

Gender-barriers faced by women entrepreneurs in the South African mining industry

Student number 21820172

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ABSTRACT

Literature and the economic environment have emphasized the need for women to venture into entrepreneurial activities to promote the growth of the country's economy and thus alleviate poverty through reduction of unemployment. However, women's participation is limited due to gender barriers further to entrepreneurship being embedded as a masculine concept. Furthermore, entrepreneurship studies have not included the aspect of gender as a sociocultural construct. Hence gender behaviours shaped by sociocultural norms are not considered in entrepreneurial studies.

Therefore, the study explored gender-specific barriers faced by women entrepreneurs in mining, established gender barriers due to sociocultural norms and approaches to overcoming barriers thereof. The study explored the barriers by conducting a qualitative study. Sixteen (16) in-depth interviews with women entrepreneurs running businesses in the mining industry offering technical services which are regarded as male-dominated, were conducted. The findings indicated that women entrepreneurs face gender barriers and highlighted the following key barriers affecting women entrepreneurs in mining as a non-traditional industry: Patriarchy, stereotyping, discrimination, lack of networking skills, lack of access to finance, and lack of experience and skills.

On the other hand, it has been established that both mining companies and government continue with efforts to promote small enterprise development and promote gender equality. However, efforts have yet to appear effective for women entrepreneurs. Therefore, women entrepreneurs should first undertake techniques that can strengthen their agency and legitimacy in order to gain access to even the most basic resources.

A conceptual model was developed based on the findings of research questions anchored in the empirical study.

Keywords

Entrepreneurship, Gender, Socio-cultural norms, Women Entrepreneurs, Barriers.

List of Abbreviations and acronyms

Table 1: List of Abbreviations and Acronyms

Abbreviations	Meaning
BBBEE	Broad Based Black economic
	empowerment
PSF	Post Structural Feminist Theory
SAICA	South African Institute of Chartered
	Accountants
RQ	Research Question
WE	Women entrepreneur
ESD	Enterprise and Supplier Development

Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Kagisho Dorcas Nondwangu

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Title: Gender-related barriers faced by women entrepreneurs in the mining industry

CHAPTER 1: DEFINITION OF PROBLEM AND PURPOSE

1.1 Introduction

Entrepreneurship is the discovery and exploitation of opportunities into profitable outcome achieved through creation of goods and services, thus creating jobs and contributing towards economic development and alleviation of poverty (Sutter, Brutton & Chen, 2019; Giotopoulos, Kontolaimou & Tsakanikas, 2017). Furthermore, Meyer & de Jongh (2018) says that entrepreneurship is one of the important contributors of sustained economic growth and development, innovation and employment. However, entrepreneurship has been embedded to be a gendered phenomenon (Mehtap, Pellegrini, Caputo & Welsh, 2017). Even though an increase in women's engagement in entrepreneurship has been observed worldwide, women's participation is still low compared to male counterparts Aneke, Derera & Bomani, 2017) due to gendered and non-gendered barriers faced by women, particularly in non-traditional sectors such as mining industry.

Several challenges have been cited as hindering the growth of women entrepreneurs (WE) in South Africa, including start-up finance, market access, unequal responsibility allocation, and business skills (Holthof, 2022). Furthermore, according to literature, WE encounter more sociocultural obstacles compared to male counterparts. The socio-cultural challenges include cultural expectations (such as gender roles, and male-controlled cultures such as patriarchy) and societal structures (such as family, networks, and social status), which influence the development of women entrepreneurs (Kapinga & Montero, 2017). The socio-cultural barriers women face in building their businesses are rooted in a patriarchal ideology that undervalues women's work and abilities to succeed. As a result of the socio-cultural setting for women in most parts of Sub-Saharan Africa, the social empowerment of women necessitates a shift in entrepreneurship policies and a change in common mind-set and belief about the roles of women and men. Furthermore, significant obstacles to entrance into non-traditional businesses exacerbate the environment in which the industries, as previously indicated, are frequently closed to women, reducing the likelihood of female entrepreneurs succeeding in non-traditional industries such as mining (Aneke et al., 2017).

Therefore, in the context of South Africa, this study leans on the Post-structural feminist theory to explore socio-cultural gender barriers faced by women entrepreneurs in the mining industry and approaches used by women entrepreneurs to overcome the barriers. The Post-structural feminist (PSF) theory is to demonstrate that gender is socially constructed under the assumption of male dominance or patriarchy. Poststructuralists (PSF) examine the ways in

which some widely held "facts" and "beliefs" serve to maintain authority and power, and it further supports a way of perceiving the world that calls into question what is called "truth" and "knowledge" (McMorrow, 2018). Hence, the application of PSF theory allows the author to gain insight from the feminist view on how socio-cultural norms influence views and societal institutions that feed inequality (Tlaiss & Kauser, 2019). Furthermore, it influences the interest or lack thereof of female participation in entrepreneurial activities (Szuter, n.d). Therefore, the PSF approach was used as it focuses on the particular processes that transform individuals into gendered subjects. This theory has relevance to the study.

1.2 Context

Poststructuralist feminism pays attention to how women network, behave and engage with the societal aspects of life, such as engaging in a general matter and its knowledge thereof and also knowing and understanding their power and ability and exercising that power through practices of resistance on a micro-level (Mills, Durepos & Wiebe, 2010). This approach is relevant for the study because it defines gender as a phenomenon that is socio-culturally constructed with sociocultural practices and representations are linked with masculinity and femininity separate from gender being physiological, male or female. Subsequently, masculinity and femininity influence the behaviours leading to differences in the experiences of men and females (Giménez & Calabro, 2018).

Entrepreneurship has a critical role to play in order to achieve Sustainable Development Goals through promotion of sustainable and inclusive economic growth by creating jobs, fostering innovation and reducing income and gender inequality (OECD, 2017). According to a study conducted by Sajjad et al.,(2020), it was observed that women, play critical part of economic development. Further studies shows that women's business participation influences bottom line of companies positively enhancing sustainability of the business (Minerals Council South Africa, 2020).

1.2.1 The mining industry and women entrepreneurs

South Africa is a mineral rich country which is estimated at US\$ 2.5 trillion worth of mineral resources (Mulaba-Bafubiandi & Singh, 2018). According to PWC (2021), the South African mining sector contributed 6.7% and 7.6% (equivalent to R803.3bn and R985.3bn respectively) to South African GDP in the year 2020 and 2021 respectively. Thus the mining industry has a significant contribution to the South African economic growth. Mulaba-Bafubiandi & Singh

(2018) suggests that mining entrepreneurship may well be hold a key role in the future of mining industry because of the worldwide trends of minerals' supply and demand; hence is a space where entrepreneurship can help in attracting foreign investment into the country.

In South Africa, entrepreneurship appears to be leading in the desirable direction, with an increase in contribution of small businesses towards rate of total turnover from 16%, in 2013, to 22% in 2019 (Statssa, 2020). Overall turnover contribution of small businesses in the service industry increased from 29% in 2014, to 42% in 2019 (Statssa,2020). However, general business failure rate in South Africa has decreased from 6.0% to 4.9% in 2017 and 2019 respectively, however it remains greater than the establishment business rate of 3.5%, indicating that more businesses are closing down more than the rate at which new ones are established (GEM SA, 2020).

1.2.1.1 Women entrepreneurs in SA mining industry

South Africa is one of twelve economies where working-age women's entrepreneurial activity rates increased from 10.2% (2020) to 11.1% (2021), compared to 11.7% for men (up from 11.4% in 2020), according to the Mastercard Index of Women Entrepreneurs (2022). However, female entrepreneurs account for only 1.6 of the 4.1% of South African entrepreneurs in the mining sector, according to the Global Entrepreneurship Monitor South Africa (2020). Furthermore, a study by Kansake, Sakyi-Addo & Dumakor-Dupey (2021) indicates that men dominate the mining industry. Recent evidence suggests that significant barriers to gender-equal mining sector includes gender discrimination with 53% women reporting gender discrimination as a hindrance (Kansake, et al., 2021).

Furthermore, according to GEMSA (2020), the male-female entrepreneurial activity ratio decreased from 1.52 to 1.14 in 2017 to 2019 respectively, translating into 12.5 male: 8.2 female entrepreneurs ratio to 10.9 male: 9.6 female entrepreneurs ratio, showing increase in women entrepreneurship; however women population comprise more than half of South Africa's adult population, thus the entrepreneurial activity ratio should ideally reflect this. Moreover, Statssa (2020) indicates that 20% of female owned businesses fail annually which is indicative of high barriers to entry and business sustainability for women entrepreneurs (Statssa, 2020). Furthermore, the COVID-19 pandemic significantly impacted women entrepreneurs because of small businesses vulnerability, significant impact on industries and the increased load of family care and job obligations (GEM Report, 2021) with studies showing that women were more severely affected by the epidemic than males (Elam et al., 2021).

According to Terjesen, Hessels & Li (2016), any country's prospects of achieving desired economic growth are hindered by the systematic exclusion of women entrepreneurs in the key industries contributing significantly to its economic growth and development. These non-traditional industries such as technology, manufacturing, mining and construction, drive the economies of many countries. According to Elam et al. (2021), the wholesale/retail trade sector saw the most early-stage entrepreneurial activity in 2020, with 51.3% of women and 43.4% of men operating globally. In contrast, male entrepreneurial activity was twice as common as female rates in the mining industry. As a result, although this sector considerably contributes to economic growth and have the highest gender gaps in early-stage activity, they continue to be dominated by men (Aneke et al., 2017). Aneke et al., (2017) further alludes that lesser percentage of women entrepreneurs owning and running businesses in these industries is a phenomenon mostly affecting developing countries, especially in Africa.

Gender-inequality is one of the main barriers of women entrepreneurship which impacts women negatively in their entrepreneurial efforts. This gender pressures creates behaviours that are as a result of social impacts emanating from culture and social constraints amongst others, in addition to entrepreneurship being embedded in the system as a gendered phenomenon that is masculine (Raghuvanshi, Agrawal & Ghosh, 2017). The different behaviours reflected by men and women, in entrepreneurship context, due to the aforementioned social processes, are affected by entrepreneurial cognition which is of gendered nature (Brush, Edelman, Manolova & Welter, 2018). Several studies further suggests that gender beliefs and lack of access to financial support are also key hindrances which consequently prompt women to opt to engage in entrepreneurial activities requiring low financial capital, such as those in services sector (Mulaba-Bafubiandi & Singh, 2018; Panda, 2018).

However, Government of South Africa in an attempts to implement framework to promote entrepreneurship, directs that mining must have a minimum of 30% Broad Based Black economic empowerment (BBBEE) constituting of a minimum of 20% BBBEE entrepreneurs of which minimum of 5% must be women (Mining Charter, 2018). However, in 2019 small businesses had less presence in the mining industry of 4.1% with women representing only 0.7 women to men ratio according to Global Entrepreneurship Monitor South Africa (2020) and moreover, women stakeholders make up twelve percent (12%) of the mining sector (Mineral Council of South Africa, 2018). Global Entrepreneurship Monitor South Africa (2020) also reports that female entrepreneurs make up only 1.6 out of the 4.1% of the South African entrepreneurs within the mining sector. Furthermore, a study by Kansake, Sakyi-Addo &

Dumakor-Dupey (2021) indicates that men dominate the mining industry. Recent evidence suggest that significant barriers to gender-equal mining sector includes gender discrimination with 53% women reporting gender discrimination as a hindrance (Kansake, et al., 2021). However, mining companies are also attempting to encourage women entrepreneurship and some tactics to support women entrepreneurs are indicated below but list not exhaustive.

SMME Education, Training & Business skills development: South African mining companies invest in skills development through portable skills training (such as in Mechanical and electrical) and leanership, and adult education through the Mining Qualifications Authority (MQA) which serves as the mining industry's SETA. In addition, MQA administers and develops learning programs. It is worth noting that, over many decades, the mining industry has consistently supported higher education infrastructure development, according to the Minerals Council of South Africa (2019). Additionally, according to the Mining Charter, all mining firms must devote 5% of their yearly leviable payroll to skill development. As a result, over the last five years, the Mining Charter skills development has spent more than R5 billion per year. Furthermore, developing high-level skills is critical to the mining sector's advancement and sustainability of mining (Minerals Council of South Africa, 2019).

SMME Funding for services/products: Mining companies such as Anglo American have partnered with South African Institute of Chartered Accountants (SAICA) Enterprise Development to implement a Financial Excellence Programme that assists mining-related SMMEs with the goal to improve SMME financial management systems to run more efficiently and sustainably (Mkhize, 2022). SMMEs are also tracked in their business development and growth against the initial financial deep dive. They are also assisted through training regarding solid financial record-keeping practices and further coaching the entrepreneur in financial management systems and adequate cash flow processes. Furthermore, the National Empowerment Fund (NEF) established the NEF Women Empowerment Fund to help accelerate funding women-owned businesses in various industries for start-ups, expansions, and equity acquisition (NEF, 2020).

<u>Procurement & Vendor Application :</u> Mining companies provide opportunities for local SMMEs to participate in mining procurement activities through the Supplier Development Program to create sustainable local SMMEs. Furthermore, SDPs provide opportunities for local SMMEs to form joint ventures, subcontracting, and partnerships. Partnerships allow SMEs to collaborate with other enabling organizations and partners (for example, Anglo American Zimele, DMR, and DTI) to create platforms for local and black-owned SMMEs, create job

opportunities through procurement, and assist local SMMEs in becoming sustainable beyond mining activities (Anglo American, 2022).

1.3 Purpose of Research

Studies revealed that women entrepreneurs encounter challenges in their business activities resulting in fewer women-owned businesses than their male counterparts (Raghuvanshi et al., 2017). Women entrepreneurs face gender-related and non-gender-related discrimination (Chowdhury et al., 2018; Imhonopi et al., 2016), which Welsh et al. (2016) attribute to structural and social gender constructions. Thus, sociocultural norms and gender prejudice play a role in the challenges faced by female entrepreneurs (Murnieks et al., 2020; Lindqvist, Sendén & Renström, 2021). Furthermore, entrepreneurship scholars identified the source and nature of various biases that affect entrepreneurship (Simarasl et al., 2022) with little mention of how an individual entrepreneur explains such biases and constraints be overcome (Kapinga, 2017. Thus, the difficulties WE experience in the mining industry may harm their companies' entrance, start-up, growth, and profitability, as well as contribute to the failure rate of womenowned businesses in mining.

Therefore, the study's primary purpose was to explore and gain a more insightful understanding of socially constructed gendered barriers faced by women entrepreneurs in mining, their experiences, and some mitigating strategies for dealing with such constraints.

1.4 Problem statement

Based on the above discussion, this study seeks to probe into gendered barriers faced by women entrepreneurs in the SA mining industry and explore the reality of their gender-related barriers. Gender as a socially constructed phenomenon, for this study, will relate to the concept of gender, especially the concept that has been formed and imposed through societal expectations as most of the previous research has only used physiological gender as a measure without considering socially constructed gender concepts.

1.5 Theoretical need for the study

This study will build onto existing body of knowledge. In terms of gender-phenomenon, literature mentions that "the production of knowledge is based on gendered ideas, and that it maintains and reproduces a system of gender relations that renders a masculinity perception" whilst lacking explicit feminist analysis (Foss, Henry, Ahl & Mikalsen, 2019). This study will consider gender-phenomenon barriers faced by female entrepreneurs in mining. Additionally,

body of knowledge in many entrepreneurial studies have represented entrepreneurship as masculine and modelled masculinity as entrepreneurship benchmark and universal model which led to this model being institutionalised in the economy (Wu et al., 2019). Women entrepreneurs' perspectives will be considered in this study.

Furthermore, current body of knowledge generally represents gender as a variable ignorant of gender construction; additionally embedding subordination of women in the entrepreneurial space thus further widening gender inequality (Foss et al., 2019 & Wu et al., 2019). Therefore, appropriate and relevant perspectives such as post structural feminist approach may add a different and in-depth insight to the understanding of the barriers faced by women in entrepreneurship and enabling a better approach to reduction and/or elimination of these barriers whilst ensuring more women participation in entrepreneurship as well as enabling women entrepreneurs to run sustainable businesses (Poggesi, Mari & De Vita, 2016).

1.6 Business need for the study

Literature highlights that entrepreneurship has a significant impact on the socioeconomic success of countries as it contributes to employment, eradication of poverty (Panda, 2018) and contributing towards the growth and development of the economy (Meyer & de Jongh, 2018). Furthermore, entrepreneurship studies indicates that women entrepreneurs may contribute significantly towards sustainability of the economy which leads to economic development of the country of operation (Chowdhury, Yeasmin & Ahmed,2018). Therefore, it is important to encourage more women to venture into entrepreneurship, especially in the non-traditional industries which contributes significantly towards employment and revenue (Anna et al., 2000). This study aims to provide key insights to assist both existing businesses owned by women and new ventures towards entrance and sustainability of these businesses through an understanding of barriers women entrepreneurs face and by gaining the know how to overcome these barriers. Thus through more female owned start-ups, the business environment will expand thus impacting the economic growth more than they currently are through innovation and creation of competitive companies (Strohmeyer, Tonoyan, & Jennings, 2017).

1.7 Conclusion

Even though women's engagement in entrepreneurship is on a positive trajectory, there is still a significant difference between women and men in this field due to gendered and non-gendered barriers faced by women, particularly in non-traditional industries such as mining.

High barriers to entry into such industries further aggravate the environment in which the aforementioned industries are sometimes closed to women, lessening the chance of female entrepreneurs to thrive in non-traditional industries like mining. The study seeks to gain a deeper understanding of gender-related barriers which are perpetuated by a socio-cultural influence as there is a need to take into account the differences between male and female entrepreneurs acknowledging the socio-culturally gender construction. Chapter 2 provides for the literature review.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

This section deals with key concepts such as entrepreneurship, construction of gender and theory relevant for this study.

2.1.1 The concept entrepreneurship

Entrepreneurship is briefly explained as the finding and exploitation of opportunities into profitable outcomes through creating goods and services, thus creating jobs through innovation (Douglas & Prentice, 2019) and contributing to economic development (Giotopoulos, Kontolaimou & Tsakanikas, 2017). Many scholars indicated that entrepreneurship has a critical role in contributing to nations' socioeconomic success (Panda, 2018) and economic sustainability(Dhahri & Omri, 2018). Furthermore, as an important contributor to sustaining economic growth, innovation, eradicating poverty as well as income inequality (Halvarsson, Korpi & Wennberg, 2018; Meyer & de Jongh, 2018). Several studies have additionally indicated that large companies are no longer the predominant contributors to the Gross domestic product; Small businesses contribute significantly to the Gross Domestic Product of developing countries through employment (Zeraibi & Jangjua, 2019). Thus, the realisation of this particular world trend has further heightened the advancement of the small business entrepreneurial sector and its contribution to the economy (Meyer & de Jongh, 2018). On the human factor side, most scholars agree that entrepreneurship is driven by human motivation, behaviour and self-efficacy, which includes ambition, passion and the desire for independence (Newman, Obschonka, Schwarz, Cohen & Nielsen, 2019).

2.1.2 The concept of gender as created and enforced through societal expectations

Entrepreneurship literature defines gender as either male or female without consideration of cultural and social differences (Lindqvist, Sendén & Renström, 2021). Furthermore, Morgenroth & Ryan (2018) allude that gender is repeatedly represented based on societal norms, thus is socially constructed, with Smith (2016) mentioning that no one is born a woman, but one becomes a woman. Additionally, Lindsey (2020) supports the latter by explaining that, sociologically, gender is shaped by society and thus creates gendered behaviour.

Literature further mentions that being a women is a role accompanied by expectations of the society with the external environment regularly defining these expectations for women, which are imbedded from a young age. Consequently, resulting in experiences and behaviours influenced by the social expectations and also the created gendered behaviour which affects

personal interaction, identity, status and role in the society (Lindsey, 2020). Furthermore, Bastian, Metcalfe & Zali (2019) adds that societal expectations on women leads to gender inequality which results in unequal access to opportunities and resources. The behaviours, amongst others, depends more on the relationship dependency of women with men. Men look at women from a position of power with women regarded as spectators thus affecting how women view themselves which results in women viewing themselves through eyes of men. On the other hand, socially constructed male identities generally takes up a position of dominance whilest distancing themselves from femininity (Smith, 2016).

Furthermore, gender is constructed and shaped by life experiences on a daily bases of individuals, to the complex structures and patterns of gender produced by global society institutions (Giuliano, 2020). For example, culturally, expectations are attached to being a husband and wife or mother and father. Furthermore, socially, women's decision making regarding aspects such as family, education and employment is based on norms and beliefs about their role in society; norms and beliefs continue to persist from generation to generation (Lindsey, 2020; Giuliano, 2020). These social and cultural stereotypical expectations reflect the existing difference between males and females with a further impact on how individuals define themselves and the treatment by others (Ellemers, 2018). Furthermore, studies indicate that gender stereotypes affect how people behave because they interpret and recall information about themselves or others (Ellemers, 2018).

A strong effect of gender exists in entrepreneurship debates, with different socio-cultural features like prevalent views of entrepreneurship and its societal role, which either promote or limit business activities (Ward, Hernández-Sánchez & Sánchez-García, 2019). Furthermore, the literature indicates that women tend to show less inclination to entrepreneurship and have less self-efficacy than men. The aforementioned is attributed to gender biases whereby women may perceive themselves as lacking skills and traits needed to perform an activity regarded as male-oriented, the behaviour resulting from women's social construction. The latter is associated with a multifaceted combination of root causes, such as the view that entrepreneurship is a male field (Mehtap et al., 2017). Therefore, Ellemers (2018) suggest that the encouragement and cognitive functions of gender biases be considered to understand their influence on embedded beliefs and communications about men and women.

2.1.3 The role of Culture in Entrepreneurial Decision Making

The actions and attitudes of entrepreneurs toward business decisions are critical to start-ups, with the country's culture in which the entrepreneurship activity is occurring influencing the

entrepreneur's decision-making (Bullough et al., 2022). Entrepreneurs frequently cite a fundamental aspect of their identity to justify their actions and decisions. Furthermore, entrepreneurs contend that a person's identity leads to a preference for specific processes and ways of living and making decisions. The latter identity can be chosen voluntarily or imposed by society (EstradaCruz, VerdúJover & GómezGras, 2019). Culture is an essential part of one's identity because a person's personality and behaviour are linked to his or her national culture of origin. In a "masculine" society such as South Africa, men are expected to be assertive, challenging, and focused on material success, whereas women are expected to be submissive. According to gender researchers, entrepreneurs' motivation in business performance and growth expectations are influenced by gender (Bullough et al., 2022). However, research shows that despite women's entrepreneurship playing an increasingly significant role in job creation and the social and economic development of their communities, little is known about the interactions and distinctive characteristics of women's entrepreneurship and culture. Culture explains multifaceted differences in women's entrepreneurship across societies, as well as business success or failure. Numerous difficulties faced by WE are gender-specific and result from cultural beliefs, norms, and practices (Anambane and Adom 2018; Sehgal, 2018). Therefore, cultural barriers based on gender attitudes continue to prevent women from starting or running enterprises. This is due to the fact that women are often assigned to household and childcare-related jobs. Women are often perceived as being incompatible with the industry since decision-making is less rational and more emotive in women (Hapsari & Soeditianingrum, 2018).

2.2 ENTREPRENEURSHIP AS A GENDERED PHENOMENON

Entrepreneurship is viewed as a male-dominated phenomenon in most parts of the world (Raghuvanshi et al., 2017; Welsh, Memili, Kaciak & Ochi, 2014), with men consistently dominating the entrepreneurial landscape as the stereotypical entrepreneur role model (Byrne, Fattoum & Diaz Garcia, 2019). Furthermore, gender representation in academic knowledge has characterised and embedded entrepreneurial personality as "masculine and male" within the society and the economy (Mehtap, Pellegrini, Caputo & Welsh, 2017). Business economics scholars have embedded the capabilities and practices of strong male entrepreneurs as common knowledge and objective than those shown by their female colleagues (Foss et al., 2019; Henry et al.,2016). Consequently, gendered ideas are the results of the production of knowledge that repeatedly produces and maintains a gender relations system that enhances perceptible masculinity whilst lacking explicit feminist analysis (Henry et al., 2016; Foss et al., 2019). Hence female entrepreneurship is insignificantly

defined when compared with male entrepreneurship due to biased representation by academic disciplines, which presents only one viewpoint regarding the entrepreneurship phenomenon (Mehtap et al., 2017). The discussion above has highlighted entrepreneurship as a gendered phenomenon. In the following discussion below, key aspects in this regard are uncovered further.

2.2.1 An overview of Female Entrepreneurship

Ummah, Choy & Beevi (2021) states that women's active participation in all areas of life can further promote the development of the countries' economies as women's entrepreneurship is crucial to accelerating economic progress. However, the extent to which entrepreneurship affects economic growth depends on many factors, including gender composition, business activity and equality (Sarfaraz, Faghih & Majd, 2014; Ward et al., 2019). Hence, gender equality and the active engagement of women in entrepreneurship are essential factors in economic development. Furthermore, the advancement of gender equality and support of the institutional stakeholders are critical to enhancing women's contribution to socio-economic development (Ward et al., 2019).

Despite the large number of female entrepreneurs starting new businesses, women continue to be under-represented in South Africa (Ndimande, 2019), additionally women entrepreneurs are reported to venture into business often as more of "necessity" entrepreneurs rather than 'opportunity' entrepreneurs like their male counterparts. Furthermore, Jones (2021) and Westhead and Solesvik (2016) posit that women entrepreneurs are more of conventional entrepreneurs, implying that women are keen to venture into entrepreneurial activities but within the context of maintaining conventional roles based on gender; the aforementioned is attributed to women experiencing racial discrimination and gender prejudice barriers to the business growth (Bilimoria and Conley, 2022) which is further agreed upon by Modarresi et al., (2016); Westhead & Solesvik (2016) who alludes that South African entrepreneurship is affected by factors such as gender and race.

2.2.2 Women entrepreneurship in Non-Traditional industries

Mining is regarded as a non-traditional industry (Aneke et al.,2017), as has limited women inclusion (Kansake, Sakyi-Addo & Dumakor-Dupey, 2021). The discussion below considers women entrepreneurship in such industries, and is relevant to the mining industry.

