Gender in Southern Africa to 1945*. London: James Currey.

Webber, R. (1990). Basic Content Analysis (2nd Edition). DOI: <https://dx.doi.org/10.4135/9781412983488>

Webster, E. and Von Holdt, K. (2005). Beyond the Apartheid Workplace: Studies in Transition. Scottsville: University of KwaZulu-Natal Natal Press.

Webster, E., Stewart, P., Phakathi, S., Dlulane, G. and Fakier, K. (2002). Future Mine 6.2.1 Mining Personnel Development Strategies: A Review and Evaluation of Career Development Strategies for Production Workers. Johannesburg: Sociology of Work Unit, University of the Witwatersrand.

Wilson, F. (2014). South Africa's migrant labour system. *The Oxford Companion to the Economics of South Africa*, 275-282.

Women in Mining (2020). Global Perspective cases and best practices from Australia and South Africa. Retrieved from https://unece.org/fileadmin/DAM/energy/se/pdfs/UNFC/Women_in_Mining_Webinar/Women_in_Mining_Presentation.pdf

Women in Mining (SA) (2020). Creamer Media's Mining Weekly. Women representation agenda is at even odds – WiMSA. Retrieved From <https://www.miningweekly.com/page/women-in-mining>

Woolnough, H., & Redshaw, J. (2016). The career decision of professional women with dependent children: What's changed. *Gender in Management: An International Journal*, 31(4), 297–311. <https://doi.org/10.1108/GM-03-2016-0038>

WRS (Worldwide Recruitment Solutions). (2014). Let's talk about: women in the mining industry. <https://www.mining.com/lets-talk-about-women-in-the-mining-industry-31775/>.

8. Appendices

Annexure 1: Questions

Biographical data

Age: _____

Race: White ☐ Black ☐ Indian ☐ Coloured ☐ other ☐ (Please specify)

Area of responsibility: Amandelbult complex ☐ Open Cast ☐ Tumela ☐ Dishaba

☐ Processing plant ☐ Project Management Office ☐

Member of Amandelbult Leadership Team: Yes ☐ No ☐

Current Position: _____

Duration in current role: _____

Highest qualification: Matric ☐ Diploma ☐ University Degree ☐ Honours Degree ☐ Masters

Degree ☐ other ☐ (Specify)

How were you recruited in your current role? Internal recruitment ☐ Internal ☐
promotion/succession planning ☐ external recruitment ☐ secondment ☐ other ☐ (please
specify) _____

If succession plan/internal promotion or secondment, describe your career progression:

How long have you been working in the mining industry?

What was your role prior to the current one and how long did it take for you to move into your next role?

Work related

As the leadership team and people responsible for the career progression of women in mining, how long does it typically take for women to move from one role to the next?

Why do you think that's the case?

What is the role of the leadership team in ensuring career progression for women in mining at Amandelbult mine?

What mechanisms, policies, or structures in place at Amandelbult mine that ensures fast tracking of career progression for women in mining?

Do you think these structures are effective in promoting career progression for women in mining?

If so? Please explain?

What support outside policies and procedures are available for women in mining to fast track their career progression on site?

If yes? What are those support structures, and have they been working?

If not? Why is that the case?

How would you describe Amandelbul mine's working environment for women in mining?

What are the barriers that the leadership team see as hindering the career progression for women at Amandelbult mine?

How is the leadership team attempting to deal with these barriers?

Are there any racial disparities between women's career progression at Amandelbult mine?

If they are, why do you think that's the case?

What structures are in place to deal with these disparities?

Annexure 2: Approval Letter from Amandelbult mine

28 June 2021

Dear Lihle Ngcobozi

I Patrick Morutlwa, Senior General Manager for Amandelbult Complex, hereby give permission for Tshifhiwa Peter Singo to conduct research entitled, “An analysis of support structures in the career progression of women in mining at Amandelbult Mine”. The research will be for purposes of completing his Masters degree of Management: Governance and Public Policy.

My understanding is that he will be conducting interviews with Amandelbult Leadership Team. This team consists of the Senior General Manager for the complex, the General manager for Open Cast, Tumela and Dishaba Mine. This team also has senior manager from Engineering, Human Resources, Finance, Operating Model, Mineral Resources Management, Project Management Office, Social Performance Management, Processing Plant, Safety, Health and Environment.

The interview will take approximately one hour each virtually and individual's participation will be voluntary and at their own discretion. The understanding is that all individual responses will be kept confidential and that the ethical research processes will be adhered to.

Approved / Dissapproved

Patrick Morutlwa _____

Senior General Manager: Amandelbult Complex

Annexure 3: Participant sheet

Dear Sir/Madam

My name is Tshifhiwa Peter Singo and I am a master's student of Management in Governance "Specializing in public policy" at Wits University in Johannesburg. As part of my studies, I must undertake a research project, and I am investigating Support structures in the career progression of women in mining at Amandelbult Mine. The aim of this research project is to investigate strategies that management at Amandelbult mine use to ensure career progression for women in Mining.

As part of this project, I would like to invite Amandelbult Leadership Team "ALT" to take part in an interview. This activity will involve questions and answers and will take approximately one hour. With your permission, I would also like to record the interview using a digital device (optional).

You will not receive any direct benefits from participating in this study, and there are no disadvantages or penalties for not participating. You may withdraw at any time or not answer any question if you do not want to. The interview will be completely confidential and anonymous as I will not be asking for your name or any identifying data, and the data you give to me will be held securely and not disclosed to anyone else. I will be using a pseudonym (false name) to represent your participation, in my final research report. If you experience any distress or discomfort, I will stop the interview or resume another time.

If you have any questions afterwards about this research, feel free to contact me on the details listed below. This study will be written up as a research report which will be available online

through the university library website. If you wish to receive a summary of this report, I will be happy to send it to you upon request (optional). If you have any queries, concerns, or complaints regarding the ethical procedures of this study, you are welcome to contact the University Human Research Ethics Committee, telephone + 27(0)11 717 1408, email: Shaun.Schoeman@wits.ac.za

Yours sincerely,

Peter Singo

Researcher: Tshifhiwa Peter Singo, 2421941@students.wits.ac.za; +27 60 968 2948

Supervisor: Lihle Ngcobozi, lihle.ngcobozi@wits.ac.za; +27 11 717 3807