Although evidence indicates an increase in women-owned businesses worldwide, it remains significantly lower than businesses owned by men (Raghuvanshi et al., 2017). Furthermore, sixty-seven percent (67%) of businesses owned by women remain in a traditionally "femalegendered" competitive service and retail sector, which has a low earning or revenue when compared with "male-gendered" non-traditional sectors (Chaudhuri et al., 2020). Women entrepreneurs are less inclined to venture into high-risk sectors (Hmieleski & Sheppard, 2019). Literature states that one of the attributing factors is women's lack of financial assistance, prompting women to choose businesses that require low capital injection, such as those in the services sector. Panda (2018) further states that female entrepreneurs encounter different challenges which men do not, leading to further widening of the gender gap. Furthermore, women entrepreneurs engaged in male-dominated sectors face significant gender stereotyping, including a lack of access to the formal network, which is a good source of essential business resources and information (Panda, 2018). According to Aneke et al. (2017), the potential of the South African economy to reach set growth targets is hindered by the systematic exclusion of female entrepreneurs in critical industries such as mining, construction and manufacturing (Aneke et al. 2017).

Moreover, Aneke et al., 2017 suggest additional studies to focus on the challenges and barriers women entrepreneurs face in male-dominated industries. Aneke et al., 2017 attribute this to most of the literature that has focused mainly on male and female entrepreneurship without differentiating the industries, whilst prior studies indicate and validate the existence of variables differentiating women entrepreneurs in male-dominated industries and those in conventional sectors. Hence, a possible direction for future research on women entrepreneurs' self-efficacy to venture into non-traditional industries and the capability to run entrepreneurial activities successfully is suggested. For example, should women be encouraged to engage in entrepreneurial activities in non-traditional industries, given the differences in financial returns between traditional and non-traditional industries? What further assistance can be provided if encouraged? Hence, the study seeks to research entrepreneurship as a gendered phenomenon (Foss et al., 2019). The attention is drawn to the study of female entrepreneurship in formulating critical solutions that can be developed to eliminate these barriers.

2.2.3 Challenges faced by women in entrepreneurship

Although female entrepreneurial activities are on the upwards trajectory globally and significantly making a contribution towards economic growth and the well-being of society, studies reveal that women entrepreneurs encounters challenges in their business activities

and this results in fewer women-owned businesses than their male counterparts (Raghuvanshi et al., 2017). Furthermore, extensive research has been conducted on the barriers facing women in entrepreneurship, including gender-related and non-gender-related discrimination (Chowdhury et al., 2018; Imhonopi et al., 2016), with Welsh et al., (2016) alluding that women entrepreneurs globally, face structural and social challenges.

2.2.3.1 Gender barriers

Entrepreneurial cognitions: According to entrepreneurship studies, internal conditions such as personal traits and behaviours could also promote or hinder entrepreneurship and further affect entrepreneurial cognition (Mehtap et al., 2017). Furthermore, Wu et al. (2019) state that poor entrepreneurial cognition results from gender biases embedded in society, which results in low women entrepreneurial cognition. Low women's entrepreneurial cognition influences the ability of women to identify opportunities, formulate strategies to solve the problems and take advantage of the identified opportunities to sustain a business (Naidu & Chand, 2017; Zhou, Yang, Sun, Liu & Liu, 2021; Thomas, Randolph & Marin, 2019). Newman et al. (2019) state that self-efficacy has been linked positively to behaviours enhancing entrepreneurial cognition.

Networking Capital: Literature has indicates that one of the reasons for gender disparity may be that men have larger networks, higher social capital than women (Neumeyer et al., 2018). This also has an impact on which industry would women be most likely to do business in to not face the aforementioned challenges, for example, literature indicates high prospects of women to start businesses in service sector that in a non-traditional industry (Chaudhuri, Sasidharan & Raj, 2020).

Smith et al. (2017) claim that social capital, which Porter & Woo (2015) define as the capacity to start businesses and engage in entrepreneurial activities, is the ability to derive value from relationships and resources through social structure or networking to achieve desired entrepreneurial outcomes. In addition, network capital can encourage or inhibit entrepreneurial activity depending on the industry of the business, according to Kerr and Coviello (2019). Firstly, studies have demonstrated that women entrepreneurs who use private finance sources benefit from network diversity and that social capital is essential for the start-up phase. Ter Wal et al. (2020) mention that benefits include seizing market opportunities, identifying and allocating scarce resources, acquiring sponsors, and seizing innovative opportunities. Furthermore, network connections can also be a source of support in uncertain times and are advantageous for exchanging knowledge and benefits. On the other hand, some critical

voices warn that dependence on strong-tie networks and social capital poses challenges for historically marginalized groups like female entrepreneurs (Neumeyer et al., 2019).

Additionally, a confluence of high bonding capital (within-group ties), weak bridging capital (external ties), and cultural indifference in entrepreneurship promotes the creation of substantial social capital in entrepreneurial ecosystems. According to earlier studies, social capital and networks would have varying advantageous effects depending on gender. Furthermore, social capital and network barriers for women business owners result from distorted expectations, prejudices, and "naive ideas underpinning investors' conscious and subconscious search criteria" (Brooks et al., 2014). Women are thus frequently denied access to male-dominated high-level networks in politics and business. Moreover, it was shown that these patriarchal institutions were prevalent in transitional economies (Neumeyer et al., 2019).

Although South African mid-career entrepreneurs have developed their skills and social capital, research shows that women are less likely to have more significant business networks due to lower societal standing, a lack of role models, and a lack of confidence (Herrington & Kew, 2018). In summary, it is crucial to comprehend the contextual factors that influence how women start and grow businesses at a time when female entrepreneurship is on the rise globally. Female entrepreneurs' capacity (or lack thereof) to build social capital in an entrepreneurial environment is one such contextual aspect.

Limited or No Access to Finance: According to Wu et al. (2019), financial capital is one of the critical foundations of a business. However, social standing is dependent on the country's economy and gender as defined by socio-cultural norms, which contributes to the value and distribution of social standing or class (Li et al., 2019). These gender stereotypes and gender discrimination contribute to the lack of funding and or limited access to finance experienced by women entrepreneurs (Gupta, Wieland & Turban, 2019). Sauer & Wiesemeyer (2018) states that the rate of qualifying for a start-up loan is low for businesses owned by females in comparison with those of their male counterpart which is high. The discrepancy is attributed to gender discrimination as a result of socio-cultural values. These values have been embedded in gender for generations. For example, Chinomona & Maziriri (2015) states that South African women entrepreneurs have been prejudiced for not owning properties that financial institutions can use as loan collateral and need husbands' assistance to enter into a financial agreements. Worth noting that the current COVID 19 pandemic has worsened not only the economies, but also the financial access barriers to women entrepreneurs (Villaseca, Navío-Marco, & Gimeno, 2020). Thus, it is clear that women experiences barriers of lack of financial support and working capital (Li et al., 2019; Sauer & Wiesemeyer, 2018). Henceforth, Baporikar & Akino (2020) states that skills development is important in entrepreneurship and women have talents and potential to make it in business but they remain unexplored, for example, lack of financial skills worsens barriers worse.

Lack of education and skills training: Multiple variables influence the success of an entrepreneurial endeavour, including socio-cultural factors, economic ones, education, skills, and training. The latter are qualities necessary to meet a specific degree of performance requirement, and literature divides education or skills into three categories: behaviour, knowledge/experience, and skills/abilities (Schneider, 2017). Hence, Ahmed and Qalati (2019) suggest that a lack of education is another key barrier to women becoming entrepreneurs. According to studies, most women have inadequate education, making it difficult for them to be aware of success enablers such as accessible financial sources and how to get such funds through effective business strategies. (Global Entrepreneurship Monitor, 2019; Rudhumbu et al., 2020). The lack of opportunities for vocational and technical education and training in entrepreneurship for a field historically considered for men also leads to studies showing that many female entrepreneurs lack technical and entrepreneurial competence. Moreover, due to the factors mentioned earlier, women lack the practical experience and management skills necessary to run their businesses effectively (Rudhumbu et al., 2020). Due to a lack of entrepreneurship education, most female entrepreneurs experience difficulties in efficiently marketing their products and services and running thriving enterprises. According to Moghtadaie and Jamshidian (2021), the extent of entrepreneurial education impacts how women take advantage of possibilities.

2.2.3.2 Socio-cultural Norms

According to Eagly's social role theory, people adopt specific preconceptions to fit in with society, some of which are related to gender (Holthof, 2022). Gender stereotypes, within which social norms are embedded, are generalized beliefs about the traits and behaviours that people who belong to a specific social group of men and women must possess (Rubio-Banon, 2016). Wu (2019) defines social norms as "value systems particular to a community that motivate individuals to behave in certain ways". These value systems determine the extent of acceptability of female entrepreneurs and the behaviours required (Holthof, 2022) whereby being a woman is associated with "feminine" responsibilities, and because of socio-cultural gender construction, women are expected to fulfil many roles from a social perspective, such as domestic responsibilities. This hinders women-owned entrepreneurial activities because women tend to prioritize duties like caring for their families and children, making it difficult to strike a balance between entrepreneurship and daily life (Welsh et al., 2018). As a result,

women are perceived as less entrepreneurial owing to societal norms constructions rather than their natural traits (Ahl, 2006).

Additionally, the culture that predominates in a country determines the extent to which preconceptions presented on gender and associated social norms are present in a community (Hofstede, 1998). Numerous studies specifically mention Hofstede's aspects of national culture, which include, among many others, the masculinity-femininity dimension. Therefore, cultural norms in a particular nation restrict the conduct of women entrepreneurs since norms establish the strength or weakness of cultural expectations for becoming an entrepreneur and adhering to social responsibilities (Ahl, 2006; Brush, 2014; Hofstede, 1998). Hence, culture has an impact on the obstacles that women face in business (Brush, 2014). Therefore, sociocultural norms and gender prejudice provide additional challenges for female entrepreneurs (Murnieks et al., 2020) such as the following barriers;

Gender Bias and Discrimination: Literature indicates that most women entrepreneurs are faced with stereotyping and are being discriminated against by society and institutions whilst feminist researchers utilize gender discrimination to describe the extent of oppression and subordination worldwide as long as civilizations value male dominance and female submission (Njogu & Orchardson-Mazrui, 2005). Li, Ahmed & Qalati (2019) further allude that gender differences negatively impact women to the extent of limiting their engagement in entrepreneurial activities. The latter is attributed to gender biases embedded in society, as raised by several authors, which results in low women's entrepreneurial cognition; which further influences the ability to identify opportunities, formulate plans to solve the problems and take advantage of the identified opportunities to sustain a business (Naidu & Chand, 2017; Zhou, Yang, Sun, Liu & Liu, 2021; Thomas, Randolph & Marin, 2019).

The gender biases further hinder women in entrepreneurial activities and limit access to business development services in order to succeed in business ventures. Xie & Wu (2021) and Li & Qalati (2019) additionally state that the factor contributing to gender discrimination in entrepreneurship is traditional female social stereotypes, resulting in women not being able to succeed in their business ventures. The latter is due to a lack of behavioural abilities required for entrepreneurship, which, according to social cognitive theory, shows that the social environment around people influences their cognition and behaviour (Schunk & DiBenedetto, 2020). The aforementioned is indicated in several pieces of literature is attributed to sociocultural values and attitudes which, through norms and traditions, construct gendered behaviours of the society members, especially women. Socio-culturally constructed gender

negatively impacts economic development because women are less interested and have less self-efficacy to venture into entrepreneurial activities (Newman et al., 2019).

According to a study by Holthof (2022), most entrepreneurs have experienced gender bias at some point in their careers, which meant they were not taken seriously in their role as founders or intention to start a business because they are biologically female. The latter is just one example in which gender bias was discovered. The degree to which male counterparts take female business owners seriously, for example, is directly correlated with their outward appearance, with factors like looks impacting the credibility of their purpose to start a business and the perception of their competence (Holthof, 2022). Hence, female entrepreneurs must defend their position by demonstrating competence because they are viewed as less capable.

Gender Inequality: Bastian et al. (2019) define gender inequality as the unequal distribution of the burden of adversities between women and men, in contrast to other scholars who define it as the unequal treatment of men and women that results in gender-based discrimination embedded in their rights, obligations, and opportunities. In keeping with the previous statement, inequality is giving people in society unequal chances because of perceived differences that are primarily based on gender. Additionally, gender inequalities in the external environment are reflected in female entrepreneurship and are frequently more pronounced for women than males. Additionally, these disparities result in unequal access to opportunities and resources, leading to economic inequality, which is the unequal distribution of financial resources within societies (Bastian et al., 2019). On the other hand, having access to resources like financial ones, among others, is crucial for future business success since they allow for the acquisition of other essential resources like human and physical ones and assist start-ups in surviving the dangers associated with being new (Block et al., 2018). However, despite government initiatives to empower women, gender inequality persists in South Africa in all spheres of influence, including institutions, families, organizations, and the economy (Mukorera, 2020). As women continue to fight for the same advantages and rights as men, this issue is one of the nation's most pressing socioeconomic ones as gender equality and female entrepreneurship remain crucial contributors to economic development because they affect how much entrepreneurship stimulates economic growth (Ward et al., 2019). Additionally, most governments, including South Africa, have taken a stand against inequality. For instance, the South African constitution was amended to include a bill of rights that "prohibits discrimination based on gender, sex, and sexual orientation, among other things" (The Bill of rights of the Constitution of the Republic of South Africa, 1996). However, men still dominate the business sphere, and women are still underrepresented globally despite those, as mentioned earlier. According to Casale & Posel (2021), the Covid-19 issue has also

increased gender inequality in South Africa, reversing some hard-won successes of the prior 25 years.

Dominant Patriarchal Mind-set: According to Wood (2019) and Klingorová & Harvlek (2015), Inequality is one of the most common types of social construction. It results from cultural and historical processes, geographic location, and predominately practised religions. Furthermore, Inequality is a product of patriarchal culture, which gives males authority, identification, and centeredness, thus preventing women from becoming equal to men due to men having greater power over women. It mainly relates to beliefs in economics, politics, society, and religion that have made men the dominant gender. The patriarchal worldview has persisted primarily due to culture, social structures, and educational institutions and is deeply engraved in society (Mudau & Obadire, 2017). According to the literature, all ethnic and racial groups in South Africa experience patriarchy, and black women face triple oppression due to their gender, ethnicity, and social class. In South Africa, patriarchy usually appears in the manner that it rules and controls female sexuality (Wood, 2019; Mudau & Obadire, 2017).

According to the social constructionist perspective, women are less likely than men to start businesses in patriarchal societies (Shahriar, 2018). Entrepreneurship is seen as a man's domain, and because women typically think an entrepreneurial job is "wrong" for their gender, the patriarchal expectations of society impact their entrepreneurial endeavours. Additionally, women historically have not been required to work since their male spouses or family financially supported them (Bui et al., 2018). Furthermore, gender socialization, the different upbringing of men and women, is cited for women's low engagement in business, discouraging women from starting their businesses by diminishing their self-efficacy and perceived capacity to recover from failure (Shahriar, 2018). Due to the patriarchal nature of culture, women also have fewer prospects for financial access, which is key to starting and sustaining a business, than those in westernized, developed nations (Wu, Li & Zhang (2019). It is important to note that women in matrilineal communities where women control the continuity of the matrilineage and resources and thus have higher status, are frequently encouraged to pursue other careers such as operating a business and also raised to work outside the house (Giuliano, 2020); hence, the different ways to explain gender disparities in entrepreneurship are how men and women are raised.

Household responsibilities - Motherhood: Broad Based Black economic empowerment

According to the literature, patriarchy affects family structures and men's and women's roles in society; thus, in addition to several barriers to female entrepreneurship, motherhood, which

is associated with household responsibilities, is identified as a barrier to women's entrepreneurship due to socio-cultural norm (Wu, 2019). Society's stereotypes associate household, childcare, and domestic activity with women rather than men. Women are socio-culturally constructed to take care of family responsibilities, so housework and care are primarily the responsibility of women (Rubio-Banon, 2016). Thus, literature on women's entrepreneurship frequently includes a family component, whereas literature on entrepreneurship generally does not (Ahl, 2006, as cited in Hong et al., 2018). The fact that women are associated with domestic work and caring for families suggests that women's entrepreneurship is "less desired." Additionally, mothers' schedules and views of competence are both impacted by parenting, as women are perceived as less capable after having children (Hong et al., 2018). Furthermore, Shahriar (2018) stated that in patriarchal societies, women are less likely than men to start businesses.

2.2.4 Approaches used by women entrepreneurs to overcome entrepreneurship barriers

The discussion below considers some approaches used by women entrepreneurs to overcome barriers and then considers some tactics used in the mining industry in SA to support women entrepreneurs.

Clough et al. (2019) further imply that entrepreneurship scholars instead highlight financial resource pursuits as a primary goal for entrepreneurs. Entrepreneurship scholars have identified the source and nature of various biases that affect entrepreneurship (Clough et al., 2019; Khoury & Prasad, 2016), with little mention of how an individual entrepreneur explains such biases and constraints be overcome (Cardinale, 2018). However, before they can even start to mobilize financial support for their businesses, entrepreneurs from disadvantaged groups, such as women entrepreneurs, frequently lack the most fundamental forms of social support and the associated agency and legitimacy (Khoury & Prasad, 2016).

Although there is limited study into strategies to overcome entrepreneurial biases, according to Kapinga & Montero (2017), to identify and explain strategies through which disadvantaged entrepreneurs, including women entrepreneurs, build agency and legitimacy as they mobilize resources for their ventures and overcome gender barriers, two strategies appear to benefit women entrepreneurs. The two strategies are those created for the women entrepreneurs by governmental institutions and those created by the women entrepreneurs themselves. Additionally, other scholars allude that minority entrepreneurs used other strategies such as family transformation, ally activation, and facilitator co-optation (Simarasl et al., 2022).

Government-created strategies aim to address regulatory (for instance, access to funding, economic inequalities) and cognitive barriers (for example, inequalities in education access) that impede the development of women entrepreneurs' business activities (Kapinga & Montero, 2019). In addition, government institutions could promote network structures that help women advance in male-dominated industries by offering business skills, primary education, mentorship, training and support networks (Ndimande, 2019). In terms of skills, however, the concept of women collaborating with men is an ease access to entry into starting a business; the latter serve as a strategic partnership for a favourable, harassment-free working environment in the male-dominated industry. Furthermore, women, where members pool their resources and work together in groups to boost entrepreneurial growth, to some extent, guarantee women to strengthen their networks and acquire resources such as recognizing business opportunities and obtaining finance from financial institutions (Kapinga & Montero, 2017).

2.3 THEORETICAL FRAMEWORKS

As indicated in Chapter one, this study leans on gender related theoretical frameworks. This is explored in the discussions to follow.

2.3.1 Gender as a construct

Gender is set to be structurally and socially created, emphasising femininity and masculinity whereby both define what women and men are supposed to behave and be like, impacting their behaviours leading to different experiences between men and women (Giménez and Calabrò, (2017). Gender is a personal identity, social status and set of relations amongst men and women, how society does things, which results in gender inequalities embedded into institutions and organisations, among others. In this context, women entrepreneurs are disadvantaged due to expectations that lead to gender inequality and thus limit access to resources and opportunities (Bastian et al., 2019). Hence, women face barriers exacerbated by these socialised processes because entrepreneurship is described as masculine. Due to the aforementioned social processes, the different behaviours reflected by men and women in the context of entrepreneurship are affected by entrepreneurial cognition. Brush, Edelman, Manolova & Welter (2018) state that entrepreneurial cognitions can be gendered. Brush et al. (2018) further allude that women generally have unequal and different entrepreneurial cognitive frameworks compared with their counterparts. For example, women would be inclined to health sector and arts whilst male counterparts are inclined in engineering and technology sectors (Simon, Wagner & Killion, 2017).

Also, literature argues that broad cognitive frameworks linked to industries such as manufacturing, construction, mining and technologies, among others, encourage people to become entrepreneurs through the awareness that they will be assisted in triangulating between the apparent events, thus recognising potential opportunities (Biraglia & Kadile, 2017; Baron, 2007). In addition, research has associated entrepreneurial cognitions with the individual's self-efficacy, connections, approach, and behaviour toward risk. Literature suggests that the aspects mentioned earlier positively link with the desire or aspiration to be engaged in entrepreneurial activities. This argument draws an association with Albert Bandura's Social Cognitive Theory, which shows that the social environment around people influences their cognition and behaviour (Abdullah, 2019; Santos et al., 2021). This theory directs attention to self-efficacy and sociocultural variables, among others, whereby selfefficacy is the belief in the ability of an individual to persevere and attain success through one task action (Moudrý & Thaichon, 2020). Many researchers have viewed self-efficacy as a type of social capital required by entrepreneurs to raise interest (Santos et al., 2021) and gain confidence to persevere or perform (Gao et al., 2020), thus increasing the entrepreneurial intention and success of women-owned businesses (Moudrý & Thaichon, 2020). On the other hand, socio-structural factors enable behavioural performance, thus resulting in goal setting due to self-efficacy influence (Schunk & DiBenedetto, 2020).

Therefore, to better understand the challenges women entrepreneurs face, especially Genderbias, this research is anchored in Social Cognitive theory using post structuring feminist approach. Furthermore, to influence the society to develop a different viewpoint acknowledging sociocultural gender construction instead of physiological construction as an entrepreneurship phenomenon. Post-structural feminists argue that the differences and similarities of gender are socio-culturally constructed due sociocultural practices linked with masculinity and femininity (Wu, Li & Zhang, 2019; Foss et al., 2019).

2.3.2 Post-structural feminist approach

Poststructuralist feminism pays attention to how women network, behave and engage with the societal aspects of life, such as engaging in a general matter and its knowledge thereof and also what knowing and understanding their power and ability and exercises that power through practices of resistance on a micro-level (Mills, Durepos & Wiebe, 2010). This approach is relevant for the study because it defines gender as a phenomenon that is socio-culturally constructed with sociocultural practices as well as representations are linked with masculinity and femininity separate from gender being physiological, male or female. Subsequently, masculinity and femininity influence the behaviours leading to differences in the experiences

of men and females (Giménez & Calabro, 2018). Furthermore, post-structural feminist studies show that gender norms and values are constructed by culture in the individual's environment of existence; however, they are overlooked by studies about entrepreneurship. Hence, an application of post-structural feminism is preferred work on the basis that gender is socio-culturally constructed, resulting in societies disadvantaging others, especially women and privileging others, especially men resulting in widening gender inequality (Scraton, 2018; Ahl et al., 2016)

The post-structural feminist approach enables the capability to gain more insights, objectively and fairly, into the context, meaning and impact of barriers faced by women entrepreneurs. It enables the understanding of the low levels of women entrepreneurs and, as a result, gain insight into the real barriers encountered by female entrepreneurs in order to better identify solutions and responses needed to address the barriers (Wu et al., 2019). Moreover, adding insight into interventions and policies established to do away with barriers faced by women with intentions to venture into entrepreneurship or women who are already involved in entrepreneurial activities as well as seeking to reflect, revise, rewrite about gendered entrepreneurship (Poggesi et al., 2016). This approach may create a greater potential to move beyond stagnant theorizations of masculinity in various gendered phenomena such as entrepreneurship, amongst others (Waling, 2019).

2.4 CONCLUSION

The literature indicates that women entrepreneurs face challenges additional to challenges faced by their male counterparts primarily due their gender. Also, gender is set to be socio-culturally constructed. As a result, due to socio-cultural norms, most women entrepreneurs are faced with stereotyping and are being discriminated against by society. Furthermore, gender biases further hinder women in entrepreneurial activities and limit access to business development services in order to succeed in business ventures as they experience the gender bias at some point in their careers because of their gender.

In addition, sstereotyping behaviour affects how women see their vocational potential and vulnerability with gender stereotyping influencing people's judgments about the roles each carries out due to the traits and qualities associated with men and women. The aforementioned results in women striving to work or venture into business in socially acceptable positions or industries for their gender and shy away from positions that are

thought to be more suitable for males and lack in interest to venture into entrepreneurial activities, especially in patriarchal society.

Intensive entrepreneurship has been done over the years, however, many of the research studies focused on gender as a physiological phenomenon and base entrepreneurship studies purely on masculinity and femininity, ignoring the social constructions and influences of cultural norms on gender. Therefore, a better understanding of the gender-related barriers faced by women entrepreneurs, through post structuring feminist approach is considered inn this paper. Post-structural feminists argue that the differences and similarities of gender are socio-culturally constructed due sociocultural practices linked with masculinity and femininity. Chapter 3, which follows, considers the key research questions for this study.

CHAPTER 3: RESEARCH OBJECTIVES AND KEY RESEARCH QUESTIONS

The key objective of the study is to explore socio-cultural gender barriers faced by women entrepreneurs in the mining industry. It aims to understand the gender-related barriers faced by women entrepreneurs in South African mining industry, and gain deeper understanding of challenges they face in starting and running a thriving business in a male dominated industry. Furthermore, consider and determine the mitigating strategies in dealing with barriers, including the strategies used by women entrepreneurs to overcome some of the main obstacles they face. The research questions are anchored in the current body of literature outlined in Chapter 2 and literature matrix within which questions were anchored was developed (see Appendix C). The study will elicit responses from women entrepreneurs functioning in the mining industry with the following questions being probed into:

Research question 1: What are the gendered and non-gendered barriers facing women entrepreneurs in mining?

The question seeks to determine an existence of gender barriers towards women entrepreneurs within a male dominated industry and the impact thereof; as studies revealed that women entrepreneurs encounter challenges in their business activities and this results in fewer women-owned businesses than their male counterparts (Raghuvanshi et al., 2017) with women entrepreneurs facing gender-related and non-gender-related discrimination (Chowdhury et al., 2018; Imhonopi et al., 2016), with Welsh et al., (2016) attributing it to structural and social gender constructions.

Research Question 2: Is there gender-bias to women entrepreneurs due to sociocultural norms?

The purpose of Research question 2 is to understand the barriers to entrepreneurship due to socio-cultural norms for the reason that entrepreneurship scholars alludes that culture restrict the conduct of women entrepreneurs since norms establish the strength or weakness of cultural expectations for becoming an entrepreneur and adhering to social responsibilities. Therefore, the aim of the question is to determine the role sociocultural norms and gender prejudice play as a challenges for female entrepreneurs (Murnieks et al., 2020; Brush, Edelman, Manolova & Welter, 2018; Gupta, Wieland, & Turban, 2019; Lindqvist, Sendén & Renström, 2021).

Research question 3: What are some of the tactics and approaches used by women entrepreneurs to overcome gender-related challenges faced in the mining industry?

Entrepreneurship scholars identified the source and nature of various biases that affect entrepreneurship (Clough et al., 2019; Khoury & Prasad, 2016) with limited mentioning of how an individual entrepreneur explains how such biases and constraints might be overcome (Cardinale, 2018), with Clough et al. (2019) further alluding that entrepreneurship scholars instead highlights the financial resource pursuits as a primary goal for entrepreneurs. Hence Research question 3 seeks to determine the strategies to overcome gender biases in entrepreneurship and enhance participation of women in technical entrepreneurial activities in a male dominated industry.

To note, this study focuses on the mining industry in South Africa more specifically, however the findings from this study may be relevant for other industries with similar contexts and experiences. The section to follow considers the methodology employed for this study.

CHAPTER 4: RESEARCH METHODOLOGY

4.1 Introduction

The study aimed to understand better the gender-related barriers women entrepreneurs experience in the South African mining industry and the problems they encounter in starting and maintaining a successful business. Therefore, this chapter discusses the chosen research methodology used for this study. The overarching method used was qualitative, with an exploratory research design to investigate the barriers women entrepreneurs experience in the mining industry. The sampling method, sample size, population, measurement instrument, data gathering methodology, and analysis process were chosen to support the research's robustness. Each subject is explored more in the next section.

4.2 Research Methodology and Design

Qualitative research methodology was used with an exploratory research design to investigate the barriers women entrepreneurs experience in the mining industry. The exploratory study was undertaken to uncover information by posing new questions as outlined in the interview quide (see Appendix B), and evaluating things in a new light through insights and experiences lived by women entrepreneurs in the mining industry (Saunders and Lewis, 2018). Furthermore, Qualitative research was found to be appropriate for the study as it is an umbrella to interpretivism for knowledge that is socially produced; hence relevant to gaining insights from women entrepreneurs' lived experience within the socio-cultural environment (Symon, Cassell & Johnson, 2018). Additionally, this method was relevant as it used a smaller group of women entrepreneurs to explore and gain insight from their lived experiences and derive interpretation and meaning from women entrepreneurs' perspective and context (Welch & Piekkari, 2017). Furthermore, the study was exploratory aimed to investigate the factors contributing to a societal social problem, namely, barriers faced by women entrepreneurs and socio-cultural norms affecting women, from their own individual perspective or general belief from women entrepreneur as a group of people. The complex nature and less understanding of the topic by the researcher made it an exploratory study, with the aim to gain more in-depth insight (Saunders & Lewis, 2018). As the aim of the study was to gain in-depth insight of the barriers women entrepreneurs face through their narrated experience in the male-dominated industry, open-ended questions were used to gain better understanding (Saunders & Lewis, 2018) on the topic. Therefore, the gained insight from data collected from women entrepreneurs was analysed and interpreted to draw conclusions and recommendations (Creswell, 2016).

4.3 Philosophy

The study was conducted with interpretivism philosophy which is believed to be the right methodological choice for exploratory studies as trust plays a critical role in acquiring data from participants (Nowell et al., 2017). The latter is attributed to participants having to share their life experiences in entrepreneurship with the researcher, in the context of a social phenomenon (Saunders & Lewis, 2018) and further derive interpretations and meaning from the context (Welch & Piekarri, 2017). Furthermore, Welch & Piekarri (2017) argue that there is no better point of access to understanding than the lived experiences of the participants, with attention paid to the frame of reference of the participants (Bell, Kothiyal & Willmott (2017). Hence, the researcher employed the interpretive approach for this study to understand the barriers faced by women entrepreneurs with a focus on a social construct of gender occurring in the natural environment through the lens of women entrepreneurs and at the level of each individual to ascribe meaning to the experience (Kerr & Coviello, 2019).

4.4 Approach selected

Saunders & Lewis (2018) associates inductive approach with qualitative research as the researcher is often trying to gain an understanding of meaning participants attach to the events. Thus, the inductive approach was found to be appropriate to use to gain understanding of distinct barriers of the non-traditional industry and possible strategies to thrive in running a mining business. According to Richie et al. (2013), the value of qualitative research rests in the ability to study topics in depth from the perspectives of many participants, as well as interpretations produced inductively from the data. Furthermore, the induction approach examines patterns and associations derived from observation of the world; thus, the approach was used to gain in-depth insight from female entrepreneurs, particularly in the mining environment, their socio-environment, and communities in which participants are members or operate. Furthermore, Eisenhardt et al. (2016) say that the inductive technique is effective when theory is limited; hence the technique was used because of limited theory concerning women entrepreneurship from the context of feminism. Therefore, this study derived conclusions from interviews by gathering the perspectives of female entrepreneurs and extracting their experiences with gender barriers in a male-dominated industry.

4.5 Methodological choices

The methodological choice of collecting data for the study was mono-method. Data were collected using in-depth interviews as a single technique (Myres, 2022). Only the in-depth virtual interviews were conducted to gain deeper insights into women entrepreneurs' lived experiences regarding the external and internal hindrances women entrepreneurs face in

mining. Saunders & Lewis (2018) allude to the mono-method being collection of data using one specific approach without the addition of another approach. Gender barriers in post-structural feminism are a developing social phenomenon that provides room for further understanding whilst considering the research questions (Kerr & Coviello, 2019).

4.6 Strategy

Narrative inquiry through semi-structured in-depth interviews was used in the research study to gain personal lived experience and opinions of the women entrepreneurs in mining sector (Saunders & Lewis, 2018). Furthermore, Wengraf (2001) states that one of the ways to acquire information by in-depth interviews is through narratives about the lives of the people. Capturing the stories of the participants and reflecting on their experience serviced the research context of understanding the gender barriers faced by female entrepreneurs, socio-cultural norms and how they overcomes the barriers (Cornelissen, 2017).

4.7 Time horizon

Cross-sectional research was adopted to collected data from a group of women entrepreneurs in a relatively short period (Saunders & Lewis, 2018; Zikmund et al, 2013), thus, data was collected through interviews at only one period in time in August and September 2022 at separate times from women entrepreneurs who are in mining industry (Saunders & Lewis, 2018). Furthermore, the open nature of interviews allowed for exploration of the women entrepreneurs' experiences with a non-prescriptive posture (Ritchie et al, 2013). Time slots for interviews were dependent on the availability of each individual.

4.8 Population

Saunders and Lewis (2018) defines population as a "complete set of group members" where samples can be taken from for a specific study in which a conclusion can be made drawn. Furthermore, Saunders and Lewis (2018) allude that it is not often practically possible to study the whole population. Therefore the population for this study was only women entrepreneurs who have identified and exploited opportunities to create a business (Welter et al., 2016) by rendering technical services, for instance engineering, geosciences and project management in the mining industry with small to medium businesses in South Africa.

4.9 Unit of analysis

Zikmund et al. (2013), explain the unit of analysis to be individual, group, organisation or company. Furthermore, the unit of analysis, which refers to differentiation criteria of the parts of the content to be used as a base for decisions to be taken when developing themes and

codes (Milne & Adler, 1999), was women entrepreneurs owning businesses in the mining industry offering technical services. Only women with whole-share holding or partial shareholding in a company were invited and interviewed.

4.10 Sampling method and size

Guetterman (2015) advises that to achieve credibility of the sample, the research must ensure relevance and extensiveness. The relevance of the sample focused on whether the sample selected is relevant to the study. Purposive sampling was used to actively choose participants that are able to assist in answering the research questions due to their knowledge and experience of the topic of study (Rudolph, Leedy & Ormrod, 2018). Participants were selected through referrals by industry peers and also through approaching mining companies supply chain databases. Eligibility criterion was followed prior to inviting participants as recommended by Hennink, Hutter and Bailey (2020), which were involved in mining sections and their companies either supplied mining industries or assisted the mining industry with technical services.

Vasileiou et al. (2018) suggest using methodological knowledge to critically evaluate how saturation and other characteristics affecting sample size sufficiency relates to the particulars of the research. For extensiveness of the sample size, this was confirmed with minimum that is aligned to the methodological choice of the study and the saturation of the empirical data. In this research to understand the barriers faced by women entrepreneurs in mining industry through in-depth interviews, minimum sixteen (16) participants were selected and interviewed. These were relevant interviews within different categories of women who are conducting business in mining. The criteria of businesses used:

- Operating new and established business
- Hundred (100%) percent female-owned
- Ownership in partnership with male-owned business
- Partnership with other women-owned business

The adequacy of the sample size and relevance of the sample enhances the credibility of the sample (Guetterman, 2015). Therefore, the relevance of the sample is confirmed by all participants being women entrepreneurs owning and operating businesses in the mining industry. The extensiveness of the sample was achieved as the sample size was higher than the minimum sample for the methodological choice of the study, which is 12. Saunders & Lewis (2018) further notes that, "for research where the aim is to understand commonalities within a fairly homogenous group, a maximum of 12 in-depth interviews should suffice."

Creswell (2016) recommended 5 to 25 interviews for semi-structured interviews in the chosen type of research design, hence for this study sixteen (16) participants were selected and interviewed. Furthermore, the empirical data was assessed for saturation using the proposed method by Guest, Namey and Chen (2020). In this approach, the base size and run length is employed and the saturation was achieved after 14 interviews (≤ 5), where the base size was eight interviews and then three for run length. The saturation at (0%) was achieved with interview 15 and 16 as shown in Figure 1 below.

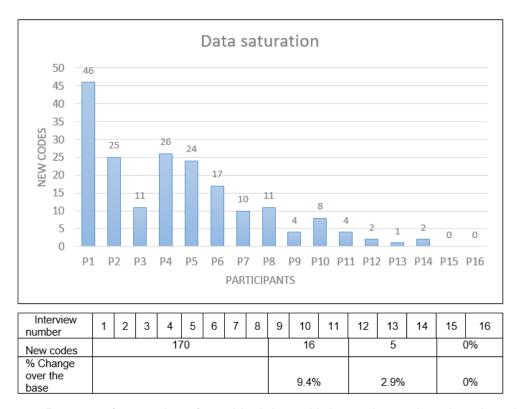


Figure 1: Process of saturation of empirical data with base size and run length options

4.11 Data Gathering Process

Measurement Instrument: According to Hennink, Hutter, & Bailey (2020), the role of the researcher is to elicit the story from the participants to gain insight. The researcher chose to conduct in-depth interviews to enable in-depth understanding of what barriers were faced by the women entrepreneurs and how they managed to thrive and sustain their businesses in mining. The in-depth interviews are recommended for exploratory research as it reinforces the purpose of gaining insight from the participants' perspective (Hennink et al., 2020). Hence, an interview guide (see Appendix B) was developed and anchored around the literature review and the research questions described in Chapter 3. These questions were open-ended question as follow up questions were asked based on the response of the entrepreneurs. Follow-up questions were however without leading the participants as in-depth interviews are

not a dialogue (Hennink et al., 2020). This was important in order to fulfil the purpose of the research objective. The 3 introductory questions were used to acquire the entrepreneurship background of the women participants. These were followed by the other questions which sought to probe deeper into the aspects of each research question. DiCicco-Bloom & Crabtree (2006) states that the systematic and repetitive nature of qualitative research process whereby data analysis overlap with data collection often results in changing the questions as the researcher learns more about the research topic, hence in some instance follow-up questions were asked to gain deeper understanding. Prior to each interview, the consent letter (see Appendix A) was sent to participants to promote voluntary participation and ensures confidentiality of the participants. Each participant signed consent form accordingly with the researcher reading the consent form and confirming permission with participants at the start of each interview before recording function could be enabled.

Data Collection Tool: Due to most participants being in different provinces of South Africa, time constraints, and convenience to participants, Zoom platform was used exclusively to conduct all the virtual online interviews. Both the video and audio functions were enabled with permission of participants as outlined in the consent forms. The camera option was only disabled during interviews were connectivity limitation prevailed especially due to electricity load-shedding and participants' remote mining location with limited network coverage. The summarised duration of the interviews is indicated in table 2 with average duration of approximately 46 minutes per interview.

Table 2 Interview duration

Description	Quantity
Number of interviews	16
Interview duration total	12 hours 7 minutes
Average duration	46 minutes 28 seconds
Shortest duration	30 minutes 10 seconds
Longest duration	1 hour 11 minutes 44 seconds

4.12 Data Storage

All interviews were recorded and all audio, video recordings, Microsoft word notes taken during the interview and transcribed data is kept electronically on Google drive created by the researcher prior to interviews. All data was stored without identifiers. Furthermore, only the researcher have access to the drive to ensure protection of the information shared by participants. Upon completion and submission of the research, all information was submitted

over to GIBS to store in the GIBS data storage system for a period of 10 years as per University of Pretoria requirements.

4.13 Analysis approach

The research used thematic analysis for data analysis as proposed by Silverman (2020). Terry et al., (2017) explained thematic analysis as a method used for identifying, analysing and reporting patterns in the collected data. Figure 2 summarise the approach to be taken in analysing the data that is adapted from Braun and Clark (2006). The analysis was conducted with the aid of computer software, ATLAS.ti version 22 which has the capability to create codes and themes and create relationships through thematic maps (Paulus et al., 2019).

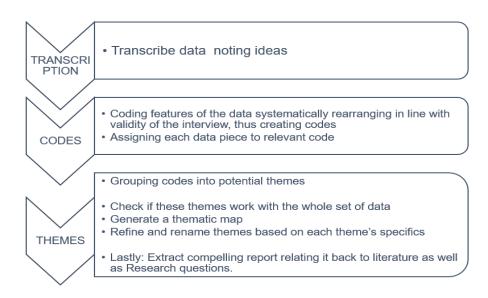


Figure 2: Brief flow chart illustrated the thematic analysis (Adapted: Braun and Clark (2006).

Initially, the recorded interviews were transcribed verbatim to ensure that they fully reflect the content and the perspective of the participants. During the first phase the research read the interviews to familiarise with the contents.

This analysis technique enabled the researcher to characterize the phenomena of gender barriers in the male-dominated mining industry in the context of gender as a socio-culturally constructed phenomenon via the lens of female entrepreneurs, which was previously lacking in the literature.

All sixteen interview transcripts were transcribed by the researcher and uploaded onto the ATLAS.ti 22 analysis software tool for analysis. During analysis, the researcher first reviewed the data at a high level to find concepts relevant towards the empirical study after which the wordlist was extracted focusing on key words assessing the consistency across the interviews and the and alignment of the empirical data on the research questions of the study.

Furthermore, the thematic analysis enabled the researcher to use an inductive approach to understanding the notion of gender barriers by coding a significant quantity of data and translating it into relevant and manageable codes, sub-themes, and themes (Hsieh & Shannon, 2005). The inductive technique enabled the researcher to understand the experiences of the female entrepreneur participants based on their own experiences in the entrepreneurial journey, reducing the researcher's bias (Hsieh & Shannon, 2005). Line-on-line coding ensured, initially without filter then with filter removing duplication resulting in the final codes with each code linked to a quotation or multiple quotations. Codes created descriptive data labels which are a critical building blocks of the data analysis. Furthermore, new codes were added as they surfaced rather than constraining data into defined codes (Bloomberg & Volpe, 2019). Codes that had already been developed required to be improved when different insight was acquired from data that related closely to codes previously created.

The next phase involved consolidating the codes into code group or sub-themes, where the research conducted recursive examination to establish the possible. Furthermore, respondent triangulation method was used to connect themes as they are narrated by participants. Respondent data enabled the researcher to acquire comprehensive understanding of the barriers faced by women entrepreneurs and share deeper experiential insights (Carter, Bryant-Lukosius & DiCenso, 2014; Patton, 1999). The themes were developed based on an understanding and interpretation of female entrepreneurs' interview responses and aligned to the research questions and their relationships was evaluated and confirmed with thematic maps. The relationship was either a code or subtheme being part of another one, association between two of them or in contradiction to each other. This was an iterative process to optimise the theme and complete analysis based on the collected data.

Moreover, Themes were established once the code was completed. The additional unrelated codes to the study topic are shown in Appendix E but not explored in Chapter 5. The results chapter 5 subheadings were similarly synchronized with themes. A total of 191 codes, see Appendix E, were generated. On completion of this, the report was compiled, and the findings are report in Chapter 5.

4.14 Quality controls

Strategies were implemented to promote data authenticity and trustworthiness of the analysis thus ensuring credibility, transferability, dependability and confirmability in qualitative research (Johnson et al., 2020; Joan, 2012).

Validity: Although in the context of qualitative study, low external validity due to lack of generalizability exist, validity is explained as the test of the realness of the findings (Nowell et al.,2017; Saunders & Lewis, 2018). To ensure validity of the data, the researcher ensured adherence to the selection criterion of the participants, which was women entrepreneurs in mining and thus reduced having a biased sample (Joan, 2012). Furthermore, Saunders and Lewis (2018) identify history, morality and testing, amongst others, as factors that can negatively affect validity.

Reliability: On the other hand, reliability of the analysis refers to the accuracy and precision in which data collection and analysis will produce consistent results (Saunders & Lewis, 2018). The researcher ensured standardisation of interview questions across all participants' interviews to eliminate bias and promote consistency. The researcher asked the same questions as out in the interview guide in Appendix A. The questions were set out in a consistent and uniform manner to get deeper understanding around the themes, from the women entrepreneur participants. Codes and themes generated from the interviews were compared rationally without preconceiving categories to ensure reliability of the data to be collected whilst aligning to the research topic.

Credibility: The credibility of the study was ensured by conducting selection of optimum methodological choice which is qualitative to answer the 'what' and 'how' questions (Mtotywa, 2019), the credibility of the sample through the already discussed in previous section (section 4.9), data triangulation and members check (Shenton, 2004). Respondent triangulation method was used to connect themes as they are narrated by participants. Respondent data enabled to acquire comprehensive understanding of the barriers faced by women entrepreneurs and share deeper experiential insights (Carter, Bryant-Lukosius & DiCenso, 2014; Patton, 1999). This provided insight and the confirmation of the themes used for the findings of the study.

Transferability: Although in the context of qualitative study, low external validity due to lack of generalizability exist, the external validity which is linked to transferability in qualitative research the test of the realness of the findings (Nowell et al., 2017; Saunders & Lewis, 2018).

To ensure transferability of the data, the research ensure adherence to the selection criterion of the participants, which is women entrepreneurs in mining, as well as this will reduce having a biased sample (Joan, 2012). Furthermore, the study provides sufficient details including an interview guide which can ensure repeatability of the study and the findings transferable to similar setting dealing with the gender-related barriers women entrepreneurs experience in the South African industrialised industry such as mining, manufacturing and engineering. The approach to transferability was adequate with no requirement for generalisability in exploratory study in line with it purpose of using this methodological choice.

Dependability: The dependability is equivalent to reliability in quantitative research highlights the accuracy and precision in which data collection and analysis will produce consistent results (Saunders & Lewis, 2018). This by using ways to demonstrate that same outcomes would be achieved if the work were carried out once again in the same environment, using the same procedures, and using the same participants in the study. The research ensured that the research methodological choice and methods implementation as per description of what was planned in the proposal phase. Additionally, the research ensured standardisation of interview questions across all participants' interviews to eliminate bias and promote consistency. Thus, the questions as set out in the interview guide in Appendix B are set out in a consistent and uniform manner to get deeper understanding around the themes, from the women entrepreneur participants.

4.15 Ethical Considerations

The objective of the study was explained to the participants and that the research is for academic purpose. Furthermore, participants were advised that anonymity and confidentiality will be maintained, as per Appendix A. The medium of communication for interviews was English, as the South African business language. Participants were advised that participation was voluntary and had the right to withdraw from participation at any time, without penalty. Also, participants were advised of the confidentiality and that participant's identity will be withheld, thus will be securely stored with no identifiers.

4.16 Methodological Limitations

The limitation of this study is that the findings of the research cannot be extended to broader population of the non-traditional industries as it is not generalizable (Queirós, Faria & Almeida, 2017). Ochieng (2009) further states that the aforementioned limitation is attributed to a small number of participants being interviewed thus not extending to wider population which can lead to research findings being tested statistically to test the significance or non-significance

of the finding thereof. However the findings may be relevant to industries with similar contexts and experiences.

Furthermore, the study might have been limiting by using purposive and snowball sampling techniques resulting in selection bias (Saunders & Lewis, 2018). Hence, although the researcher attempted to recruit individuals from various racial denominations, there may have been other barriers based on race, particularly in light of regional context of South Africa in reference to historical Apartheid legacy and a disparity in racial inequality. As a result, generalizability to all races will be impossible.

The interviewer's subjectivity might have occurred when conducting interviews and analysing data, considering the researcher's profession as a geologist in the mining business. Furthermore, as a first-time novice interviewer, the researcher was not expertly trained in interviewing skills, which could have influenced the results observed during data analysis (Kalu, 2017). Worthnoting is that the ability of the interviewer increased with increase in the number of interviews completed although the lack thereof might have influenced the research findings.

Lastly, the study did not categorise different entrepreneurs based on the size of the business as the challenges and barriers could be similar or different in each a small versus big enterprise

CHAPTER 5: ANALYSIS AND RESULTS

5.1 Introduction

The primary purpose of the study was to explore and gain a more insightful understanding of socially constructed gendered barriers faced by women entrepreneurs in mining, their experiences, and mitigating strategies for dealing with such constraints. The empirical data of the qualitative study was obtained from 16 semi-structured interviews with various women entrepreneurs in the mining industry. The findings of the empirical data from the interview transcripts are analysed and presented following a particular order starting with the profile of the respondents, relevance of empirical data, discussing the themes of the study, and finally answering the research questions.

5.2 Overview of sample study

The overview of the study sample was obtained from the profile of the participants as well as the relevance of the empirical data. The data was collected through semi-structured interviews using an online platform, Zoom, with women owning and rendering services to the mining industry.

5.2.1 Profile of the participants

The participants were strictly women entrepreneurs and confidentiality of the interviewees were maintained by only referring to them as participants and the business names withheld to ensure confidentiality. The profile of the participants indicates the participants' personal background, the year their companies started, shareholding ownership and the company activity description within the mining industry (Table 3). The participants were from different mining sections and their companies either supplied mining industries or assisted the mining industry with mining technical skills and project management.

Participants	Year of founding	Shareholding %	Experience and additional information
Participant 1 (P1)	2016	100% owner	Engineering professional with mining industry experience. Business operates in civil works and construction.
Participant 2 (P2)	2017	51%, with male partner	Mining Engineering professional. Business offers contract mining services and mining rehabilitation.
Participant 3 (P3)	Founded in 2012, operated from 2021	100% owner	Environmental Sciences professional. Business offers environmental consultancy services to various industries, including mining.
Participant 4 (P4)	2018	Partnership (49% women partnership)	Project Management Specialist with chemical engineering background. Business operates
Participant 5 (P5)	2014	Partnership 50% (women only company)	A family-run business focusing on electrical services for the mining industry.
Participant 6 (P6)	2018	51% shareholder	Entrepreneur with a radiography qualification and work experience in the mining environment. Company specializes in mining supplies.
Participant 7 (P7)	2014	51% shareholder, male partnership	Entrepreneur in Project Management services with a Metallurgical Engineering.
Participant 8 (P8)	2018	Partnership 51% (women only company)	Entrepreneur in Project Management offering end- to-end services across the mining value chain.
Participant 9 (P9)	2012	Partnership	Entrepreneur in mechanical maintenance and supply of screen panels to the mining sector.
Participant 10 (P10)	2014	100%	Entrepreneur in Location Intelligence Consulting using Remote Sensing and Geographical Information Systems. Business operates within the mining, engineering, legal and environmental sectors.
Participant 11 (P11)	2017	100%	Supply and maintenance of screen panels
Participant 12 (P12)	Founded in 2017	100% owner	Entrepreneur in the transportation of fuel from supplier to mining houses.
Participant 13 (P13)	Founded in 2014	100% owner	Entrepreneur in training of multi-disciplinary engineering learners. Business offers vocational training opportunities. Participant holds a PhD in Engineering.
Participant 14 (P14)	Founded in 2021	100% owner	Entrepreneur in Project Management services.
Participant 15 (P15)	Not specified	Majority shareholder and Managing Director	Entrepreneur in mining and civil geotechnical consulting with an Engineering Geology qualification.
Participant 16 (P16)	Founded in 2015	100% owner	Entrepreneur in electrical and instrumentation services for mining houses.

Table 3: Participants profile.

5.2.2 Relevance of empirical data

The word list from Atlas ti 22 was used to determine the relevance of the empirical data and the alignment of data across all interviews with the purpose of the study (Figure 3). The most dominant words were business, company, work, women, skills, mining, entrepreneurship, technical, industry and entrepreneurs. These words were prevalent across all interviews and were in line with the study. The relevance of the empirical data and interviews is essential for the credibility and rigor of the findings (Guetterman, 2015)

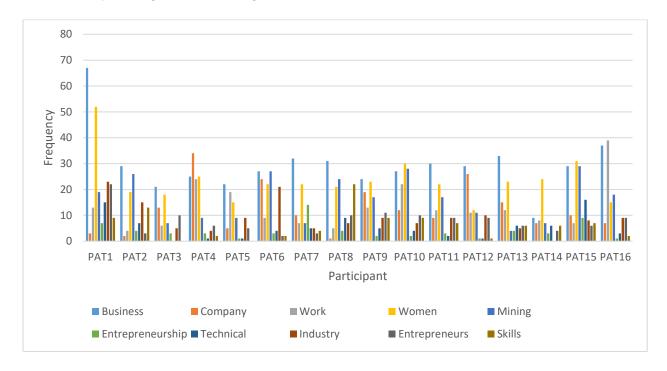


Figure 3: The dominant words in the study

5.3 Themes of the study

The primary purpose of the study was to explore and gain a more insightful understanding of socially constructed gendered barriers faced by women entrepreneurs in mining, their experiences, and mitigating strategies for dealing with such constraints. The qualitative study had three research questions which were: what are the gendered and non-gendered barriers facing women entrepreneurs in mining, is there gender-bias to women entrepreneurs due to socio-cultural norms and lastly, what are some of the tactics and approaches used by women entrepreneurs to overcome gender-related challenges faced in the mining industry? Six themes and ten sub-themes were extracted and illustrated under relevant research question findings below.

5.4 Results of Research Question 1: Gender Barriers

RQ1: What are the gendered and non-gendered barriers facing women entrepreneurs in mining?

The first research question sought to determine the gender barrier faced by women entrepreneurs who are rendering services in a non-traditional, male-dominated mining industry from the perspective of the women entrepreneurs through their lived experience. The interview answers for the questions anchored in Research question 1 were analysed into two themes: women entrepreneurship in non-traditional industries and gender barriers. The first sought to understand challenges starting a business in a male-dominated industry/ non-traditional industry and the last to highlight other gender barriers faced by women entrepreneurs in the mining sector. The themes were anchored in the codes created, therefore the codes associated with the aforementioned themes can be seen in Table 4 below.

Table 4: RQ 1 themes with related codes

Codes	Theme	Research Question	
Gender stereotype & Discrimination	Challenges starting a		
Lack of Recognition – Women need to prove themselves	business in the mining sector	RQ 1: What are the gendered and non-gendered barriers facing women entrepreneurs in mining	
Lack of Financial resources	T1: Non-traditional industries - Gendered		
Lack of experience: Education and Skills training	barriers		
Male supremacy - Patriarchy			
Lack of confidence and networking	T2: Gender barriers		
Barriers to entry & Business opportunities			

5.4.1 Women entrepreneurship in non-traditional industries – Gender barriers

The first theme developed sought to gain insight and understating into the barriers faced by WE in venturing into a business and rendering technical services in a non-traditional or male-dominated industry such as mining. This was done to critically understand how the entrepreneurial opportunity was identified and pursued taking into consideration the participants' journey and experience and barriers faced by women in a non-traditional industry. One theme was created from created in the context of the participants' experiences, named Mining: Non-traditional industry and network interaction of relevant codes shown in Figure 4.

Mining: non-traditional (Male dominated) industry

The theme sought to gain insight in a male dominated non-traditional industry, specifically mining.

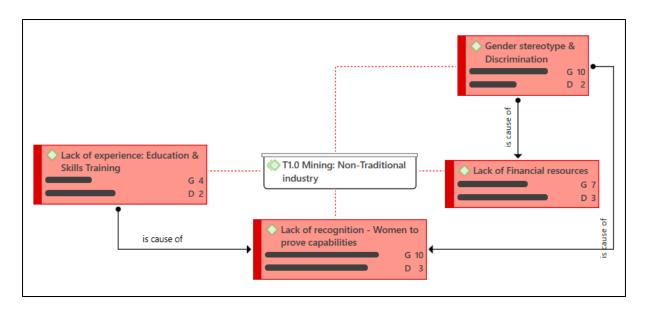


Figure 4: Network interactions of RQ 1, theme 1-Mining:Non-traditional industry.

The majority of participants indicated that one of the challenges of entering into business in a non-traditional industry such as mining, were issues of discrimination against women and the gender stereotypes that women must continually disprove or work against. Furthermore, participants alluded to stereotypes such as women cannot lead or take charge and thus should not be put into leadership especially in male dominated industries makes it very difficult for women to venture into entrepreneurial activities into non-traditional industries. It becomes difficult for male sub-ordinates to submit and follow the leadership of the women, this continuous gender stereotyping of females in the non-traditional industries also creates barriers for women to fully function within the workplace. The negative connotation of BEE is that most males in the industry think that females are present in the positions they are in not because of their skills but because of BEE which participants felt was wrong as BEE only granted an opportunity to qualifying females to take part in a closed system, and these were some of the barriers woman faced in the mining industry, not forgetting gender stereotypes and discrimination that females faced on a daily basis. Participants explained experiences:

"For a very long time, when I walk into a boardroom and I see black females, I immediately think they're here because of BBBEE." Yeah, he said that to me. "But, in working with you I've actually seen why you are where you are today."P7

"Some guys believe women can't lead, they're not supposed to lead, they just stay to raise children and be a housewife and do the housework and we still have a lot of those men in in the mining industry. they don't think that me as a woman will be able to work in the industry" P6.

"they don't think that me as a woman will be able to work in the industry" P9

Furthermore, participants indicated that in addition to gender barriers, they further encounter racial discrimination in addition to gender discrimination as barriers with Participant 1 explaining:

"The main people who are decision makers within the mining industry, still predominantly white Afrikaans males, and because they make the decisions, it's already a barrier for black men to penetrate, especially the technical space, so how much more if you're a black woman because you are not seen as an equal player. A lot of the time, on a high level you will see that there are initiatives because the government puts regulations in place to address those issues but from a day-to-day operational perspective you can see that the thinking is still the same. White maleowned businesses supersede 100 fold the opportunities that are given to local female, male, black business" P1.

Additionally P15 highlighting the preference of male-counterparts over women:

"Male counterparts are still being preferred" P15

Participants further alludes that gender discrimination in mining, is further shown visible through lack of recognition i.e. women having to prove themselves as a barrier to entry into the mining industry. Participants alluded that women have to go an extra mile in order to show their capabilities even though they may be the people for the job additional to possessing relevant qualifications and experience in the field. Hence, all the aforementioned issues and challenges have created an environment where women have to prove themselves

"So it is a bit more difficult as a female, because you need to first prove yourself. You're not given that benefit of the doubt of "I know that you're capable". No... You need to first show that you're capable, then I'll believe you." P7

"having to prove yourself so much that your work is not valued at the same level or rather the same value as male counterparts" P10

"So you find that (I don't know if it comes naturally, or it's just a preconceived notion) once he starts discussing more especially technical specifications and what he wants, he'd usually direct those questions to a male, rather than myself" P1.

"Why I say it's hard like I said, you need to know what you're doing, because you know, a guy can mess up a project, nobody will even bother about it. But when it is a woman, it is exaggerated" P13.

"In most cases we always have to prove ourselves 10 times more than men. What I've realized is that I've been given tasks that men can't do, I think they just want to test if I can do it, and I'm happy to say that in most cases I find out about the problem I'm being given, and I try to get as much information as possible to give it a proper solution" P16

Participants also indicated that the non-traditional industry such as mining, is capital intensive; hence participants had a firm view that to establish a business, financial capital is important with Participants alluding that:

"The second challenge with the space I'm in is –it's capital intensive, we're talking millions worth of machines that you need to deploy at any given time" P8

"money is the centre of it all, money is very fundamental, it's very important. You need funding, you need equipment you need a vehicle. It comes down again on the same thing that it's funding. And it's not so easily to get funding!" P5.

With P11 attesting that saying:

"The biggest support that people or business people need is finance but you cannot execute a business without finance" P11.

However, women face barriers to access funding to start and sustain businesses in mining industry as it is a capital intensive sector, coupled with the inadequate resources such as machinery or equipment to handle capacity required due to a lack of financial support and funding for women entrepreneurs. Participants held a firm view that women do not receive financial support compared with their male counterparts:

"When a male counterpart of mine said he was doing sampling for them and everything and there were no issues, it was straightforward thing. But when I got there, they just told me "No, we do not have a budget"-P11

"Now, without a good profile financiers are not comfortable to finance you. So my balance sheet was a constraint because financiers were not comfortable to finance me, and I needed massive machines to operate, and without those machines it means I need to rent out machines." P8

"You know, as a black person living in South Africa it's very rare that you have financial backing to start your own business." P1

As a result, P16 indicated having to use her own money to finance her business, however with a challenge to finance for a bigger project due to limited capital at hand.

". My savings played a role in starting up, they were not that much but they helped a little to kick-start everything Yeah. And the other challenges is - when we get big orders like maybe a million, then it's money that you don't have at hand, that you can't really access immediately to fulfil your order. And that has been a challenge for a while." P16

And P4 indicating resorting to a non-traditional way of acquiring capital to finance company human resources, explain that

So, we were at a point living hand to mouth, without any reserves to pay people. So I remember, at some point we were scrounging around calling people to help us, to give us cash to get out of that situation. I remember I called fellow business that I knew that I had a relationship with, my husband had to loan us money. People loaned us money, we took even from our own personal savings to cover that expense so that we could just at that point pay our employees. P4

However, other participants alluded to other mining companies giving support to assist small enterprises with P4 alluding to Company B having support structure that assist businesses in terms of paying invoices on time to ensure small businesses remain liquid in term of cash-flow "we just submit one invoice and we get payment, and company C was also paying us quite quickly and understanding that we're a small company, we've employees to pay we, don't have a lot of capital behind us, so they were really very good in terms of the payment terms" P4

Participants further alluded to barriers to entry in mining and the reason men are preferred in the non- traditional industries was experience, and articulated that women have less experience in non-traditional industries for the reason that historically men have been working in these industries for longer than women, and these are some of the issues that should be dealt with systematically if women are to make progress in these fields. Furthermore, participants attributed challenges in the industry to having its own communication terminology; hence the lack of technical language when engaging with industries also played a role in women interactions within the industry.

"male counterparts are still being preferred, and that's because there is no one else within the same years of technical experience that most mining sectors would be looking for that is actually female, that is in business" P15.

"the biggest challenge that we experienced in the mining space – first it was the liability of newness. What I mean is, the space that I'm in, it's, mainly players, big players who've been in this space for a long time" P8.

"So when you're in the supply industry and you're a woman, and especially if you don't have a mechanical or electrical background - they have a technical way of talking to other guys, guys just know this stuff from how they were raised or they have that benefit. So that causes a bit of a barrier, the fact that women don't always understand the technical language" P6.

With P11 further alluding that not being afforded an opportunity to gain exposure becomes a barrier to women as they are still new in the industry.

"Number two, if you are going to run a Geology consulting company, how would you have gathered or acquired the skill, if you were only exposed to grade control and pit mapping for example. You grow up the ranks you become MRM and you still do not know how to do resource estimation" P11.

5.4.2 Gender barriers faced by WE in the mining sector

The second theme related to Research Question 1 was Gender barriers. The theme developed sought to gain deeper understanding of gender barriers faced by women in mining sector. This was constructed to critically understand barriers women face in the mining industry through participants' journey and experience. One theme with was created in the context of the Research Question 1, namely, Gender barriers faced by women entrepreneurs in the mining sector.

The theme was anchored in the codes created, therefore the codes associated with the aforementioned theme can be seen in Figure 5 along with the associations that create a network between the codes.

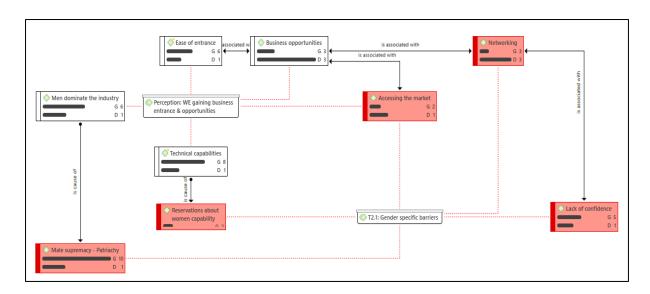


Figure 5: Network interactions of RQ 1, theme 2 - Gender barriers

5.4.2.1 Gender barriers

The majority of women interviewed indicated that the major barrier and challenge in running or starting a business in the mining sector was male supremacy in the industry because of the dominance of men in the industry with Participant 9 articulating that

"it's still pretty much male dominated, and hopefully that's something that will change, you know" P15

with P8 sharing a strong view of the world being patriarchal whilst P9 alludes to mining industry being male dominated which further exacerbate having to prove capabilities as a women entrepreneur:

"It's a patriarchal world, everywhere, so, as a woman you go into that space knowing that – it's a patriarchal world, you are always in the back-foot as a woman". P8

"Mostly the challenge is mining it's a male dominated area that I'm in, so there is challenges where people will discriminate, especially on the male side that they don't think that me as a woman will be able to work in the industry because it's more male dominated" P9.

Furthermore, the ideal of male supremacy was seen in the type of tasks males were given versus the tasks females in the industry were given, participants felt that women were given inadequate tasks as compared with men, hence men grow and expand in entrepreneurial activities, which P16 explains:

Ladies are given tasks that are very useless, or maybe a job that is type that is useless in a way, stuff that would not grow you, and the other serious tasks they are being given to guys entrepreneur." P16

Majority of women also indicated that the other barrier is lack of networking which gives men an upper hand in entrepreneurial activities as it gives access to market through the ability to position yourself as an entrepreneur. Participants mentioned challenges of accessing the market as it was difficult to find opportunities for themselves, furthermore even when they found the opportunities, participants felt they were discriminated against because of gender. The lack of networking is furthermore linked to lack of confidence in women.

"It's so difficult to get opportunities and to just position yourself in a way that you will be seen for what it is that you are really good at, and you will get recognized." P14

"But the other thing is that I can be bidding a tender for you as a guy, and then in some sectors of the society, they will plan hunting trips together. They will meet somewhere and they have a drink. You can't do that because I mean I'm a woman. They can go and play golf. It's a normal thing to go and play golf together and there you get a business. For a woman, and for an African woman, it's actually unheard of, it's actually unheard of that you went to play golf. "P13

With P15 sharing the similar sentiments explaining that -

"It's a tactic that I haven't learned yet, and it's a tactic that I will learn with time. But a lot of a lot of business deals or communication is done over rugby games and golf and it's more social. But the thing is that even if you do have these social networking, will you still be accepted as a female in them?" P15

"Men have set up men's clubs, informal clubs, networks where they socialize with each other and it makes it easier for them to take it beyond a social setting to a professional business setting, you know" P8

Furthemore, P16 explaining the lack of confidence in women

"I think it will even boost our confidence, because other ladies, you can see they've got the capabilities, but the confidence is not there, they're not that confident." P16

Furthermore, the social clubs and networks which fed into their professional relationships had a negative effect to the perception of women such that women were perceived to be too formal waiting on meetings and following protocol because they did not have any social relationships

with the people within the industry and were only limited to professional relationships which in turn made limited the way they interacted with people in the industry.

"As a woman you want to follow a protocol, you want to wait for that meeting, because you do not want to compromise yourself in the process. You want to set up that appointment. What stopped you now from just giving me a call and saying P11 can you talk? Nothing, but you waited for that set time to say "Okay, our appointment was set for this time" P11

Furthermore, gender barriers were looked at a perspective of gaining an in-depth understanding barriers with regards to receiving equal business opportunities and barriers thereof. Although some participants indicated existence of barriers to entry, interestingly data also shows that women believe that there is positive trajectory regarding venturing into mining, with P14 alluding that:

"it makes it a bit easier for women because a lot of companies obviously look for your Level One, female owned mostly. So I feel like that is sort of an advantage just from that direction or that perspective." P14

However, other women indicates that although measures are put into place, the reality on operational level seems to be contrary with P15 holding a view that:

"I don't think it's as easy as it's put out there by the mining industry, because yes, the mining industry has a lot of initiatives for women in mining and trying to grow that sector, but whether it actually filters down to entrepreneurs on the technical side of things" P15.

Furthermore, the other perception for women to gain entrance into mining services business was attributed to acquiring technical skills with P9 stating that:

"I think technical skills are very critical." P9

Also P13 and P2 alluding that women need to venture into services which technically they possess skill and capabilities of:

"as an entrepreneur, you need to know your stuff. I'm in engineering, you cannot just get up from any profession and go into engineering without knowing the nitty gritties" P13. "Generally as a woman, your technical skills, must be there because if you want to run a successful business, you've got to understand what you're doing" P2.

5.4.3 Summary of Results: Research Question 1

The key objective of the Research Question 1 of the study was to understand the genderrelated barriers faced by women entrepreneurs in South African mining industry from the perspective of the women entrepreneurs through their lived experience. Through data collected from participants interviews seeking to gain insights in terms of RQ1, the findings indicates existence of barriers related to gender in addition to those not related to gender and network interaction of key codes and themes is illustrated in Figure 6 below.

From the perspectives obtained, it was suggested that generally women found it more challenging to venture into non-traditional industries due to dominance of men in the industry. The dominance of men in non-traditional industries results in women entrepreneurs facing gender stereotyping and discrimination. The latter creating further barriers such as lack of recognition, hence resulting in women having to prove themselves, and work extra hard to prove their capabilities in rendering a technical service.

Additionally, it was indicated that the dominance of men enabled patriarchy which was found to be another barrier for women entrepreneurs. The ideal of male supremacy results in women entrepreneurs not being afforded equal business opportunities when compared with men women were given inadequate business tasks as compared with men which further creates a barrier for gaining technical expertise and running a thriving business.

Mining as a non-traditional industry was found to be capital intensive and lack of financial assistance for women owned business further exacerbate the lack of entrance and lack of access to market into mining entrepreneurial activities. Furthermore, lack of financial support and resources was linked to gender discrimination as women do not receive financial support and attribute this to both gender and racial discrimination. The other barrier is lack of networking by women entrepreneurs, which gives men an upper hand in entrepreneurial activities and enhances their access to market through the ability to position themselves as an entrepreneur and gaining access to potential clients. Women do not engage in social networking activities due to lack of confidence, or being risk averse, amongst others. The results indicate that women entrepreneurs do face gender barriers in addition to non-gender barriers in the South African mining industry. The data clearly indicates existence of gender barriers into mining entrepreneurial activities which is predominately attributed to the dominance of men in the industry, and the perception about women in a male dominated industry.

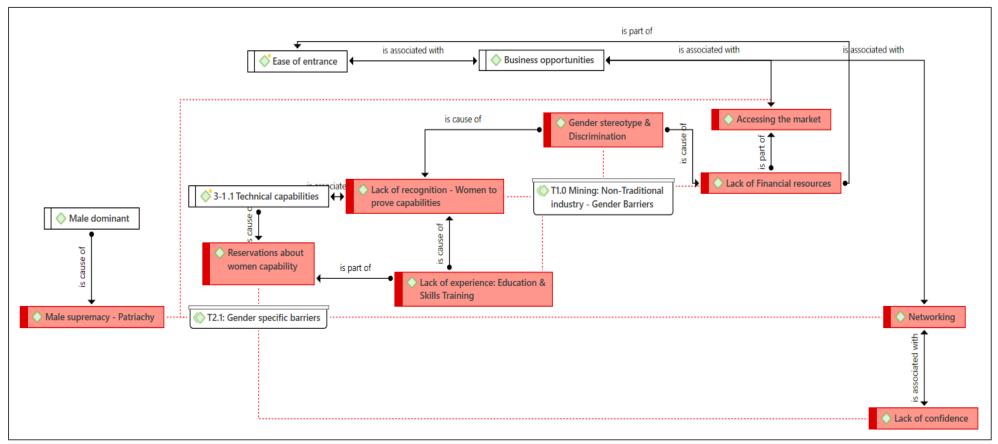


Figure 6: Network interactions of RQ 1

5.5 Results of Research Question 2: Barriers due to Socio-cultural norms

Research Question 2: Is there gender-bias to women entrepreneurs due to sociocultural norms?

The second research question was: Is there gender-bias to women entrepreneurs due to socio-cultural norms? Therefore, this section was answered with two themes namely, gender biases due to sociocultural norms and influence of culture in decision-making as shown in Table 5 below.

Table 5: RQ 2 themes with related codes.

Codes	Theme	Research Question	
Masculinity			
Motherhood	T1: Gender Bias	RQ 2: Is there gender bias to WE due to cultural norms	
Socio-cultural expectations/norms - Cultural prescriptions			
Decision informed by business need			
People-centred decision making			
Sustainable decisions	T2: Influence of Culture in decision		
Values influence decision-making	making		
Charity begins at home			
Women attach emotions			

5.5.1 Gender Biases due to sociocultural norms

The aim of the theme was to gain understanding of the barriers to entrepreneurship due to socio-cultural norms which restrict the conduct of women entrepreneurs since norms establish the strength or weakness of cultural expectations for becoming an entrepreneur and adhering to social responsibilities (Murnieks et al., 2020). Figure 7 illustrate the interaction of codes which the theme was anchored on.

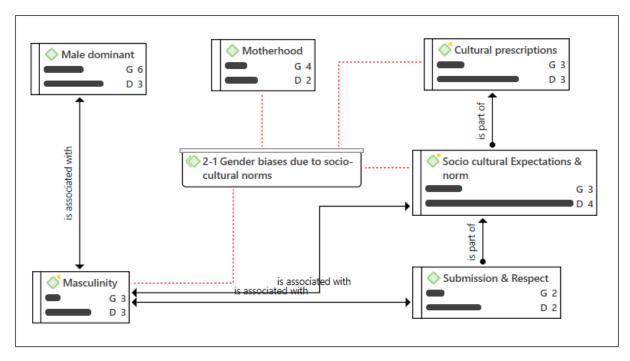


Figure 7: Network interactions of RQ 2, theme 1 - Gender Biases.

The cultural and social environment in the mining industry was found to be male dominated due to historical mining background of South Africa; resulting in men's long-standing experience in the industry. Furthermore, participants states that the mining industry is untransformed.

One that I can really identify with is, even in your team you've got a certain race that you work with. Even in the area that we operate in, it's largely not transformed. P1

Thus participants felt that men were more comfortable with men, hence domination of "boysclub" and that even though boardrooms had more women now, men had the tendency to address the other men even though a woman was the subject expert. For instance, P11 admittedly explained that she succeeded in acquiring project mainly because she worked with a male counterpart.

"Boardrooms have got more ladies now, which is always beautiful to see, but you'll find that the men tend to address more the gents, even though you are the subject matter expert." P10

"And in the projects that I've succeeded, I succeeded because I had a male friend of mine who I have worked with for some time." P11

Furthermore the cultural prescriptions discriminated against women by continuously favoring the male counterpart and rejecting females who were qualified for the job. Participants also spoke of how even though they were owners of the companies, their male managers were more likely to be respected and given courtesies such as eye contact and handshakes

regardless of what they did or how much they tried to gain that respect it was always met with some sort of rejection although the rejection itself was subliminal, alludes P1.

When you arrive there, you're not seen as a business equal, you're seen as a woman.P15

The end user would only really give the male manager who I was with eye contact and speaking directly to him instead of speaking directly to myself as the business owner.P1

Participants also indicated that there was under representation of women in the mining industry and the discrimination of women, as alluded to by P19

Mining it's a male dominated area that I'm in, there is challenges where people will discriminate, especially on the male side.P9

Gender bias was also reported to exist in mining industry with by not acknowledging their presence in meetings, or by not acknowledging their opinions even though they were subject experts was an expression of sexism within the industry as alluded to P10:

"but you'll find that the men tend to address more the gents, even though you are the subject matter expert" P10

Participants also highlighted the expression of sexism in mining due to the industry being male dominated and thus tailored towards men, socially and systematically and that was seen in the increased availability of opportunities for men versus those available for women within the industry. The sexism is further witnessed through unethical practices against women such as sexual advancements where males would require sexual favours from women biding for business or opportunities in the industry in order to grant them the opportunity with P14 explaining that

Because there was, like I said, ulterior motives being pushed by the person at the forefront, and when I obviously declined or rejected his advances, then I didn't get the opportunity.P14

And the other challenge that you get in inside the mine is people wanting money. Someone would be telling you, "No, in order for me to give you this work, I have to have a portion of whatever money that you make out of there. P16

Participants also describes mining culture anchored in traditions and culture of society, and sociocultural factors evidenced in the mining workplace where participants further alluded that women entrepreneurs are seen as women first and foremost before they could be seen as

business equals. Furthermore, due to sociocultural norms women are expected to still uphold the socio-culturally constructed expectations such as respecting a man and being submissive. The cultural backgrounds of individuals highly affected how they interacted with other people, however some of the cultural norms were counter conducive for women in the mining industry, for example, for black women especially cultural teachings were geared towards submission and not talking back even though they disagreed with decisions taken that affected them, hence P13 alludes that

"In African culture, you don't just tell a man "go and do this." You ask "Ntate David, Oom Sam, please, can you try and do this?" Remember, Oom "Sam" is earning so little but he's an elder, so you must respect him – and then you just don't come and say "that's how we do it!" P13

This meant that women were not readily accepted and that there was a general expectation for women to be supportive characters in business and not business owners. Furthermore, P8 explaining how African culture requires women to be submissive

"as a black woman, culture affects us as well. You're taught to be submissive, you're taught not to talk back, and throughout our lives as women, we're constantly fighting for space. We're constantly fighting to be noticed. It's the same in business, it applies everywhere and it becomes exacerbated in the business space." P8

A statement made by a participant where she said that she had to be submissive to her male colleagues to make them comfortable so that she could interact with them at a business level further proved that the industry practices were highly affected by cultural norms and that women still had to engage in self-limiting behaviours to take part in the industry as alludes to by P15:

"There must be a part of you acknowledging that you're a woman first, and being, I don't know if that's the right word to use but being sort of submissive in a way to gain their comfort, to show them that that, I respect you." P15

Another cultural norm was the respect for elders, which in most cultures meant that you could not give an elder person instruction or tell them what to do, especially elder males, which then made it hard for female entrepreneurs to instruct and lead older men as there was an expectation for respect in the cultural context, thus explaining the resistance of female leaders in the industry.

"to show them that that "listen, okay, I respect you" and which I don't necessarily think as men they come in with having to do the same things like that, you know" P15

The social norms however were not always against women but favoured women in that men generally thought that women are weaker and need protection thus some men shielded women from the extreme dangers of the industry by either doing some of the work or by limiting their exposure to these conditions or environment.

As a black woman, you're taught to be submissive, you're taught not to talk back, and throughout our lives as women, we're constantly fighting for space. We're constantly fighting to be noticed. It's the same in business, it applies everywhere, and it becomes exacerbated in the business space. P8

Interestingly, four of the participants highlighted the gender bias and discrimination that is associated with household expectations which are culturally constructed. For instance, P7 alluded to her experience of discrimination based on such expectation and explaining that a male counterpart whom she was offering a service to mentioned:

""So if you are here working, who's raising your children?"" P7

Furthermore, the intention to start a business was also indicated to be influence by the role of women as mothers in their households, with P13 explaining that she ventured into business when her children were grown to adulthood.

"So I stayed in academics for 17 years. When the children were grown, I decide to go back to the field," P13

Additionally, P16 alluded to challenges of running a business whilst expected to take care of her household

Then boarding school was the safest option for her, because at least there'll be someone looking after her 24/7, because I would work and then sometimes you get home late, you don't see her, then you have to travel to Jo'burg to get spares, you only see her after 2 to 3 days... those were my challenges, you know. I'm not sure about other people, but those are things that I experience. P16

5.5.2 Influence of Socio-culture on decision-making

The purpose of theme 2 of RQ 2 was to gain insight into whether and how culture influence the decision making abilities of a women entrepreneur because culture restrict the conduct of women entrepreneurs (Murnieks et al., 2020; Brush et al., 2021) with Figure 8 illustrated the interconnection of codes in relation to the theme.

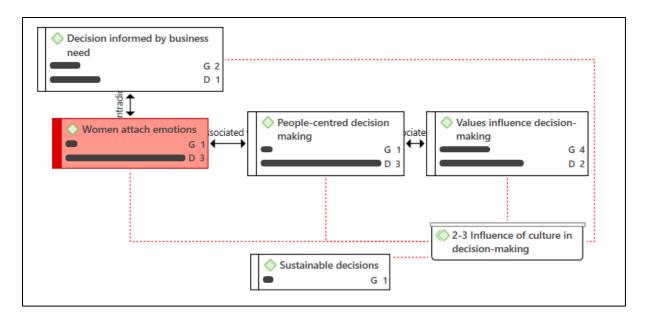


Figure 8: Network interactions of RQ 2, theme 2 - Influence of Culture in Decision making

As decisions are part of the activities in any business, it was imperative to gain insight in how culture contribute to how women make decisions and what the influence may be in identifying a business opportunity and starting a business.

Participant felt that decision making was more of a leadership skill and was not bounded by culture but rather by the business needs and that it was futile to make decisions regarding the business to suit people's cultural sensitivities. Other Participants in agreement felt that decisions needed to be sustainable and traceable for future leaders to understand how and why certain decisions were made. Cultural practices like ubuntu also drove people centred decisions such that some participants felt they had to take into consideration future employees or leaders when making their business decisions.

"I can't be making major decisions based on someone's possible cultural sensitivities - not in a disrespectful way, but at the end of the day if you came to me requiring the expertise, all I need to deliver is that expertise." P15

"Whatever decisions I make today, they need to take into consideration the Lebo that's going to join the business tomorrow, or the Nthabiseng or Nobahle and I always say that people do business with a person, or rather they do business with people."P10

"So, I think if I have to sum up that question in terms of decision making, it's about sustainability. You want the next person that's going to take the reins, to come in and

run with it, and you want to have built that baby or built that brand to something that you can also look back and say, "I started that, look where it is now". P10

The factor of culture and how it influences decisions in participants was explored and majority of the participants felt that their values played an important role in their decision making in their entreprises and relationships with clients. and how they were passing on these values to their children when teaching them about starting and running a business. It was the belief of a particular participant that women were bound to involve their emotions in the decisions they take, hence was confident that women cared when they took decisions

"I think the simplest way for me to say is, it's my values and how what I value normally then translates into the decision-making in the organization Even the way that I relate to my clients, the relationships that I build, it's all values based." P4

"With my children I'm trying to also lead them into a way of how to do business and to do business in an honest way and I'm a Christian." P9

And P9 further saying

"I didn't come across any woman even if they do it in silence, where a woman will not put emotions into things and that is where it comes in where I believe that women have much more a caring factor in them where the emotions come in." P9

5.5.3 Summary of Results: Research Question 2

The key objective of Research question 2 was to understand the gender biases and barriers to entrepreneurship due to socio-cultural norms for the reason that entrepreneurship scholars alluded that culture restrict the conduct of women entrepreneurs since norms establish the strength or weakness of cultural expectations for becoming an entrepreneur and adhering to social responsibilities. Therefore, the findings indicates the existence of **gender-bias to women entrepreneurs due to socio-cultural norms** and network interaction of key codes and themes is illustrated in Figure 9 below.

From the perspectives obtained, it was suggested that the mining industry is mainly built around men because of their long-standing experience in the industry. Further that the industry remains untransformed, and that men are more comfortable with working with men, even if a a woman is the subject-matter expert. This creates an environment where women are seen as only support. Furthermore, the cultural prescriptions in the industry cause division in business practices and results in gender discrimination against women. Such discrimination

results in women feeling rejected, as they are not afforded the same courtesy as their male counterparts.

Furthermore, the cultural backgrounds of individuals effects how men and women interact with other people. Some of the cultural norms are socially constructed norms, thus gearing women toward submission, or not 'talk back' to elderly male counterparts, although there may be a room to engage for decisions to be made. This cultural norm creates an expectation from women to not be disagreeable and for them to be submissive thus limiting them to supportive roles.

A statement made by a participant where she said that she had to be submissive to her male colleagues to make them comfortable so that she could interact with men at a business level further proved that the industry practices are influenced by cultural norms, and that women still had to engage in self-limiting behaviours to take part in the industry.

The social norms motivated by good intentions also creates barrier for women to gain experience. Men generally think that women are weaker and need protection thus some men shielded women from the extreme dangers of the industry by either doing some of the work or by limiting their exposure to these conditions or environment.

There is an under representation of women in the mining industry, and discrimination experienced. Women may not be often acknowledged for their subject-matter opinions, or for their presence in boardrooms and/ or meetings, suggesting some possible sexism within the industry. This further allows for availability more opportunities for men versus for women.

There are unethical practices against women such as sexual advancements, where males would require sexual favours from women biding for business or opportunities in the industry in order to grant them a business opportunity. In some instances the women would be required to pay or make financial bribes in order to be given an entrepreneurship opportunity.

Cultural practices like 'ubuntu' drives women entrepreneurs' decision making. Women make decisions are influenced by their cultural values, so women often make people-centred decisions. Women involve their emotions in the decisions making. The decision to venture into entrepreneurial activities is also influenced by the expectation of socio-culturally constructed gender-related roles in the society. Motherhood may affect their willingness to partake in entrepreneurship, and the degree to which they are able to run a thriving business.

The study suggests that socio-cultural norms creates barriers and biases to women entrepreneurs in the South African mining industry.

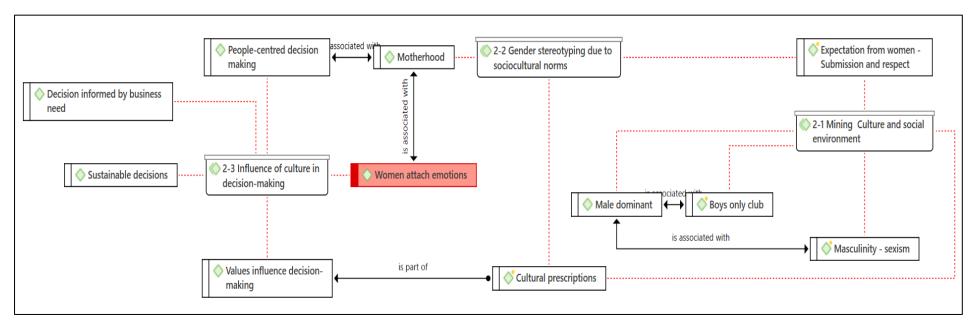


Figure 9: Network interactions of RQ 2.

5.6 Results for Research Question 3: Tactics and approaches

The third research question was what some of the tactics and approaches used by women entrepreneurs are to overcome gender-related challenges faced in the mining industry. The coping mechanisms and strategies of dealing with the biases varied. This question was discussed over two themes: essential abilities to overcome gender barriers in mining industry (sub-divided into Technical abilities and Behavioural abilities) and support for women entrepreneurs in the mining sector (sub-divided into Non-governmental and Governmental support) as shown in Table 6 below.

Table 6: RQ 3 themes with related codes.

Codes	Sub-themes	Theme	Research Question
Business, Finance & Marketing skills			
Assemble Systems & Teams		Essential capabilities	
Technical Capability	3-1.1 Essential abilities: Technical Capabilities		
Reach out for mentorship and coaching programs	recommodi Capasiniles		
Deliver expertly			
Command respect			
Communication skills			
Self-reliance & understanding	3-1.2 Essential abilities: Behavioral skills		
Harness inherited trait	Deliavioral skills		Research question 3:
Interpersonal skills			
Community upliftment			What are some of the
Conscientize men about equity and equality			tactics and approaches used by women entrepreneurs to overcome gender-related challenges
Create an enabling environment			
Government to avail opportunities	3-2.1 Support for WE: Governmental		faced in the mining industry?
Implement legislation	C oronninonia.	Support for Women entrepreneurs	
Investor-friendly legislation			
Legislation a game changer			
Legislation is levelling the playing field			
Embrace technology			
Opportunity for development			
Support through ED initiatives	3-2.2 Support for WE: Non-		
Supporting women businesses makes good case	Governmental		
Supportive spouse and family			

5.6.1 Essential abilities to overcome gender barriers: Technical and Behavioural capabilities

The purpose of this theme was to gain understanding of what women entrepreneurs themselves believe the abilities required to become an entrepreneur and overcome or ease gender barriers in mining industry were. Gaining the aforementioned insight would assist in

tailor making solutions to overcome barriers taking into account first hand experiences of women entrepreneurs. The theme was sub-divided into two subthemes, namely Technical abilities and Behavioural abilities. The sub-themes were generated based on the codes from interview data and Figure 10 illustrate the network interaction of the two themes using the key codes.

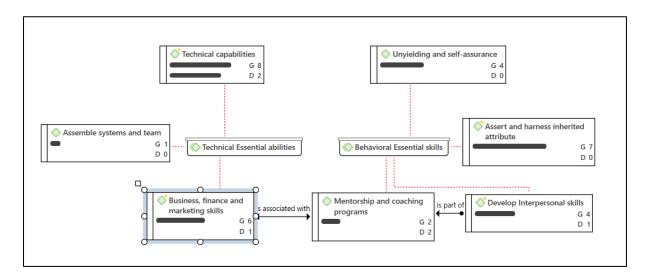


Figure 10: Network interactions of RQ 3, theme 1-Essential capabilities.

Technical Capabilities

The participants highlighted the essential abilities required to overcome the gender barriers in the mining industry such as the technical capabilities required by the industry to survive having successful businesses. The participants stressed that before dealing with any of the industry bias it was important for women who wanted to take part in this industry to educate themselves and acquire the technical requisite qualifications to understand the industry and its needs but also to show the people in the industry that you can be trusted with the job with P4 mentioning alluding that:

"People want someone who knows this story, even if you don't have millions of years of experience in what you're doing, but you've got a plan. You can come to me and you can say, 'Ma'am, I've got five years of experience, but with that I've learned 1-2-3 and I've acquired 1-2-3, and I can bring in a team that can help me to deliver for you in this way'." P7

"We need to just incline ourselves technically, study more" P14

Also, women need to technically be able to make a mark through assembling systems and teams that would help run businesses and making sure they manage cashflow, as the main objective of business was to make money

"Make sure that you set up the right systems, get people to help you, get competent people to help you to run your business, make sure that you're collecting cash." P4

and P4 further sharing the challenge of lacking financial management:

"And the main issue was our ability to collect payment. We were not collecting quickly enough to have sufficient cash flow to cover our expenses month to month. So, we were at a point living hand to mouth, without any reserves to pay people." P4

The latter skill was further alluded to by P1 saying:

"you need to have basic finance skills where you know how to budget, you know how to read your financial statement, you know how to forecast the finances and the financial needs of the business, you know how to price and so forth, you need to, of course, be able to market the business." P1

And P5 explaining her barrier prior to acquiring the marketing skill and P11 saying it is important to have marketing skills due to change in the way things were done:

"it was for me a challenge to put a board on for marketing, and eventually we got to do that and put the board on, and whenever I pass that board, I'm so proud because it took time for me" P5

"You need some form of marketing skills, you need to be hands on as well, because the way things are done always changes." P11

However, P6 alluded to companies giving support to entrepreneurs to gain business skills and appreciated the benefit of such support

"I just attended a short course now with "Big Mining house", I found it very fruitful. I learned a lot about myself, and I learned a lot about Project Management, and because we have plans to in future also extend our business into services, I think this was a very good one to attend actually because it gave me another view of looking at stuff when you are managing a project." P6

Behavioural capabilities

Furthermore, adding the need for mentorship, as mentors provided opportunities to learn and support structures within the industry, and the need to form relationships in the industry and

outsource specialised services. P14 further suggests mentorship and coaching to aid gender barriers and furthermore serve as mentor to others as P15 added

"get mentorship, get a mentor or some coaching, but it's mostly coaching in the technical space - somebody who's sort of in the same space as you, and can technically take you along on that learning journey." P14

"I try to do things that are not within my comfort zone, and I at times have anxiety issues, but I push myself because there are a lot of times when I feel as if I need to build myself to be the mentor that I wish I had, so that I could be the mentor for someone else to have". P15

Participants also suggests that women needed to be business savvy and have business finance and marketing skills as part of their foundational base.

"then you definitely need business acumen, when I say business acumen, I'm talking about things that you can also learn from short courses in school as well, and practically from running your business on a daily basis" you need to have basic finance skills where you know how to budget, you know how to read your financial statement, you know how to forecast the finances and the financial needs of the business, you know how to price and so forth, you need to, of course, be able to market the business. You need some form of marketing skills, you need to be hands on as well, because the way things are done always change" P1

And further alludes that soft skills such as project management, negotiation, communication skills and interpersonal skills were also a basic need for not only women but anyone who wanted to survive having a business in any industry especially the mining industry.

"It's not always just technical skills, but it's soft skills as well."P9
"Soft skills are very important because they allow you to see, to hire the right people, to surround yourself with the necessary people to make sure that things are done." P2

which P1 further agrees to:

"So you need to have the soft skills to be able to lead and run projects, and be able to work through human resource issues," P1

However, participants also mentioned appearance as a form to attract and command respect and thus was needed for women to overcome gender biases and challenges within the industry. Futhermore, participants emphasized on not changing who you are to fit in, which usually involved asserting inherited characters such as having a strong character and dressing the way you like

In as much as people will make advances at you, always look presentable. You don't have to look like a man to get a job. Wear your skirt and go and pitch, especially in our environment, in mining in engineering, you tend to get the sense that people feel like they need to look a certain way. P4

Part of surviving the challenges women faced in the industry required women to embrace and harness their inherit qualities such as having strong characters, embracing femininity and having self confidence in their ability to do the job as

"So, actually what's helping me now is my natural femininity, my nurturing side, my empathy side mixed with my business set of skills is now becoming my strength." P2

All these required women to understand themselves and their limits of what they could and could not do and be self-reliant, for example a participant mentioned that she quickly realized that no one was going to hand her tissues she had to generate her own tissues.

"if you cry too much nobody will give you tissue, so better not cry, or you manufacture tissues yourself and give it to yourself. So, there's no room to cry, there's no room to be sentimental or angry, because if you clarify your intention for a particular mission, then you are ready to face whatever is going on in that line" P13

5.6.2 Support for WE: Governmental and Non-Governmental

The purpose of this theme was to gain understanding of how women would like to be supported given their lived experience. Gaining the aforementioned insight would assist in tailor making solutions to overcome barriers taking into account real challenges and ideal support as required by those experiencing the barriers first hand. Furthermore, provision of relevant support will aid ease entrance to entrepreneurial activities and further enhance survival of women owned businesses in the mining industry. Support themes have been divided into two themes, namely, Governmental and Non-governmental support illustrated in the network interaction in Figure 11 below.

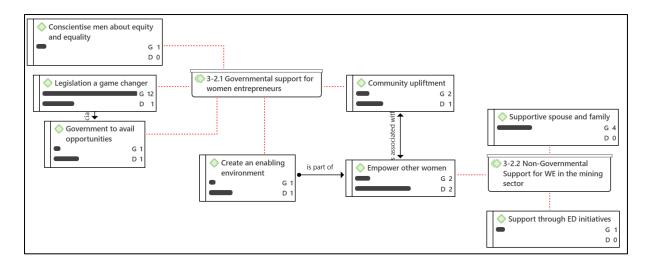


Figure 11: Network interactions of RQ 3, theme 2-Support for WE.

Governmental support:

Participants mentioned that one of the beneficial form of support that the government could implement was educating the male counterparts about the women in the industry and their capabilities as P14 suggests.

"I think it's just to educate male counterparts that we are right at the top of them. I feel like it's just to educate them and to provide awareness to society to say women are just as great; they're just as excellent; they're just as needed in the society." P14

The participants further mentioned that the government and institutions have a direct impact on the success rate of a company thus, was of utmost importance for government to ensure that it rewarded deserving companies and properly implemented legislation promoting women owned business intentionally, says P8:

"the government needs to be more intentional in their policy to drive big businesses to give women opportunities. You've got BEE on paper but, they're not implementing it well enough". P8

However, P12 allude to men and women receiving equal opportunities because of legislation put in place by government. Hence, this serves to lessens barriers faced by women entrepreneurs

"I think we are given opportunities fairly because number one, I'm just not sure with the other parts outside the mine because my clients are mostly mines – they would put up this thing, meaning everyone is allowed to apply for it, and they've been giving opportunities to women recently for BEE reasons and also to empower them, so opportunities are equal." P12 Furthermore, government legislation should intentionally enhance involvement of big businesses to make space for women in the industry as with current context the industry have well established big players as P13 shares:

"So the other setback like I said - people don't trust you, and you're getting into a field where you already have the big guys, you know... Company Bs, Company Cs, all the big guys, you're competing with them and there's no mercy" P13

"We need to find opportunities that allow women to really infiltrate and find opportunities within the business environment." P1

On the other hand, many of the participants felt government legislation intervention to make mandatory for businesses to interact and involve female owned business led to increased opportunities for women in the mining industry. Initiatives such as the BEE aid for women to participate in entrepreneurship regardless of the shortcoming in experience women had, thus, levelling the playfield by giving women the opportunity to gain experience

"The availability of opportunities I would say for women specifically, is assisted by things like the Mining Charter, for example, which certain stipulations in terms of women had owned businesses, so it forces the creation of opportunities." P7

"The Mining Charter, and it also speaks to the transformation within mining and not only from a race perspective, but also to say that there needs to be more women and all of that." P7

"When it comes to tenders and Black Economic Empowerment, if you're a woman you're already a step ahead of your male counterparts." P1

With P14 further mentioning the support of mining houses to assist small companies in registering into vendors and which lessens barriers to entry

"I think that lately, with just the different respective organizational requirements for how to get in or registered as a vendor or on the database, it makes it a bit easier for women because a lot of companies obviously look for your Level One, female owned mostly." P14

Non-Governmental Support:

Based on the data collected, the support structures mentioned by the participants included women supporting women in the industry by creating opportunities for other women advancing fellow women into entrepreneurship, thus enabling others to start their own businesses which meant that more families are going would be fed, more children would be inspired, more children are going to be educated and money is going to come back to the community and have the interests of the community first as alluded to by P1.

"If we push more women into entrepreneurship and into being able to start their own businesses, more families are going to be fed, more children are going to be inspired, more children are going to be educated, more of that money is going to come back to the community as opposed to being invested in other things that don't necessarily have the interests of the community, but we know that women are more invested in their communities than their male counterparts." P1

"I'm aware of the gender inequality and gender disparities, I am very intentional about bringing women and favoring women when I run my business." P8

Furthermore, participants allude that supporting one another will promote business opportunities being shared and made accessible to one another through referrals

"we must learn to support each other. If I am an electrician, and you are a mechanical guy and the other guy is a boiler making guy, if there is boiler making work, I can easily recommend you or inform you that "there's 1-2-3-4-5...your service are needed where...and if as well you know of other people that need my service you can also recommend me..."P16

Other support structures include enterprise and supplier development initiatives and accessible funding tailored for women only for females participants to partake

"We need to start creating opportunities that are just for women, funding that is just for women, enterprise development programs that are just geared towards women". P1

with P6 and P12 mentioning the benefits of such support and explains -

"I just attended a short course now with "Big Mining Company Z", I found it very fruitful.

I learned a lot about myself, and I learned a lot about Project Management, and because we have plans to in future also extend our business into services" P6

"Then company B invested in my company with about R10 000 000 which helped me to but two trucks so that I deliver fuel to Company A" P12

And P14 mentioning how she received support from a mining company when she did not know what to do given the challenge she face and further receiving mentorship from mining company and thus receives support to run the business successfully.

"when I started using my own tankers, every single day they would find water inside the product, inside the diesel. And you know contamination is a serious issue, even if it's one litre of water it's a serious thing. So for about a month and a half, I went through that and I decided to take it up with company B because no one was hearing me out. My mentor is actually company C, I took it up with my mentor, they're like "no, it's an operations issue". So I then contacted "Company D" and said "these tanks are brand new and each and every time from the very first load when I reach the mine, they get water. So I need you to intervene because I've been crying out and it seems as though no one is hearing me out. Then guess what, because company B intervened, in a space of three days the issue was fixed." P14

Dealing with gender bias as women entrepreneur in the mining industry was said to require a strong back and that entailed having a good support system at home that understood the challenges of the industry and the challenges of being a woman in that industry. Hence, Participants further indicated that one of the most important support structures for women in business was support from their immediate families and friends as the endeavour of entrepreneurship put a lot of strain on relationships especially in the absence of family support.

"If the partner does not trust you enough to do the work or to run the business, that kills your morale, and that will eventually create friction and create an unhealthy environment for the kids." P11

Participants 16 further sharing her experience from support of the family

"I have three friends that have been working for themselves for the longest of time, long before I even started my own business. Those were the people that would give me money. I think the trust is good there between us, because people don't just trust you with a lot of money like that, but with them, they did fulfil those orders for me so I can get paid and pay their money back with no interest even, you know" P16

5.6.3 Summary of Results: Research Question 3

Entrepreneurship scholars identified the source and nature of various biases that affect entrepreneurship with limited mentioning of how an individual entrepreneur explains how such biases and constraints might be overcome. Hence Research Question 3 was what some of the tactics and approaches used by women entrepreneurs are to overcome gender-related challenges faced in the mining industry? The question sought to determine the strategies to

overcome gender biases in a male dominated industry. Additionally, Figure 12 shows the interaction of codes in which themes were anchored.

Participants reported wide range of approaches and tactics of dealing with the biases which were divided into two themes, namely, technical abilities and behavioural abilities, and support for women entrepreneurs, classified into non-governmental and governmental support.

The findings revealed that technical skills were essential to enhance the capabilities of WE in rendering a niche technical service in mining to deal with industry bias, and hence it was important for women who wanted to take part in mining to educate themselves and acquire the technical requisite qualifications to understand core services and needs, but also to show the other stakeholders including male counterparts in the industry that women can be trusted with the job and delivering exceptional and adequate results.

Survival and growth of women-owned enterprises in mining requires WE to be business savvy and have business finance and marketing skills as part of their foundational base. Furthermore, women entrepreneurs need to put in place systems and teams that will promote the success of the business.

Soft skills such as a negotiation, communication skills and interpersonal skills were also a basic need WE who wanted to survive having a business in a non-traditional industry such as mining.

Furthermore, traits that are reported to be needed for women to overcome barriers and challenges within the industry included the ability to command respect in the manner of appearance and embracing and harnessing inherent qualities, such as having strong character and having self confidence in the ability to do the job.

It was important to note that the industry was tough thus the women needed to stretch their limits and function outside of their comfort zone, continuously innovatively packaging of services and have an unyielding self-assurance that made them stand their ground even when people said 'no' to them or discriminated against them because of gender, as a women.

Moreover, mentorship and coaching were set out to be important, as mentors provided opportunities to learn and serve as a support-structures within the industry. Furthermore, forming relationships and empowering each other as women further promotes survival of WE in the industry and this being achieved through referral of women to where opportunities are and promoting collaboration through outsourcing specialised services from other women owned businesses.

Support for women in the mining sector was found to be important for the survival of the businesses hence there was a need for support structures. The support structure subdivided into governmental and non-governmental support. In terms of non-governmental support, structures include enterprise and supplier development (ESD) initiatives that were available for female to partake. ESD also serve as a form to create platform in the mining communities and moreover continuously give support to small upcoming businesses.

The other important support structures for women in business was support from their immediate families especially their spouses as the endeavour of entrepreneurship put a lot of strain on relationships especially in the absence of spousal support. Dealing with gender bias as women entrepreneur in the mining industry was said to require a strong back and that entailed having a good support system at home that understood the challenges of the industry and the challenges of being a woman in that industry.

The governmental support was aimed at providing support to women who possess technical abilities, however participants mentioned making opportunities for women in these non-traditional industries who do not have technical ability. Another beneficial form of support that the government could implement was educating the male counterparts about the women in the industry and their capabilities. Participant further mentioned that the government and institutions have a direct impact on the success rate of a company and government could implement legislation by making sure that big businesses made space for women in the industry as well made sure that the legislation in itself did not affect the industry by making it difficult to mine in South Africa thus driving away investors.

The enabler of women entrepreneurship was attributed to legislation which serve a game-changer. Many of the participants felt it forced businesses to interact with women and female owned business thus leading to increased opportunities for women in the mining industry. Initiatives such as the BEE put women businesses on the list regardless of the shortcoming in experience women had, thus levelling the playfield by giving women the opportunity to gain experience. Contrarily, implementation on an operational level remains a challenge.

The findings revealed some mechanisms to employ to overcome gender barriers.

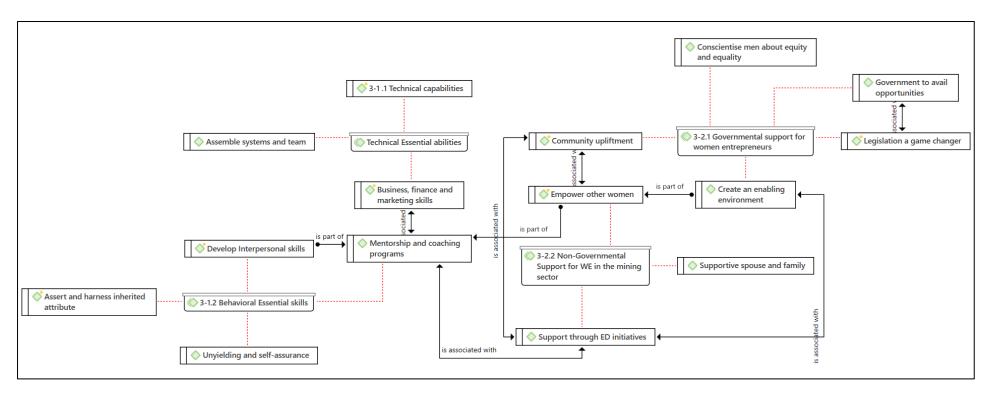


Figure 12: Network interactions of RQ 3

5.7 Summary: Results Summary in relation to Empirical Study

The qualitative study had three research questions which were: what are the gendered and non-gendered barriers facing women entrepreneurs in mining, is there gender-bias to women entrepreneurs due to socio-cultural norms and lastly, what are some of the tactics and approaches used by women entrepreneurs to overcome gender-related challenges faced in the mining industry? The findings indicates the following in relation to the empirical study:

What are the gendered and non-gendered barriers facing women entrepreneurs in mining?

There were a number of gendered and non-gendered barriers women faced in being entrepreneurs in the industry. These barriers were no different to those of any entrepreneur whether male or female in starting a business. However, there were those that were unique to women although not unique to women in the mining industry such as discrimination, gender stereotyping which led to limited opportunities for women and a lack of trust in the women's ability to deliver should they be granted the opportunity.

The barriers for women entrepreneurs in the mining industry were gendered and non-gendered. However, there was a link between the two, for example the lack of experience in women in the industry was non-gendered however because women were previously prohibited to function in these industries there was no way they could acquire the same amount of experience as men.

Key findings in relation to research question 1:

From the perspectives obtained, it was suggested that generally women found it more challenging to venture into non-traditional industries due to dominance of men in the industry. The dominance of men in non-traditional industries results in women entrepreneurs facing gender stereotyping and discrimination. The latter creating further barriers such as lack of recognition, hence resulting in women having to prove themselves, and work extra hard to prove their capabilities in rendering a technical service.

Additionally, it was indicated that the dominance of men enabled patriarchy which was found to be another barrier for women entrepreneurs. The ideal of male supremacy results in women entrepreneurs not being afforded equal business opportunities when compared with men women were given inadequate business tasks as compared with men which further creates a barrier for gaining technical expertise and running a thriving business.

Mining as a non-traditional industry was found to be capital intensive and lack of financial assistance for women owned business further exacerbate the lack of entrance and lack of access to market into mining entrepreneurial activities. Furthermore, lack of financial support and resources was linked to gender discrimination as women do not receive financial support and attribute this to both gender and racial discrimination.

The other barrier is lack of networking by women entrepreneurs, which gives men an upper hand in entrepreneurial activities and enhances their access to market through the ability to position themselves as an entrepreneur and gaining access to potential clients. Women do not engage in social networking activities due to lack of confidence, or being risk averse, amongst others.

The findings, as evidenced in the previous chapter, suggest the existence of gender-related barriers, additional to the non-gender-related barriers faced by women entrepreneurs in a male dominated industry, mining.

Is there gender-bias to women entrepreneurs due to socio-cultural norms?

The findings of the study showed that the socio-cultural norms of the industry were tailored to favour men since men dominated the industry; and enhanced patriarchal mind-set of the men in mining. The domination of men in this industry was due to the history of the industry due to cultural norms thus women were not accepted in this field. This led to women experiencing discrimination and rejection within the field. The cultural norms such as submission and respect for elders has made it difficult for women to function optimally in their positions as business owners. The socio-cultural expectations anchored on gender construction, such as to be submissive and motherhood made it difficult for men in the industry to accept women and further promote gender discrimination and exclusion of women in technical services business opportunities in mining due to reservations about capabilities of women purely based on gender as constructed by socio-cultural norms.

Key Findings in relation to research question 2:

From the perspectives obtained, it was suggested that the mining industry is mainly built around men because of their long-standing experience in the industry. Further that the industry remains untransformed, and that men are more comfortable with working with men, even if a a woman is the subject-matter expert. This creates an environment where women are seen as only support. Furthermore, the cultural prescriptions in the industry cause division in business practices and results in gender discrimination against women. Such discrimination results in women feeling rejected, as they are not afforded the same courtesy as their male counterparts.

Furthermore, the cultural backgrounds of individuals effects how men and women interact with other people. Some of the cultural norms are socially constructed norms, thus gearing women toward submission, or not 'talk back' to elderly male counterparts, although there may be a room to engage for decisions to be made. This cultural norm creates an expectation from women to not be disagreeable and for them to be submissive thus limiting them to supportive roles.

A statement made by a participant where she said that she had to be submissive to her male colleagues to make them comfortable so that she could interact with men at a business level further proved that the industry practices are influenced by cultural norms, and that women still had to engage in self-limiting behaviours to take part in the industry.

The social norms motivated by good intentions also creates barrier for women to gain experience. Men generally think that women are weaker and need protection thus some men shielded women from the extreme dangers of the industry by either doing some of the work or by limiting their exposure to these conditions or environment.

There is an under representation of women in the mining industry, and discrimination experienced. Women may not be often acknowledged for their subject-matter opinions, or for their presence in boardrooms and/ or meetings, suggesting some possible sexism within the industry. This further allows for availability more opportunities for men versus for women.

There are unethical practices against women such as sexual advancements, where males would require sexual favours from women biding for business or opportunities in the industry in order to grant them a business opportunity. In some instances the women would be required to pay or make financial bribes in order to be given an entrepreneurship opportunity.

Cultural practices like 'ubuntu' drives women entrepreneurs decision making. Women make decisions are influenced by their cultural values, so women often make people-centred decisions. Women involve their emotions in the decisions making. The decision to venture into entrepreneurial activities is also influenced by the expectation of socio-culturally constructed gender-related roles in the society. Motherhood may affect their willingness to partake in entrepreneurship, and the degree to which they are able to run a thriving business.

The study suggests that socio-cultural norms creates barriers and biases to women entrepreneurs in the South African mining industry and the existence of gender-related barriers due to construction of gender by socio-cultural norms.

What are some of the tactics and approaches used by women entrepreneurs to overcome gender-related challenges faced in the mining industry?

The perceptions indicated that the tactics used by women to overcome gender-related challenges were centred around proving that women could do the job, which involved gaining of technical skills and interpersonal skills. Furthermore, participants suggested that women are 'built strong and fortified themselves by being courageous, self -confident, not being averse to risk and taking a stand. There was a general notion amongst participants to keep going and not allowing the challenges they were facing stop them from achieving their goals. Other tactics were playing the field and partnering with male counterparts to gain a foot within the industry. Participant also indicated that governmental regulations and policies are being set in place to promote women participation in male dominated industry such as the Mining Charter.

Key findings in relation to research question 3

Participants reported wide range of approaches and tactics of dealing with the biases which were divided into two themes, namely, technical abilities and behavioural abilities, and support for women entrepreneurs, classified into non-governmental and governmental support.

The findings revealed that technical skills were essential to enhance the capabilities of WE in rendering a niche technical service in mining to deal with industry bias, and hence it was important for women who wanted to take part in mining to educate themselves and acquire the technical requisite qualifications to understand core services and needs, but also to show the other stakeholders including male counterparts in the industry that women can be trusted with the job and delivering exceptional and adequate results.

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Soft skills such as a negotiation, communication skills and interpersonal skills were also a basic need WE who wanted to survive having a business in a non-traditional industry such as mining.

Furthermore, traits that are reported to be needed for women to overcome barriers and challenges within the industry included the ability to command respect in the manner of appearance and embracing and harnessing inherent qualities, such as having strong character and having self confidence in the ability to do the job.

It was important to note that the industry was tough thus the women needed to stretch their limits and function outside of their comfort zone, continuously innovatively packaging of services and have an unyielding self-assurance that made them stand their ground even when people said 'no' to them or discriminated against them because of gender, as a women.

Moreover, mentorship and coaching were set out to be important, as mentors provided opportunities to learn and serve as a support-structures within the industry. Furthermore, forming relationships and empowering each other as women further promotes survival of WE in the industry and this being achieved through referral of women to where opportunities are and promoting collaboration through outsourcing specialised services from other women owned businesses.

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The other important support structures for women in business was support from their immediate families especially their spouses as the endeavour of entrepreneurship put a lot of strain on relationships especially in the absence of spousal support. Dealing with gender bias as women entrepreneur in the mining industry was said to require a strong back and that entailed having a good support system at home that understood the challenges of the industry and the challenges of being a woman in that industry.

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CHAPTER 6: DISCUSSION OF RESULTS

6.1 Introduction

In Chapter 6 the research findings from data analysed and established in Chapter 5 are discussed. The discussion is presented in the context of each Research question in line with empirical study and further contrasted with literature reviews in Chapter 2. Lastly, in light with the findings, a summative conceptual model will be presented in line with findings.

6.2 Discussion of Research Question 1 Results

Research Question 1: What are the gendered and non-gendered barriers facing women entrepreneurs in mining?

According to Ahmed and Qalati (2019), gender differences have a negative impact and limit women's entrepreneurial activities. As a result, women's participation remains low compared to men in South Africa (Raghuvanshi et al., 2017) due to women entrepreneurs facing gender-related and non-gender-related barriers (Chowdhury et al., 2018; Imhonopi et al., 2016). Furthermore, significant obstacles to entrance into non-traditional industries exacerbate the environment in which the industries are frequently closed to women, reducing the likelihood of female entrepreneurs succeeding in mining as a non-traditional industry (Aneke, Derera & Bomani, 2017). Hence, Research Question 1 sought to probe into gendered barriers women entrepreneurs face in the SA mining industry by exploring gender-related barriers within a non-traditional, male-dominated industry; and furthermore the non-gender barriers commonly faced by both men and women.

Hence, the discussion of the research question is in accordance with themes identified in Chapter 5 with relevant findings in line with literature review discussed in Chapter 2. The findings of Research Question 1 (as summarised in section 5.4) were themed into two parts, namely, Challenges faced by women entrepreneurs in Mining as a Non-traditional industry and Gender Barriers facing women entrepreneurs.

6.2.1 Barriers in Mining as a Non-traditional industry

The first theme developed sought to gain insight and understating into the barriers faced by WE in venturing into a business and rendering technical services in a non-traditional industry. The findings were summarised in section 5.4.1.

6.2.1.1 Lack of Financial support

According to Hmieleski and Sheppard (2019), women entrepreneurs are less inclined to venture into high-capital, high-risk sectors and further states that lack of finance is a barrier limiting women's entry into mining. The findings concerning the experience and journey of participants, supported the aforementioned views with participants mentioning the lack of financial support as a barrier to entry into the mining industry. The findings attributed the aforementioned to the industry presumed to be a capital-intensive industry and the prevalence of gender discrimination in offering financial assistance. Gupta et al. (2019) share similar views stating that gender discrimination contributes to the lack of funding or limited access to finance experienced by women entrepreneurs. The latter views were attested to by P11 through her encounter where a male counterpart was given a mining project with a budget; however, she was overlooked for the same project because the mine reported not having a budget.

Furthermore, other participants shared that starting and running a thriving business requires liquid cash flow. According to Wu et al. (2019), financial capital is one of the critical foundations of a business and Nawaz (2018) adds that capital is a vital component for a small enterprise to be able to manage expenditures like payroll and bills. Participants 16 attested to this view explaining the experience lived of limited access funds as she could not take big mining orders and had limited personal funds as all her previous employment pension earnings were depleted, thus received financial support from friends and family. Furthermore, P4 alluded receiving assistance from the spouse to pay staff salaries when business was at the lowest. According to Nawaz (2018), women tend to turn to their close family and friends for financial assistance and Ahmed and Qalati (2019) further mentions that the latter non-traditional means to finance, limit access to formal capital as women use non-traditional financing.

It is however worth noting that, although most participants alluded to lack of access to finance as a barrier, other participants believed that mining houses offer financial support to small enterprises through incubation hubs. P12 alluded supported the finding mentioning that through the mining house incubation program, the mining company invested a sum of R10 000 000 into her business which enabled the participant to acquire her machinery instead of hiring.

After critically reviewing the data and noting high frequency of participants, it is concluded that women entrepreneurs are confronted with financial barriers for their initial investment which may be attributed to lack of information or to access funds which is given by mining companies to offer some assistance.

To note, mining companies and the government have initiatives place to offer support to women entrepreneurs. The women entrepreneurs may not have the ability and skills to access such support, including financial support. More deliberate capacity building, around these aspects, are needed for women entrepreneurs.

6.2.1.2 Stereotyping and Discrimination

Participants highlighted that gender discrimination not only contributes to women's lack of access to capital, but the majority of participants reported that issues of discrimination against women and gender stereotypes were one of the obstacles to starting a business in a non-traditional sector. Gender discrimination, according to Ahmed and Qalati (2019), is one of the primary factors influencing women's entry into the entrepreneurial process and the establishment of new businesses, with P9 affirming the view by expressing that men do not believe women were able to work in the mining industry.

Furthermore, the dominance of men in non-traditional industries results in women entrepreneurs facing gender stereotyping and discrimination resulting in a lack of access to the formal network, which is a good source of essential business resources and information (Panda, 2018). Participant 10 agreed with the view mentioned earlier by mentioning how male counterparts pass work onto each other through "Boys club" networks. Furthermore, social capital and network barriers for women business owners result from discrimination based on gender; hence women were frequently denied access to male-dominated high-level networks in business (Neumeyer et al., 2019). Therefore, gender stereotypes and discrimination impede women from attaining their full potential in entrepreneurship and economic engagement because gender stereotypes impact persons, situations, institutions, and resources that allow entrepreneurship to thrive by shaping opportunities, access to resources and knowledge and skills, attitudes, and ambitions (Blair, 2021).

From the perspectives offered and evidenced in the previous section, this study has confirmed that stereotyping and gender discrimination is evident.

6.2.1.3 Lack of experience: Education and Skills training

One of the barriers faced by WE in a non-traditional sector, which is further male-dominated, was a lack of experience and skills training, with Schneider (2017) stating that multiple variables influence the success of an entrepreneurial endeavor, including education, skills, and training. The latter are qualities necessary to meet a specific degree of performance requirement (Schneider, 2017). Furthermore, participants alluded to barriers to entry in mining

and the reason mining preferred men in the non-traditional industries was due to lack experience. Furthermore, participants articulated that women have less experience in non-traditional industries because, historically, men have worked in these industries for longer than women. The view, as mentioned earlier, aligns with the view of Rudhumbu et al. (2020). The author cited that many female entrepreneurs lack entrepreneurial knowledge and technical skills due to limited opportunities for vocational and technical education and entrepreneurship training for traditionally male-dominated sectors. Also, this results in a gap in women's handson knowledge and abilities to operate their enterprises efficiently (Rudhumbu et al., 2020). However, P11 alluded to a lack of skills training mentioning, not being afforded an opportunity to gain exposure becomes a barrier to women as they are still new in the industry. Hence, the view shared by participants suggested that the latter created further barriers, such as lack of recognition which causes WE to have to prove themselves and work extra hard to prove their capabilities in rendering a technical service. Therefore, the extent of entrepreneurial education impacts how women take advantage of possibilities (Moghtadaie and Jamshidian (2021).

Contrarily, other participants, such as P6, indicated that mining houses provided a skills and training development platform, with her having attended a short course offered by the mining house as part of the mining organization's skill development initiative. It is also worth noting that, according to the Minerals Council of South Africa (2019), the mining industry has consistently supported higher education infrastructure developments over many decades. Furthermore, Mining Charter requires all mining companies to invest 5% of annual leviable payroll into skills development. As a result, the Mining Charter skills development has spent more than R5 billion per year over the last five years. Furthermore, developing high-level skills is critical to the mining sector's advancement and sustainability (Minerals Council of South Africa, 2019).

While mining companies and the government have put in place capacity building programmes, from the study it is evident that the women entrepreneurs require more intense capacity building and development to strengthen their business, entrepreneurship and financial skills.

6.2.2 Gender barriers

The second theme related to Research Question 1 was Gender barriers. The theme developed sought to gain deeper understanding of gender barriers faced by women in mining sector. The findings were summarised in section 5.4. 2.

6.2.2.1 Male supremacy – Patriarchy

According to the literature, all ethnic and racial groups in South Africa experience patriarchy, and black women there face triple oppression due to their gender, ethnicity, and social class. In South Africa, patriarchy also shows up in the manner that it rules and controls female sexuality (Wood, 2019; Mudau & Obadire, 2017). Furthermore, according to the social constructionist perspective, women are less likely than men to start businesses in patriarchal societies (Shahriar, 2018). The aforementioned was congruent with findings mentioning that patriarchy due to male supremacy, was found to be another barrier for women entrepreneurs in mining as a male dominated industry. Participants shared strong views of the South African mining industry being patriarchal due to dominance of men in the industry, hence P8 and P9 mentioning that, patriarchy exacerbates gender discrimination in the mining industry due to male dominance and supremacy. Results further indicate that the ideal of male supremacy results in women entrepreneurs not being afforded equal business opportunities when compared with men; which further creates a barrier for gaining technical and/or non-technical expertise through exposure and exacerbate gender inequality. According to Wood (2019) and Klingorová & Harvlek (2015), inequality is one of the most common types of social construction and a product of patriarchal culture, which gives males authority, and centeredness, thus preventing women from becoming equal to men.

Therefore, mining industry as a male dominated sector within a South Africa as a patriarchal society, enhances barriers to entry for Women.

From the study, it is evidenced that, the mining industry as a male dominated sector within South Africa as a patriarchal society, may enhance barriers to entry for Women.

6.2.2.2 Lack of Networking (Social Capital)

The findings in section 5.4.2 indicated participants alluding to lack of networking as another barrier to women entrepreneurship with literature indicating that one of the reasons for entrepreneurship gender disparity may be that men have larger networks, higher social capital than women (Neumeyer et al., 2018); which gives men an upper hand in entrepreneurial activities as it gives access to market through the ability to position themselves as entrepreneurs. Participants view was that lack of networking skills creates challenges of accessing the market as it was difficult to find opportunities for themselves; hence according to Smith et al. (2017), networking constitutes the ability to extract value from relationships and resources through social networking structures, for instance attending socials, to achieve desired entrepreneurial outcome. Worth noting, participants further attribute lack of

networking to lack of confidence in women in addition to gender discrimination as explained in section 6.2.1.2.

Lack of confidence is linked to social competence which is an interpersonal skill that enable entrepreneurs to engage with other stakeholders key to helping identify and execute a business opportunity as defined by Tocher et al.(2015). The participants views are further supported by Herrington & Kew (2018) stating that women are less likely to have more significant business networks due to lower societal standing and a lack of confidence eventhough South African mid-career entrepreneurs have developed their skills and social capital. In addition, P2 further mentioned that part of surviving the challenges women faced in the industry required women to embrace and harness their inherit qualities such as having strong characters and self-confidence.

The study has evidenced that that women entrepreneurs need to increase their social networks and confidence, through development of interpersonal skills. This may assist in securing more business, for business growth, and may allow for supporting their own personal development and confidence.

6.3 Discussion of Research Question 2 Results

Research Question 2: Is there gender-bias to women entrepreneurs due to sociocultural norms?

The purpose of Research question 2 was to understand the barriers to entrepreneurship due to socio-cultural norms because entrepreneurship scholars suggests that culture restrict the conduct of women entrepreneurs since norms establish the strength or weakness of cultural expectations for becoming an entrepreneur and adhering to social responsibilities. Therefore, the aim of the question was to determine the role sociocultural norms and gender biases play as a challenge for female entrepreneurs (Murnieks et al., 2020; Brush, Edelman, Manolova & Welter, 2018; Gupta, Wieland, & Turban, 2019; Lindqvist, Sendén & Renström, 2021). Hence, Research Question 2 sought to probe into gendered barriers as a result of socio cultural norms which women entrepreneurs face in the SA mining industry.

Henceforth, the discussion of the research question is in accordance with themes identified in Chapter 5 with relevant findings in line with literature review discussed in Chapter 2. The findings of Research Question 2 (as summarised in section 5.5) were themed into two parts, namely, Gender bias and influence of culture in decision making.

6.3.1 Gender Biases due to Socio-cultural norms

The first theme related to Research Question 2 was Gender biases within which social norms are embedded, which literature defined as generalized beliefs about behaviours and traits people belonging to a specific social group of men and women must possess (Rubio-Banon, 2016). Furthermore, Wu (2019) defines *social norms* as "value systems particular to a community that motivates individuals to behave in certain ways." These value systems determine the extent of acceptability of female entrepreneurs and the behaviours required (Holthof, 2022). In addition, Welsh et al. 2018 explain that women are perceived as less entrepreneurial owing to societal norms rather than their natural traits. Thus, the gender biases theme sought to highlight the biases WE face due to cultural norms based on findings summarised in section 5.5.1.

6.3.1.1 Socio cultural Norms: Cultural prescription

The theme was constructed to define barriers anchored in cultural norms, as detailed in section 5.5.1. In addition, the theme sought to gain insight into gender biases, considering cultural and social differences in defining gender in the context of women's entrepreneurship. Unfortunately, according to Lindqvist et al. (2021), the earlier approach is omitted in entrepreneurship literature that only defines *gender* as either male or female without considering culture.

The findings indicated that women entrepreneurs were seen as women first and foremost before they could be seen as business equals. Due to sociocultural norms, women were expected to uphold socio-culturally constructed expectations, such as respecting men and being submissive. The view strongly shared by P15 and P13 mentioned that they had to be submissive and show respect by not talking back to their elderly male counterparts as required by culture. Thus, this emerged as a barrier as it meant not being able to instruct and lead older men as there was an expectation for respect in the cultural context. According to Holthof (2022), the success of starting and running a thriving business varies with the degree of masculinity of the country's culture. Masculinity also refers to societies that value men's self-confidence and success-oriented attitudes. Women are expected to be gentle and modest at the same time, stating that participants must respect and submit to men (Holthof, 2022).

Furthermore, findings indicate women face inequality as a barrier through unequal business opportunities mainly given to men as opposed to women entrepreneurs, a view elaborated by P1 alluding that women were not seen as equal players, especially black females. According to Raghuvanshiet al. (2017), gender inequality is one of the main barriers to women's entrepreneurship, impacting women negatively in their entrepreneurial efforts. The previous

finding further asserts literature stating that inequality is one of the most common types of social construction resulting from cultural and historical processes (Wood, 2019). Worth noting, however, South Africa has taken a stand against inequality through an amendment of the South African constitution to include a bill of rights that "prohibits discrimination based on gender, sex, and sexual orientation, among other things" (The Bill of rights of the Constitution of the Republic of South Africa, 1996). However, Mukorera (2020) mentions that despite government initiatives to empower women, gender inequality persists in South Africa in all spheres of influence, including institutions, families, organizations, and the economy (Mukorera, 2020).

The study has evidenced that gender inequalities still exits, and is a barrier for women business opportunities in mining.

6.3.1.2 Household responsibilities: Motherhood

The findings in section 5.5.1 indicate women facing gender biases related to the expected role of women as mothers. Also, women taking into account their role as mothers when deciding on executing their entrepreneurial intention. For instance, P7 explaining her encounter being asked who is taking care of the kids when she is running her own business which highlighted the gender bias and discrimination that is associated with household expectations of a role of a women as a mother. According to Wu (2019), motherhood, which is associated with household responsibilities, is identified as a barrier to women's entrepreneurship due to sociocultural norm. Furthermore, Miurniek (2020) alludes that the gender biases may pose additional barriers to female entrepreneurs and results from a patriarchal society effecting family structure and role of women in society.

In addition, findings further indicated that the roles of women as mothers also influenced women's intention to start and run an enterprise, with P13 mentioning starting a business only after her children were grown. Furthermore, P16 indicated that the decision to move her child to a boarding school was because she could not run a business while running a business. This view affirms literature indicating that sociocultural norms and expectations influence gender behaviour (Rubio-Banon, 2016) and emphasising femininity and masculinity which defines what women and men are supposed to behave and be like, impacting their behaviours leading to different experiences between men and women (Giménez and Calabrò, (2017). In addition, post-structural feminists argue that the differences and similarities of gender are socio-culturally constructed due to sociocultural practices linked with masculinity and femininity (Holthof, 2022).

The study has evidenced that motherhood, which is associated with household responsibilities, is identified as a barrier to women's entrepreneurship due to socio-cultural norms.

6.3.2 Influence of Culture in decision making

The second theme related to Research Question 2 was Influence of culture on decision making in entrepreneurship. The aim of the theme was to gain insight in the influence of culture in decision making of women entrepreneurs because literature alludes that the culture of a country influences entrepreneur's decision-making; furthermore, the motivation of an entrepreneur in business performance and growth expectations are influenced by gender (Bullough et al., 2022). (Bullough et al., 2022).

In addition, many of the difficulties faced by women business owners are gender-specific and result from cultural beliefs, norms, and practices (Anambane & Adom 2018; Sehgal, 2018). The factor of culture and how it influences decisions in participants was explored and other participants were of the view that their values played an important role in their decision making in the businesses. For instance, religious values and beliefs were at the centre of how some of the participants like P9 made decisions. This indicates that, South Africa as a religious country with different beliefs influences entrepreneurial decision making which is further asserted by Bullough et al.(2022) and EstradaCruz et al. (2019).

Furthermore, findings shows that women entrepreneurs were bound to involve emotions in the decisions they take because of what P9 alludes as "caring factor" women have where emotions come in. Literature asserts this views for the reason that authors states that women are placed in roles related to domestic work and caring for children and are less rational in decision making due to women's high emotions (Hapsari & Soeditianingrum, 2018). The decision to venture into entrepreneurial activities is also influenced by the expectation of socio-culturally constructed gender-related roles in the society and socially, women's decision making is based on norms and beliefs about their role in society (Lindsey, 2020; Giuliano, 2020). Contrarily, other participants were of the view that decision making was more of a leadership skill and was not bounded by culture but rather by the business needs and that it was futile to make decisions regarding the business to suit people's cultural sensitivities as P15 shared the views with P10 suggesting that decision making should include foresight and consider the effects of the decision on the sustainability of the business.

The finding regarding influence of culture appears to be contradictory with participants sharing contradicting views.

6.4 Discussion of Research Question 3 Results

Research question 3: What are some of the tactics and approaches used by women entrepreneurs to overcome gender-related challenges faced in the mining industry?

Entrepreneurship scholars identified the source and nature of various biases that affect entrepreneurship (Clough et al., 2019; Khoury & Prasad, 2016) with limited mentioning of how an individual entrepreneur explains how such biases and constraints might be overcome (Cardinale, 2018), with Clough et al. (2019) further alluding that entrepreneurship scholars instead highlights the financial resource pursuits as a primary goal for entrepreneurs. Hence Research question 3 sought to determine the strategies to overcome gender biases in entrepreneurship and enhance participation of women in technical entrepreneurial activities in a male dominated industry.

The discussion of the research question 3 is in accordance with themes identified in Chapter 5 and considers some approaches used by women entrepreneurs to overcome barriers and the support given to Women entrepreneurs in the mining industry in SA. Furthermore, the themes were anchored in literature stating that two strategies to overcome gender biases are those created for the women entrepreneurs by governmental institutions and those created by the women entrepreneurs themselves (Simarasl et al., 2022). The findings of as summarised in section 5.6, were themed into two parts, namely, *Essential abilities* (sub-themed into Technical and Behavioural skills) *and Support for Women Entrepreneurship* (sub-themed into Governmental support and Non-Governmental support)

6.4.1 Essential abilities and Support for WE required to overcome gender barriers

Essential abilities was anchored to look at what women themselves require to ease or overcome gender barriers whilst support for WE was anchored to look at the support given to WE by both government and institutions such as mining organisation.

6.4.1.1 Essential abilities: Technical skills and Behavioural skills

Multiple variables influence the success of an entrepreneurial endeavour, including sociocultural factors, education, skills, and training. These are qualities necessary to meet a specific degree of performance requirement. Literature divides education or skills into three categories: behaviour, knowledge/experience, and skills/abilities (Schneider, 2017). Hence, the sub-themes were technical abilities and behavioural abilities linked to education and training in section 2.2.3.1 and 6.2.1.3.

Technical skills:

The findings indicate that women have less experience, in comparison with men in mining industry because men have worked in these industries for longer than women. The findings indicated that lack of relevant skills and training was a barrier with P11 alluding to a lack of skills training mentioning that, not being afforded an opportunity to gain exposure becomes a barrier to women as they are still new in the industry. The view shared by Rudhumbu et al. (2020) stating that many female entrepreneurs lack entrepreneurial knowledge and technical skills due to limited opportunities for vocational and technical education and entrepreneurship training for traditionally male-dominated sectors. The findings shows that the aforementioned result in a barrier which manifest in a form of men doubting the technical capabilities of women, a view shared by P1 stating that when technical specification of a project were discussed, questions would be directed to male counterpart even though P1 was the subject expert. Hence, P9 alludes that to overcome this barrier, technical skills are very critical as WE needs to fully know and understand the service she is offering the business and execute it expertly. Furthermore, P2 mentioning that the success of a business is dependent on the technical skills of the WE; hence P13 further alludes that women need to venture into services which they technically possess skills of. According to Moghtadaie and Jamshidian (2021), the extent of education impacts how women take advantage of possibilities. Therefore findings indicates that acquiring relevant technical skills was one of the approaches women can overcome barriers in entrepreneurship.

Behavioural skills:

Lastly, the findings indicates that acquiring interpersonal skills further assists in overcoming barriers. Interpersonal skills required were found to be soft skills such as interpersonal skills, negotiation, and communication skills which were also reported as fundamental needs to survive having a business in the mining industry. This view was supported by P9 alluding that it is not just technical skills needed but soft skills as well. Furthermore, P1 adding that soft skills enable the entrepreneur to be able to lead and handle human resources. The finding asserts the view of Popescu et al.(2020) mentioning that the entrepreneur significantly influences the performance of the business through self-awareness, emotional intelligence, and interpersonal skills. According to Popescu et al. (2020), interpersonal skills are the skills to interact, work with others, communicate with them individually or in groups, and understand them. Women might thus overcome gender barriers in mining by using these skills to determine the best course of action in a particular circumstance.

Furthermore, P13 alluded to the view that women need to understand themselves and their limits of what they could and could not do and be self-reliant. Additionally, participants further holding the view that women needed to embrace and harness their inherit qualities such as having strong characters, and having self-confidence to survive the challenges women faced in the mining industry. Quagrainie (2020) agrees, stating that competencies reflect the ability to interact with one's social and economic environment effectively. Although soft skills such as resilience, problem-solving, emotional intelligence, and strong interpersonal and communication skills are the foundations of professional and personal empowerment, women are more likely to prioritize technical skills over soft skills (Laverick & Bagnall, 2019).

6.4.1.2 Support for Women entrepreneurs to overcome gender barriers: Governmental and Non-Governmental

Support for WE was anchored to look at how both government and institutions such as mining organisation can support WE to ease or overcome gender barriers, therefore enhance participation of women in mining entrepreneurial activities.

Governmental institutions:

Although some participants still held the view that there was more that the government can do to support WE, findings indicated that implementation of BBBEE by government created an opportunity for women to receive equal opportunities and to empower women. This view was shared by participant with P13 mentioning that everyone was allowed to apply for tenders with mining houses and P7 further alluding that Mining Charter stipulations in terms of women owned businesses forces the creation of opportunities for women owned businesses. The view supports the Mining Charter's requirement that a minimum of 30% BBBEE shareholding be distributed to a minimum of 20% effective ownership in the form of shares to a BBBEE entrepreneur, with 5% ideally set aside for women. In addition, those holders of mining rights must also meet the minimum standards for women's empowerment in procuring goods and services (Mining Charter, 2018). These laws ensure that women have the much-needed opportunity to participate in a field that has historically and still is predominated at various levels by men.

Non-Governmental institutions:

Findings indicates that Participants believe that one of the most important support structures for women in business was support from their immediate families and friends as the endeavour of entrepreneurship put a lot of strain on relationships especially in the absence of family support. This view support other scholars mentioning that other entrepreneurs used other strategies such as family transformation to overcome barriers (Simarasl et al., 2022).

Furthermore, pparticipant 16 attested to this view explaining the experience lived of limited access funds and thus receiving financial support from friends and family. Furthermore, Nawaz (2018) explaining that women tend to turn to their close family and friends for financial assistance.

Additionally, P12 alluded to receiving financial support from a mining house incubation program where the mining company invested a sum of R10 000 000 into her business which enabled the participant to acquire her machinery instead of hiring. The view support the assertion by Mkhize (2022) that Mining companies offer financial assistance through Enterprise Development programmes that assists mining-related SMMEs with the goal to improve SMME financial management systems to run more efficiently and sustainably.

6.5 Summary: Discussion Summary in relation to Empirical study

RQ1: What are the gendered and non-gendered barriers facing women entrepreneurs in mining?

According to the findings, it was evident that there were gendered and non-gendered barriers faced by women entrepreneurs indicating that women face additional barriers in entrepreneurship as compared with their male counterparts, therefore, leading to less participation of women in mining. Female entrepreneurs encountered different challenges that men do not, leading to the further widening of the gender gap and hampering full participation of women in entrepreneurial activities. Furthermore, barriers such as patriarchy and gender discrimination were found to be more common in mining due to male dominance in the industry. Hence women found it more challenging in this industry. According to the literature, the barriers, as mentioned earlier, are exacerbated in the environment and industries with less inclusion of women, which reduces the likelihood of female entrepreneurs succeeding in mining as a non-traditional industry.

Although the findings indicate barriers such as lack of networking contributing towards less participation of women in mining, the barrier was somewhat also attributed to women's interpersonal skills, requiring women's interpersonal skill enhancement, which one classifies as an internal contributing factor. Furthermore, lack of finance was found to be one of the critical barriers to women entrepreneurship in the mining industry due to the capital intensiveness of the sector. Therefore, the literature alludes that women entrepreneurs are less inclined to venture into high-risk sectors due to women's lack of financial assistance, prompting women to choose businesses that require low capital injection. However, the lack

of finance barrier was contrarily found to be attributed to a lack of access to information because the evidence also indicated the existence of financial assistance by mining houses through SME hubs.

In conclusion, from the discussion regarding the findings of Research Question 1 underpinned in literature in section 6.2, it can be seen that women entrepreneurs face both non-gender and gendered barriers in mining as a non-traditional industry. Therefore, these aforementioned barriers may limit full participation of women compared to men in South African mining industry. However, evidence also indicates internal factors exacerbating barriers due to the interpersonal skills of women themselves.

RQ 2: Is there gender-bias to women entrepreneurs due to socio-cultural norms?

The aim of the research question 2 was to probe into gendered barriers as a result of socio cultural norms which women entrepreneurs face in the SA mining industry. Firstly, Gender biases, anchored in value systems referred to as social norms, are defined as generalized beliefs which determine the extent of acceptability of female entrepreneurs and the behaviours required. The findings indicated that women entrepreneurs were seen as women first and foremost before they could be seen as business equals. Due to sociocultural norms, women were expected to uphold socio-culturally constructed expectations, such as respecting men, being submissive and showing respect by not talking back to their elderly male counterparts as required by culture. Furthermore, South Africa as a masculine country, its society expects men to be assertive whilst women are supposed to be modest and tender and thus the success of starting and running a thriving business is challenging as it varies with the degree of masculinity of the country's culture. Inequality, was also found to be a gender barrier for women entrepreneurs shown through unequal business opportunities mainly given to men compared with women because women were not seen as equals to men. Although South Africa took a stand again inequality though initiatives set to empower women, gender inequality still persists. Lastly, findings highlighted that the gender bias and discrimination was associated motherhood, which is associated with household responsibilities due to sociocultural norm. Additionally, patriarchal society affects role of women in society and thus creates gender bias for women entrepreneurs. Sociocultural norms and expectations influence gender behaviour and emphasising femininity and masculinity which defines what women and men are supposed to behave and be like. In addition, post-structural feminists argue that the differences and similarities of gender are socio-culturally constructed due to sociocultural practices linked with masculinity and femininity.

The second theme related to Research Question 2 was Influence of culture on decision making in entrepreneurship aimed at gaining insight in the influence of culture in decision making of women entrepreneurs because culture of a country influences entrepreneur's decision-making; furthermore, the motivation of an entrepreneur in business performance and growth expectations are influenced by gender. Many of the challenges that women entrepreneurs face are gender-specific and stem from cultural values, norms, and customs. The factor of culture and how it influences decisions in participants was explored and other participants were of the view that their values played an important role in their decision making in the businesses. For instance, religious values and beliefs were at the centre of how some of the participants made decisions. This indicates that, South Africa as a religious country with different beliefs influences entrepreneurial decision making.

Furthermore, findings showed that women entrepreneurs were bound to involve emotions in the decisions they take because of "caring factor" women have where emotions come in. Literature states that women are placed in roles related to domestic work and caring for children and are less rational in decision making due to women's high emotions. The decision to venture into entrepreneurial activities is also influenced by the expectation of socio-culturally constructed gender-related roles in the society and socially, women's decision making is based on norms and beliefs about their role in society.

Contrarily, other participants were of the view that decision making was more of a leadership skill and was not bounded by culture but rather by the business needs and that it was futile to make decisions regarding the business to suit people's cultural sensitivities and participants suggested that decision making should include foresight and consider the effects of the decision on the sustainability of the business.

In conclusion, from the discussion regarding the findings of Research Question 2 underpinned in literature in section 6.3, it can be seen that there are gender barrier due to socio-cultural norms for the reason that culture and the environment within which women entrepreneurs exist constructed the roles of gender. However, the finding regarding influence of culture in decision making appears to be contradictory with participants sharing contradicting views.

RQ 3: What are some of the tactics and approaches used by women entrepreneurs to overcome gender-related challenges faced in the mining industry?

Research question 3 sought to determine the strategies to overcome gender biases in entrepreneurship and enhance participation of women in technical entrepreneurial activities in a male dominated industry. Furthermore, the themes were anchored in literature stating that two strategies to overcome gender biases are those created for the women entrepreneurs by governmental institutions and those created by the women entrepreneurs themselves. Firstly, *Essential abilities* was anchored to look at what women themselves require to ease or overcome gender barriers whilst support for WE was anchored to look at the support given to WE by both government and institutions such as mining organisation. Essential abilities included both technical and behavioural skills.

Technical skills was a finding implying that women had less experience, in comparison with men in mining industry because men have worked in these industries for longer than women. The findings indicated that lack of relevant skills and training due to not being afforded an opportunity to gain exposure with literature alluding that many female entrepreneurs lack entrepreneurial knowledge and technical skills due to limited opportunities for vocational and technical education and entrepreneurship training for traditionally male-dominated sectors. Hence participants alluded that to overcome this barrier, technical skills are very critical as WE needs to fully know and understand the service she is offering the business and execute it expertly moreover, the success of a business is dependent on the technical skills of the WE. Therefore findings indicates that acquiring relevant technical skills was one of the approaches women can overcome barriers in entrepreneurship.

Lastly, the findings indicates that acquiring interpersonal skills such as negotiation, and communication skills further assists in overcoming barriers and running a thriving business in the mining industry. Hence, literature indicated that the entrepreneur significantly influences the performance of the business through self-awareness, emotional intelligence, and interpersonal skills whilst interpersonal skills are the ability to work with people, communicate with groups or individuals and understand them. Therefore, women entrepreneurs can use these skills to identify the most appropriate response to a given situation, which will help women overcome gender barriers in mining. Additionally, findings indicated that participants further held the view that women needed to embrace and harness their inherit qualities such as having strong characters, and having self-confidence to survive the challenges women faced in the mining industry. However, women are more likely to prioritize technical skills over soft skills although skills such as resilience, problem-solving, emotional intelligence, and strong interpersonal and communication skills are the foundations of professional and personal empowerment.

On the other hand, support for WE was anchored to look at how both government and institutions such as mining organisation can support WE to ease or overcome gender barriers, therefore enhance participation of women in mining entrepreneurial activities. In terms of Governmental institutions, findings indicated that women believe there was still more which the government can do to support WE, findings indicated that implementation of BBBEE by government created an opportunity for women to receive equal opportunities and to empower women. Furthermore, Mining Charter stipulates that a minimum of 30% BBBEE shareholding must be distributed to a minimum of 20% effective ownership in the form of shares to a BBBEE entrepreneur, with 5% preferably reserved for women with further provision of mining right holders having to fulfil the minimum requirements for women's empowerment in procurement of goods and services. These policies ensure that women have a much-needed platform to participate in an industry that has historically been and continues to be dominated by men at various levels. Lastly, in term of non-Governmental institutions, findings indicates that participants believe that one of the most important support structures for women in business was support from their immediate families and friends as the endeavour of entrepreneurship put a lot of strain on relationships especially in the absence of family support. Literature mentioned that women tend to turn to their close family and friends for financial assistance. However, findings also indicated that mining companies offer financial assistance through Enterprise Development programmes that assists mining-related SMMEs with the goal to improve SMME financial management systems to run more efficiently and sustainably.

CHAPTER 7: CONCLUSION AND RECOMMENDATIONS

7.1 Introduction

In this Chapter, the conclusion of the research problem as mentioned in Chapter 1, will be presented. As discussed in the research problem, women entrepreneurs face gender barriers attributed to socio-cultural norms due to its influence on gender construction, in addition to barriers faced by both men and women in entrepreneurship (Chowdhury et al., 2018). The barriers are further exacerbated in non-traditional industries, such as the mining sector, which has limited women inclusion (Kansake et al., 2021). Furthermore, literature has a limited mention of how an individual entrepreneur explains how such barriers and constraints might be overcome (Simarasl et al., 2022; Cardinale, 2018). Hence, the overarching objective of the study was to explore gender barriers faced by women entrepreneurs in mining and additionally explore some possible means to overcome the barriers through the use of PSF theory which takes into account the construction of gender by socio-culture. Therefore, the research was conducted using the three questions as presented in Chapter 3, and thus, theoretical summary, principal findings conclusion and recommendation will be discussed below:

7.2 Principal Conclusion

A conceptual model in Figure 13 has been developed to give structure to the finding conclusion text and considering the feedback from the women entrepreneurs interviewed to explore gender barriers in mining as a male dominant industry.

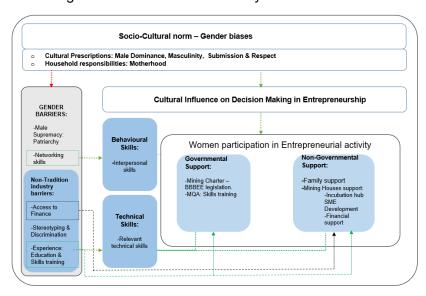


Figure 13: Proposed Conceptual model anchored on findings. (Source: Authors own)

Entrepreneurship is viewed as a male-dominated phenomenon (Raghuvanshi et al., 2017) with entrepreneurship studies embedding entrepreneurial personality as "masculine and male" (Mehtap et al., 2017) which results in women entrepreneurs facing additional barriers, over and above those faced by male counterparts, when venturing into an entrepreneurial activity. Consequently, gendered ideas are the results of the production of knowledge that repeatedly produces and maintains a gender relations system that enhances perceptible masculinity whilst lacking explicit feminist analysis (Foss et al., 2019). Hence female entrepreneurship is insignificantly defined when compared with male entrepreneurship due to biased representation by academic disciplines, which presents only one viewpoint regarding the entrepreneurship phenomenon (Mehtap et al., 2017). Therefore, the study was aimed to explore the gender barriers facing women entrepreneurs from women themselves.

The participants interviewed confirmed experiencing additional barriers due to gender within mining industry. The conceptual model based on study findings, serve to indicate barriers and shed insight as to how the barriers can be overcome from both internally (i.e. by women self-development) and externally (through support of both government, mining organisation and communities).

7.2.1 Gendered and non-gendered barriers facing women entrepreneurs in mining

The overall findings of the study highlight the following key barriers affecting women entrepreneurs in mining as a non-traditional industry: Patriarchy, stereotyping, discrimination, lack of networking skills, lack of access to finance, and lack of experience and skills. The findings indicated that one of the barriers due to gender behaviour, as constructed by culture, was a lack of confidence as an interpersonal skill; interpersonal skill required to enhance networking skills. As a result, this influenced the networking capabilities of women. Entrepreneurial studies supported the finding of Neumeyer et al. (2018), indicating that men have more extensive networks and higher social capital than women due to a lack of confidence. Thus, the business novice needs to network and establish relationships continuously for access to opportunities and resources. Furthermore, due to historical male dominance of the mining industry, women still lack mining technical skills, hence findings alluded to lack of experience. Subsequently leading to failure of women-owned businesses supported through literature stating that experience is one of the qualities deemed necessary to meet a specific degree of performance (Schneider, 2017); with Statssa (2020) alluding to an annual failure rate of women owned businesses in South Africa. Furthermore, findings indicated that lack of technical skill and experience further exacerbate discrimination against women because men see women as less capable to work in the mining industry. The discrimination, further widens inequality in the mining industry and limit access to resources and opportunities for women entrepreneurs (Bastian et al., 2019). Hence, women inclusion remains limited in the mining entrepreneurship space, although GEMSA (2020) reported an increase in participation of women in mining entrepreneurship.

Therefore, the point of departure for women entrepreneurs is to be cognisant of the critical barriers they may face when deciding to venture into entrepreneurial mining activity so that appropriate action or means can be taken to overcome these barriers. Women entrepreneurs need to be mindful of male dominancy of the industry with barriers such as patriarchy, discrimination, and stereotyping noticeable.

7.2.2 Gender-bias to women entrepreneurs due to socio-cultural norms.

Furthermore, findings also indicated that cultural prescriptions, and household responsibilities resulting from gender construction anchored in sociocultural norms, are some of the gendered barriers that hinder women from venturing into entrepreneurial activities. Societal expectations based on gender hinder the participation of women in entrepreneurship because women are expected to be modest, respectively and submissive to men (Holthof, 2022), further impacting the behaviours leading to different experiences between men and women (Giménez and Calabrò, (2017). Furthermore, findings indicated that men are expected to be assertive and focused on success which results in a masculine culture and society, thus a patriarchal society. According to Holthof (2022), the success of starting and running a thriving business varies with the degree of masculinity of the country's culture. Women further face barriers to motherhood associated with household responsibilities due to sociocultural norms (Wu et al., 2019). The decision for women to venture into business was influenced by their role as mothers, with Miurniek (2020) alluding that gender biases pose additional barriers to female entrepreneurs and result from a patriarchal society affecting the family structure and role of women in society.

Interestingly, the influence on the decision-making of women entrepreneurs in their business was inconclusive to some degree, with other women making decisions influenced by cultural values. In contrast, others alluded to decision-making skills as a leadership skills. Additionally, the finding indicated the influence of sociocultural norms on women's behaviour. The influence is due to the construction of gender by sociocultural norms and the environment.

7.2.3 Tactics and approaches used by women entrepreneurs to overcome gender barriers in the mining industry.

Lack of experience and skills was attributed to women being new in mining compared to men, in addition to the male-dominancy of the industry. Therefore, being mindful of establishing businesses they have technical knowledge of or acquiring necessary training regarding a particular technical skill enabled women and entrepreneurs to perform and navigate through gender barriers in mining.

Furthermore, women entrepreneurs need leverage on networks to access information regarding channels within which they may access finance, given that the mining industry is capital-intensive. Women entrepreneurs can leverage these networks through established relationships and networks to access governmental and non-governmental platforms offering financial assistance. Findings indicated the existence of business hubs and Enterprise development platforms created by mining organizations to assist women entrepreneurs with access to funds and financial management.

The findings further indicated that acquiring interpersonal skills such as negotiation and communication skills further assists in overcoming barriers and running a thriving business in the mining industry. Hence, the literature indicates that the entrepreneur significantly influences the performance of the business through self-awareness, emotional intelligence, and interpersonal skills. In contrast, interpersonal skills are working with people, communicating with groups or individuals, and understanding them. Therefore, women entrepreneurs need to be self-aware of their sociological status and self-develop through the development of soft skills. Furthermore, these skills assist in identifying the most appropriate response to a given situation, which will help women overcome gender barriers in mining. Additionally, findings indicated that participants believed that women needed to embrace and harness their inherent qualities, such as having strong characters and self-confidence, to survive the challenges women faced in the mining industry. However, women are more likely to prioritize technical skills over soft skills, although resilience, problem-solving, emotional intelligence, and strong interpersonal and communication skills are the foundations of professional and personal empowerment (Laverick & Bagnall, 2019).

In addition, technical skills can be acquired through governmental and non-governmental platforms such as MQA and Enterprise development by mining organizations, amongst others. According to Schneider (2017), knowledge, experience, and skills are qualities necessary to meet a specific degree of performance requirement. Therefore, the technical skills and vocational training will further assist with overcoming barriers and thus decrease the doubt in women entrepreneurs' capabilities emanating from men discriminating again women. Furthermore, skills training will reduce the gender gap in business opportunities because

women will enhance their hands-on knowledge and abilities to operate their enterprises efficiently (Rudhumbu et al., 2020).

In terms of Governmental institutions, findings indicated that women believed there was still more that the government could do to support WE. Findings indicated that the implementation of BBBEE by the government created an opportunity for women to receive equal opportunities and to empower women, which created a much-needed platform to participate in an industry that has historically been and continues to be dominated by men at various levels. Lastly, in non-Governmental institutions, participants believe that one of the most critical support structures for women in business was support from their immediate families and friends, as the endeavor of entrepreneurship puts much strain on relationships, especially in the absence of family support. Literature mentioned that women tend to turn to their close family and friends for financial assistance. However, findings also indicated that mining companies offer financial assistance through Enterprise Development programs that assist mining-related SMMEs intending to improve SMME financial management systems to run more efficiently and sustainably.

While capacity building is evident, more needs to be done to enable, empower and develop WE.

7.3 Theoretical Contribution

The literature review briefly explained entrepreneurship as the establishment of businesses contributing to the economic development and sustainability of any country through the creation of employment (Giotopoulos et al., 2017); hence, indicating a need to increase efforts in the advancement of the small business enterprise (Meyer & de Jongh, 2018). Furthermore, the literature mentioned that entrepreneurship is driven by human motivation and behaviour (Newman et al., 2019) and further alluded that behaviour is created by gender, which is shaped by sociocultural norms (Lindsey, 2020). Consequently, this results in experiences and behaviours influenced by social expectations and the created gendered behaviour. Furthermore, the latter mentioned behaviour affects personal interaction, identity, status, and societal role (Lindsey, 2020).

However, entrepreneurship literature defined *gender* as either male or female without consideration of cultural and social differences (Lindqvist et al., 2021). Hence, according to Ward (2019), women tend to show less inclination toward entrepreneurship due to gender behaviours attributed to behaviours of both men and women. For instance, gender biases whereby women perceive themselves as lacking skills and traits needed to perform activities that are regarded as male-oriented. The latter behaviour results from women's social

construction. Also, men discriminate against women in entrepreneurship due to cultural expectations, such as women being expected to take care of the household while men venture into entrepreneurship or work. Thus, the literature indicated entrepreneurship as a male phenomenon (Mehtap et al., 2017). However, it is evident from the research findings that women face gender-related barriers in entrepreneurship.

Furthermore, some barriers are due to gender construction and cultural expectations of socio-cultural norms. However, entrepreneurship scholars excluded the influence of socio-culture on gender and embedded entrepreneurship as a masculine concept (Raghuvanshi et al., 2017). The research study findings indicated that due to gender barriers, the participation of women in entrepreneurship is negatively impacted and women face exacerbated gender barriers in a non-traditional industry, mining. Therefore, the finding indicates a need for more research through the lens of women entrepreneurs to add to the body of knowledge. It is of utmost importance to holistically unpack, explore and understand entrepreneurship in terms of gender barriers from the perspective of women to enable attempts to address those barriers and promote women's participation in entrepreneurship (Poggesi et al., 2016).

7.4 Implications and Recommendation for Women Entrepreneurs.

According to the study findings, women's lack of confidence prevents them from networking and venturing into non-traditional industries such as mining. Furthermore, due to socio-cultural expectations based on gender constructs by cultural norms, women's behaviour influences their entrepreneurial intentions (Lindsey, 2020).

- Therefore, women entrepreneurs should first undertake techniques that can strengthen their agency and legitimacy in order to gain access to even the most basic resources.
- olt is recommended that society undertake targeted interventions such as social innovation challenges from a young age to shape the behaviour of a girl child and foster confidence in her talents and her propensity for entrepreneurship. In order to reconstruct gender, women should be educated to be brave and self-assured from a young age and encouraged to engage in activities typically viewed as masculine. This can be done by developing opportunities for social skills at the most basic level in the classroom. The intervention strategy should use women's mentorship and role modelling for young girls. These initiatives will dismantle gender stereotypes and potentially transform perceptions of women's roles and contributions in the community, enhancing women's capabilities as change agents, in addition, develop the strength, courage, and fearlessness required in entrepreneurship in a male-dominated sector

The empirical study also looks at the obstacles experienced by female entrepreneurs to identify solutions to overcome these obstacles and encourage women to start and grow new mining businesses and increase the chances of start-ups succeeding. By fostering a supportive environment, providing advanced entrepreneurial opportunities, aiding in the creation of new businesses, assisting in acquiring business knowledge, introducing them to business networks, and motivating them to raise the necessary capital, it will also provide essential support for people and business owners. The results of this study will also benefit society because they will consider how gender equality has helped women's businesses grow.

7.5 Implications and Recommendation for Business

Although there findings indicated strides achieved taken by Mining organisation to promote Small business enterprises, women entrepreneurs continue to face gender barriers in the mining industry. The following are recommendation based on the empirical study finding:

Although mining companies have Small Enterprise Development (SED) ongoing, establishment of Integrated SED strategy is proposed. It is recommended that mining companies should develop technical and vocational training programs, which are formal and informal, for new entrepreneurs to improve entrepreneurial conditions for women and promote skill transfer through technical training. Create a two-year program that involves collaboration and partnership between well-established maleowned businesses and entry-level female-owned businesses (inclusive in terms of ethnicity and race). Create a mandatory policy to ensure partnership compliance to promote inclusion and the transfer of skills and training between men-owned and women-owned businesses.

The aforementioned will not only benefit the women entrepreneur but will promote inclusion in the mining industry. Furthermore, it is critical to improving technical outcomes for women entrepreneurs while promoting inclusion and collaboration, eradicating discrimination, and further promoting women's acceptance in the mining industry.

7.6 Implications and Recommendation for Government

Policymakers, educational institutions, and training organizations must establish policies to reengineer the educational system. The aforementioned can be achieved by creating interactive skills platforms focusing on building entrepreneurial acumen and skills transfer, which will include the transfer of both technical and soft skills like critical thinking and communication. This will encourage young women to learn about and actively experience a variety of entrepreneurship alternatives. In addition, the inclusion of women in business is intended to change the relationship between men and women regarding power dynamics.

Governmental and non-governmental groups will also offer a set of instructions for women to develop and promote women's entrepreneurial structures using the suggestions made in the study's findings to lessen the factors and obstacles that are specific to gender in the way of women's entrepreneurship.

7.7 Recommendation for Future Research

Based on the empirical study findings, the following recommendations for future research are made:

- There is a need to research into gendered barriers faced by women entrepreneurs who
 have acquired academic qualifications in line with their service offering.
- To establish the relationship between socio-cultural norms and barriers and the degree of the influence of norms on the behaviour of women to enable women's entrepreneurial success.

7.8 Research Limitations

Methodology limitation have been discussed in Chapter 4. Thus, in addition, the following are limitation to the study:

- The research was anchored on the explorative nature of qualitative studies which can be regarded as subjective and bias with participants possibly subjective in their response given the nature of the topic
- Generalisability of the study is purely limited to South African mining industry which may pose industry bias from the response of the participants.
- Furthermore, the study did not attempt to categorise participants according to race which is critical in the context of South African history

REFERENCE LIST

- Abdullah, S. M. (2019). Social cognitive theory: A Bandura thought review published in 1982-2012. *Psikodimensia*, *18*(1), 85-100.
- Aneke, E. O., Derera, E. & Bomani, M. 2017. An Exploratory study of challenges faced by women entrepreneurs in construction in South Africa. International Journal of Business and Management Studies, 9, 35-51. https://dergipark.org.tr/en/download/article-file/440215
- Anglo American, (nd). Zimele: Our difference. https://southafrica.angloamerican.com/our-difference/zimele
- Anna, A. L., Chandler, G. N., Jansen, E., & Mero, N. P. (2000). Women business owners in traditional and non-traditional industries. *Journal of Business venturing*, *15*(3), 279-303. https://doi.org/10.1016/S0883-9026(98)00012-3 (Ranked 4*)
- Arendse, D. E. (2021). Addressing gender discrimination in cognitive assessment using the English Comprehension Test. *SA Journal of Industrial Psychology*, *47*(1), 1-10. (Ranked 1*). http://dx.doi.org/10.4102/sajip.v47i0.1776
- Baporikar, N., & Akino, S. (2020). Financial literacy imperative for success of women entrepreneurship. *International Journal of Innovation in the Digital Economy* (IJIDE), 11(3), 1-21. <u>DOI: 10.4018/IJIDE.2020070101</u>
- Barakat, S., Boddington, M., & Vyakarnam, S. (2014). Measuring entrepreneurial self-efficacy to understand the impact of creative activities for learning innovation. *The International Journal of Management Education*, *12*(3), 456-468. https://doi.org/10.1016/j.ijme.2014.05.007
- Baron, R. A. (2007). Behavioral and cognitive factors in entrepreneurship: Entrepreneurs as the active element in new venture creation. Strategic entrepreneurship journal, 1(1-2), 167-182.
- Barrett, D., & Twycross, A. (2018). Data collection in qualitative research. *Evidence-Based Nursing*, 21(3), 63-64. http://dx.doi.org/10.1136/eb-2018-102939
- Bastian, B. L., Metcalfe, B. D., & Zali, M. R. (2019). Gender inequality: Entrepreneurship development in the MENA region. *Sustainability*, *11*(22), 6472.
- Bell, E., Kothiyal, N., & Willmott, H. (2017). Methodology-as-technique and the meaning of rigour in globalized management research. *British journal of management*, *28*(3), 534-550. https://doi.org/10.1111/1467-8551.12205

- Biraglia, A., & Kadile, V. (2017). The role of entrepreneurial passion and creativity in developing entrepreneurial intentions: Insights from American homebrewers. Journal of small business management, 55(1), 170-188.
- Block, J. H., Colombo, M. G., Cumming, D. J., & Vismara, S. (2018). New players in entrepreneurial finance and why they are there. *Small Business Economics*, *50*(2), 239-250. https://doi.org/10.1007/s11187-016-9826-6
- Bruni, A., Gherardi, S., & Poggio, B. (2004). Entrepreneur-mentality, gender and the study of women entrepreneurs. *Journal of organizational change management*, 17(3), 256-268 (Ranked 2) https://doi.org/10.1108/09534810410538315
- Brush, C. G., Edelman, L. F., Manolova, T., & Welter, F. (2018). A gendered look at entrepreneurship ecosystems. Small Business Economics. (Ranked 3*). https://doi.org/10.1007/s11187-018-9992-9.
- Bui, H. T., Kuan, A., & Chu, T. T. (2018). Female entrepreneurship in patriarchal society: motivation and challenges. Journal of Small Business & Entrepreneurship, 30(4), 325-343.
- Bullough, A., Guelich, U., Manolova, T. S., & Schjoedt, L. (2022). Women's entrepreneurship and culture: gender role expectations and identities, societal culture, and the entrepreneurial environment. *Small Business Economics*, *58*(2), 985-996.
- Cardinale, I. (2018). Beyond constraining and enabling: Toward new micro-foundations for institutional theory. *Academy of Management Review*, *43*(1), 132-155.
- Casale, D., & Posel, D. (2021). Gender inequality and the COVID-19 crisis: Evidence from a large national survey during South Africa's lockdown. Research in Social Stratification and Mobility.
- Clough, D. R., Fang, T. P., Vissa, B., & Wu, A. (2019). Turning lead into gold: How do entrepreneurs mobilize resources to exploit opportunities? Academy of Management Annals, 13(1), 240–271.
- Cornelissen, J. P. (2017). Preserving theoretical divergence in management research: Why the explanatory potential of qualitative research should be harnessed rather than suppressed. *Journal of Management Studies*, *54*(3), 368-383. https://doi.org/10.1111/joms.12210

- Cullen, U. (2020), "Sociocultural factors as determinants of female entrepreneurs' business strategies", Journal of Entrepreneurship in Emerging Economies, 12 (1), 144-167. https://doi.org/10.1108/JEEE-04-2019-0046
- Chaudhuri, K., Sasidharan, S., & Raj, R. S. N. (2020). Gender, small firm ownership, and credit access: some insights from India. *Small Business Economics (Ranked 3)*, *54*(4), 1165-1181. https://doi.org/10.1007/s11187-018-0124-3
- Chinomona, E., & Maziriri, E. T. (2015). Women in action: Challenges facing women entrepreneurs in the Gauteng Province of South Africa. *International Business & Economics Research Journal (IBER)*, *14*(6), 835-850. https://doi.org/10.19030/iber.v14i6.9487
- Chowdhury, T. Y., Yeasmin, A., & Ahmed, Z. (2018). Perception of women entrepreneurs to accessing bank credit. Journal of Global Entrepreneurship Research, 8(1), 1–17. https://doi.org/10.1186/s40497-018-0119-1
- Conley, N., & Bilimoria, D. (2022). Barriers and mitigating strategies of entrepreneurial business growth: The role of entrepreneur race and gender. Entrepreneurship Research Journal, 12(3), 391-439
- Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.
- De Vos, A.S. Strydom, M. and Founche, C.B. and Delport, C.S., 2013. Research at Grassroots; For the Social Sciences and Human Service Professionals. Pretoria, Van Schaik, South Africa.
- DiCicco-Bloom, B., & Crabtree, B. F. (2006). The qualitative research interview. *Medical education*, 40(4), 314-321.
- Dileo, I., & Pereiro, T. G. (2018). Assessing the impact of individual and context factors on the entrepreneurial process. A cross-country multilevel approach. International Entrepreneurship & Management Journal, https://doi.org/10.1007/s11365-018-0528-1.
- Douglas, Evan & Prentice, Catherine, 2019. Innovation and profit motivations for social entrepreneurship: A fuzzy-set analysis, *Journal of Business Research*, Elsevier, vol. 99(C), pages 69-79. (Ranking 3*). https://doi.org/10.1016/j.jbusres.2019.02.031
- Dhahri, S., & Omri, A. (2018). Entrepreneurship contribution to the three pillars of sustainable development: What does the evidence really say?. *World Development*, 106, 64-77. https://doi.org/10.1016/j.worlddev.2018.01.008
- Elam, A. B., Hughes, K. D., Guerrero, M., Hill, S., Nawangpalupi, C., Fuentes, M. D. M., & González, J. P. D. (2021). Women's Entrepreneurship 2020/21: Thriving through Crisis. Global Entrepreneurship Research Association, London. https://www.gemconsortium.org/report/gem-202021-womens-entrepreneurship-

report-thriving-through-crisis

- Ellemers, N. (2018). Gender stereotypes. Annual review of psychology, 69, 275-298.
- Eisenhardt, K. M., Graebner, M. E., & Sonenshein, S. (2016). Grand challenges and inductive methods: Rigor without rigor mortis. *Academy of management journal*, *59*(4), 1113-1123. https://doi.org/10.5465/amj.2016.4004
- EstradaCruz, M., VerdúJover, A. J., & GómezGras, J. M. (2019). The influence of culture on the relationship between the entrepreneur's social identity and decision-making: Effectual and causal logic. *BRQ Business Research Quarterly*, 22(4), 226-244. https://doi.org/10.1016/j.brq.2018.10.002
- Foss, L., Henry, C., Ahl, H., & Mikalsen, G. H. (2019). Women's entrepreneurship policy research: a 30-year review of the evidence. *Small Business Economics*, *53*(2), 409-429. https://doi.org/10.1007/s11187-018-9993-8
- Gao, Q., Wu, C., Wang, L., & Zhao, X. (2020). The entrepreneur's psychological capital, creative innovation behavior, and enterprise performance. *Frontiers in Psychology*, *11*, 1651. https://doi.org/10.3389/fpsyg.2020.01651
- Giménez, D., & Calabrò, A. (2018). The salient role of institutions in Women's entrepreneurship: a critical review and agenda for future research. *International Entrepreneurship and Management Journal*, 14(4), 857-882. https://doi.org/10.1007/s11365-017-0480-5.
- Giotopoulos, I., Kontolaimou, A., & Tsakanikas, A. (2017). Drivers of high-quality entrepreneurship: what changes did the crisis bring about? *Small Business Economics*, 48(4), 913-930. (Ranked 3*) https://doi.org/10.1007/s11187-016-9814-x
- Giuliano, P. (2020). Gender and culture. Oxford Review of Economic Policy, 36(4), 944-961.
- Global Entrepreneruship Monitor Global; Report, (2021). https://www.gemconsortium.org/file/open?fileld=50691
- Guetterman, T.C. (2015). Descriptions of Sampling Practices Within Five Approaches to Qualitative Research in Education and the Health Sciences. Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 16(2). https://doi.org/10.17169/fqs-16.2.2290
- Guest, G., Namey, E. & Chen, M. (2020). A simple method to assess and report thematic saturation in qualitative research. *PLoS ONE, 15*(5), e0232076. https://doi.org/10.1371/journal.pone.0232076

- Gupta, V. K., Wieland, A. M., & Turban, D. B. (2019). Gender characterizations in entrepreneurship: A multi-level investigation of sex-role stereotypes about high-growth, commercial, and social entrepreneurs. *Journal of Small Business Management*, *57*(1), 131-153. (Ranked 3*). https://doi.org/10.1111/jsbm.12495
- Halvarsson, D., Korpi, M., & Wennberg, K. (2018). Entrepreneurship and income inequality. *Journal of Economic Behavior & Organization*, *145*, 275-293. https://doi.org/10.1016/j.jebo.2017.11.003
- Hapsari, N. R., & Soeditianingrum, N. (2018). Cultural Factors on Female Entrepreneurship: A Literature Review. In E3S Web of Conferences (Vol. 73, p. 11018). EDP Sciences.
- Hennink, M., Hutter, I., & Bailey, A. (2020). Qualitative research methods. Sage.
- Henry, C., Foss, L., & Ahl, H. (2016). Gender and entrepreneurship research: A review of methodological approaches. *International Small Business Journal*, *34*(3), 217-241. https://doi.org/10.1177%2F0266242614549779
- Hilson, G., & Maconachie, R. (2020). Entrepreneurship and innovation in Africa's artisanal and small-scale mining sector: Developments and trajectories. *Journal of Rural Studies*, *78*, 149-162. https://doi.org/10.1016/j.jrurstud.2020.06.004
- Hofstede, G. (1998). Masculinity and femininity: The taboo dimension of national cultures. Thousand Oaks: Sage publications (p-2-28)
- Holthof, C. (2022). Barriers to female entrepreneurship-from a perspective of the post-structural feminism theory (Bachelor's thesis, University of Twente).
- Hong T.M. Bui, Alua Kuan & Tuan T. Chu (2018) Female entrepreneurship in patriarchal society: motivation and challenges, Journal of Small Business & Entrepreneurship, 30:4, 325-343, DOI: 10.1080/08276331.2018.1435841
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative health research*, *15*(9), 1277-1288.
- Irene, B. (2017). Women entrepreneurship in South Africa: Understanding the role of competencies in business success. *The Southern African Journal of Entrepreneurship and Small Business Management*, *9*(1), 1-9.
- Joan, S., (2012). Qualitative Research Part II: Participants, Analysis, and Quality Assurance. *Journal of Graduate Medical Education*. 1 March 2012; 4 (1): 1–3. https://doi.org/10.4300/JGME-D-11-00307.1

- Jones, J. E. (2021). Strategies of Women Small Business Owners to Overcome Entrepreneurship Barriers (Doctoral dissertation, Walden University).
- Johnson, J. L., Adkins, D., & Chauvin, S. (2020). A review of the quality indicators of rigor in qualitative research. *American journal of pharmaceutical education*, *84*(1).
- Kalu, F. A., & Bwalya, J. C. (2017). What makes qualitative research good research? An exploratory analysis of critical elements. *International Journal of Social Science Research*, *5*(2), 43-56. https://doi.org/10.5296/ijssr.v5i2.10711
- Kansake, B. A., Sakyi-Addo, G. B., & Dumakor-Dupey, N. K. (2021). Creating a gender-inclusive mining industry: Uncovering the challenges of female mining stakeholders. *Resources Policy*, 70, 101962.). (*Ranked 2*). https://doi.org/10.1016/j.resourpol.2020.101962
- Kapinga, A. F., & Montero, C. S. (2017). Exploring the socio-cultural challenges of food processing women entrepreneurs in Iringa, Tanzania and strategies used to tackle them. Journal of Global Entrepreneurship Research, 7(1), 1-24.
- Kerr, J., & Coviello, N. (2019). Formation and constitution of effectual networks: A systematic review and synthesis. *International journal of management reviews*, *21*(3), 370-397. https://doi.org/10.1111/ijmr.12194
- Khoury, T. A., & Prasad, A. (2016). Entrepreneurship amid concurrent institutional constraints in less developed countries. *Business & Society*, *55*(7), 934-969. https://doi.org/10.1177/0007650314567641
- Li, C., Ahmed, N., & Qalati, S. A. (2019). Impact of Gender-Specific Causes on Women Entrepreneurship: An Opportunity Structure for Entrepreneurial Women in Rural Areas. *Journal of Entrepreneurship & Organization Management*, 8(1), 1-9.
- Lindqvist, A., Sendén, M. G., & Renström, E. A. (2021). What is gender, anyway: a review of the options for operationalising gender. *Psychology & sexuality*, 12(4), 332-344. https://doi.org/10.1080/19419899.2020.1729844
- Lindsey, L. L. (2020). Gender: Sociological Perspectives. Routledge.
- Lock, R., & Smith, H. L. (2016). The impact of female entrepreneurship on economic growth in Kenya. *International Journal of Gender and Entrepreneurship, 8*(1), 90-96 cited (57). (Ranked 2), http://dx.doi.org/10.1108/IJGE-11-2015-0040

- Mastercard Index, (2021). Women entrepreneurs are making progress in South Africa, but challenges persist. https://newsroom.mastercard.com/mea/press-releases/women-entrepreneurs-are-making-progress-in-south-africa-but-challenges-persist-mastercard-index/
- McMorrow, A. (2018). Introducing Poststructuralism in International Relations

 Theory. International Relations Theory, E-International Relations Publishing.
- Mehtap, S., Pellegrini, M. M., Caputo, A., & Welsh, D. H. (2017). Entrepreneurial intentions of young women in the Arab world: Socio-cultural and educational barriers. *International Journal of Entrepreneurial Behavior & Research*. https://doi.org/10.1108/IJEBR-07-2017-0214
- Meyer, N., & de Jongh, J. (2018). The importance of entrepreneurship as a contributing factor to economic growth and development: The case of selected European countries. *Journal of Economics and Behavioral Studies*, 10(4 (J)), 287-299.
- Mills, A. J., Durepos, G., & Wiebe, E. (2010). *Encyclopedia of case study research* (Vols. 1-0). Thousand Oaks, CA: SAGE Publications, Inc. doi: 10.4135/9781412957397
- Milne, M. J., & Adler, R. W. (1999). Exploring the reliability of social and environmental disclosures content analysis. *Accounting, Auditing & Accountability Journal*.
- Minerals Council South Africa, (2020). Women in Mining White Paper.
- https://www.mineralscouncil.org.za/downloads/send/37-position-papers/1218-white-paper-women-in-mining
- Minerals Council South Africa, (2020). Minerals Council Facts and Figures 2020.
- https://www.mineralscouncil.org.za/downloads/send/3-fact-sheets/1761-facts-and-figures-2020
- Mkhize, A., (2022). Enterprise development within Mining sectors. https://social-tv.co.za/enterprise-development-within-the-mining-sector/
- Moghtadaie, L., & Jamshidian, A. (2021). The effect of entrepreneurship education on the entrepreneurial attitude, ability and aspiration of rural women: A quasi-experimental study. *Journal of Entrepreneurship Education*, 24(S2).
- Morse, J. M., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification

- strategies for establishing reliability and validity in qualitative research. *International journal of qualitative methods*, *1*(2), 13-22. https://doi.org/10.1177%2F160940690200100202
- Moudrý, D. V., & Thaichon, P. (2020). Enrichment for retail businesses: How female entrepreneurs and masculine traits enhance business success. Journal of Retailing and Consumer Services, 54, 102068.
- Mtotywa, MM. (2019). Conversations with Novice Researchers. East London: AndsM Publishers.
- Mudau, T. J., & Obadire, O. S. (2017). The role of patriarchy in family settings and its implications to girls and women in South Africa. Journal of Human Ecology, 58(1-2), 67-72.
- Mukorera, S. Z. (2020). Is entrepreneurship the solution for female empowerment In South Africa. Journal of Developmental Entrepreneurship, 25(01), 2050003.
- Mulaba-Bafubiandi, A. F., & Singh, N. (2018). Junior mining as innovation entrepreneurship in minerals industry in South Africa. In *Proc international conf on industrial engineering and operations management* (pp. 1892-1898).
- Murnieks, C. Y., Klotz, A. C., & Shepherd, D. A. (2020). Entrepreneurial motivation: A review of the literature and an agenda for future research. *Journal of Organizational Behavior*, *41*(2), 115-143.
- Myres, K. (2022) . Session 3 Qualitative Research Skills [PowerPoint Slides]. Retrieved from GIBS Blackboard: http://gibs.blackboard.com
- Nancy Carter, R. N., Bryant-Lukosius, D., & Alba DiCenso, R. N. (2014, September). The use of triangulation in qualitative research. In *Oncology nursing forum* (Vol. 41, No. 5, p. 545). Oncology Nursing Society.
- Naidu, S., & Chand, A. (2017). National culture, gender inequality and women's success in micro, small and medium enterprises. *Social Indicators*Research, 130(2), 647-664. https://doi.org/10.1007/s11205-015-1203-3
- Ndimande, J. H. (2019). Causes for failure of women owned construction companies in Kwazulu Natal, South Africa.

 https://researchspace.ukzn.ac.za/bitstream/handle/10413/18738/Ndimande_Ja_bulile_Hilda_2019.pdf?sequence=1&isAllowed=y

- Neumeyer, X., Santos, S. C., Caetano, A., & Kalbfleisch, P. (2019). Entrepreneurship ecosystems and women entrepreneurs: A social capital and network approach. Small Business Economics, 53(2), 475-489.
- 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), 1609406917733847. https://doi.org/10.1177%2F1609406917733847
- Nawaz, A. (2018). Challenges Faced by Women Entrepreneurs in Pakistan: A Qualitative Study. Management and Organizational Studies, 5(2), 13-26.
- National Empowerment Fund, (2020). Growing the Gender dividend. https://www.nefcorp.co.za/products-services/women-empowerment-fund/
- Newman, A., Obschonka, M., Schwarz, S., Cohen, M., & Nielsen, I. (2019). Entrepreneurial self-efficacy: A systematic review of the literature on its theoretical foundations, measurement, antecedents, and outcomes, and an agenda for future research. *Journal of vocational behavior*, *110*, 403-419.

 https://doi.org/10.1016/j.jvb.2018.05.012
- Ochieng, P. A. (2009). An analysis of the strengths and limitation of qualitative and quantitative research paradigms. *Problems of Education in the 21st Century*, *13*, 13.
- OECD, P. (2017). Enhancing the contributions of SMEs in a global and digitalised economy. *Paris. Retrieved Feb*, *25*, 2019.
- Packard, M. D., & Bylund, P. L. (2018). On the relationship between inequality and entrepreneurship. *Strategic Entrepreneurship Journal* (*Ranked 4*), 12(1), 3-22.
- Panda, S. (2018). Constraints faced by women entrepreneurs in developing countries: review and ranking. *Gender in Management: An International Journal (Ranked 1)*. http://dx.doi.org/10.1108/GM-01-2017-0003
- Patton, M.Q. (1999). Enhancing the quality and credibility of qualitative analysis. Health Sciences Research, 34, 1189–1208
- Paulus, T.M., Pope, E.M., Woolf, N & Silver, C. (2019) It will be very helpful once I understand ATLAS.ti": Teaching ATLAS.ti using the Five-Level QDA method, International Journal

- of Social Research https://doi.org/10.1080/13645579.2018.1510662
- Popescu, L., Iancu, A., Avram, M., Avram, D., & Popescu, V. (2020). The role of managerial skills in the sustainable development of SMEs in Mehedinti County, Romania. *Sustainability*, *12*(3), 1119.
- Poggesi, S., Mari, M., & De Vita, L. (2016). What's new in female entrepreneurship research? Answers from the literature. International Entrepreneurship & Management Journal, 12(3), 735–764. https://doi.org/10.1007/s11365-015-0364-5
- PWC, 2021. SA Mine 2021: Harvest season, call to action. 13th edition. https://www.pwc.co.za/en/assets/pdf/sa-mine-2021.pdf
- Quagrainie, F. A. (2020). Are small women entrepreneurs resilient? Highlighting the roles of entrepreneurial competencies and motivation. International Journal of Business and Globalisation, 25(3), 361-377.
- Queirós, A., Faria, D., & Almeida, F. (2017). Strengths and limitations of qualitative and quantitative research methods. *European journal of education studies*.
- Raghuvanshi, J., Agrawal, R., & Ghosh, P. K. (2017). Analysis of barriers to women entrepreneurship: The DEMATEL approach. *The Journal of Entrepreneurship*, *26*(2), 220-238. (Ranked 1*). https://doi.org/10.1177%2F0971355717708848
- Risman, B. J. (2018). Gender as a social structure. In *Handbook of the Sociology of Gender* (pp. 19-43). Springer, Cham. https://doi.org/10.1007/978-3-319-76333-0_2
- Ritchie, J., Lewis, J., & Elam, R. G. (2013). Selecting samples. *Qualitative research practice:*A guide for social science students and researchers, 111.
- Rubio-Bañón, A., & Esteban-Lloret, N. (2016). Cultural factors and gender role in female entrepreneurship. *Suma de Negocios*, *7*(15), 9-17.
- Rudhumbu, N., du Plessis, E. E., & Maphosa, C. (2020). Challenges and opportunities for women entrepreneurs in Botswana: revisiting the role of entrepreneurship education. Journal of International Education in Business, 13(2), 183-201.
- Rudolph, J., Leedy, PD, & Ormrod, JE (2018). Practical research. Planning and design . Boston, MA: Pearson.

- Sajjad, M., Kaleem, N., Chani, M. I., & Ahmed, M. (2020). Worldwide role of women entrepreneurs in economic development. *Asia Pacific Journal of Innovation and Entrepreneurship*.
- Santos, S. C., Nikou, S., Brännback, M., & Liguori, E. W. (2021). Are social and traditional entrepreneurial intentions really that different?. *International Journal of Entrepreneurial Behavior & Research*. https://doi.org/10.1108/IJEBR-01-2021-0072
- Sarfaraz, L., Faghih, N., & Majd, A. A. (2014). The relationship between women entrepreneurship and gender equality. *Journal of Global Entrepreneurship Research*, *4*(1), 1-11. https://link.springer.com/journal/40497
- Saunders, M., Lewis, P. (2018). Doing research in Business and Management (2nd ed.). Edinburgh Gate: Pearson.
- Sauer, R. M., & Wiesemeyer, K. H. (2018). Entrepreneurship and gender: differential access to finance and divergent business value. *Oxford Review of Economic Policy*, *34*(4), 584-596.
- Schneider, K. (2017). Entrepreneurial competencies of women entrepreneurs of micro and small enterprises. Science Journal of Education, 5(6), 252-261.
- Schunk, D. H., & DiBenedetto, M. K. (2020). Motivation and social cognitive theory. *Contemporary Educational Psychology*, *60*, 101832. https://doi.org/10.1016/j.psychsport.2018.11.009
- Scraton, S. (2018). Feminism (s) and PE: 25 years of shaping up to womanhood. *Sport, Education and Society*, *23*(7), 638-651. https://doi.org/10.1080/13573322.2018.1448263
- Shahriar, A. Z. M. (2018). Gender differences in entrepreneurial propensity: Evidence from matrilineal and patriarchal societies. Journal of Business Venturing, 33(6), 762-779. https://doi.org/10.1016/j.jbusvent.2018.04.005
- Shenton, A.K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information.* 22, 63–75
- Silverman, D. (Ed.). (2020). Qualitative research. sage.
- Simarasl, N., Jiang, D., Pandey, S., & Navis, C. (2022). Constrained but not contained: How marginalized entrepreneurs overcome institutional bias and mobilize

- resources. Strategic Entrepreneurship Journal.
- Simon, R. M., Wagner, A., & Killion, B. (2017). Gender and choosing a STEM major in college: Femininity, masculinity, chilly climate, and occupational values. Journal of research in Science Teaching, 54(3), 299–323. https://doi.org/10.1002/tea.21345
- Smith, J. (2016). Gender as a Socially Constructed Phenomenon. https://digitalcommons.winthrop.edu/cgi/viewcontent.cgi?article=1019&context=sewsa
- Smith, C., Smith, J. B., & Shaw, E. (2017). Embracing digital networks: Entrepreneurs' social capital online. Journal of Business Venturing, 32(1), 18-34.
- Statistics South Africa, (2020). Three facts about small business turnover in South Africa. https://www.statssa.gov.za/?p=13900
 - Stewart, J., Kibombo, R., & Rankin, L. P. (2020). Gendered livelihoods in the artisanal mining sector in the Great Lakes Region. *Canadian Journal of African Studies*, *54*(1), 37-56.
 - Strohmeyer, R., Tonoyan, V., & Jennings, J. E. (2017). Jacks-(and Jills)-of-all-trades: On whether, how and why gender influences firm innovativeness. Journal of Business Venturing, 32(5), 498–518. https://doi.org/10.1016/j.jbusvent.2017.07.001
 - Sutter, C., Bruton, G. D., & Chen, J. (2019). Entrepreneurship as a solution to extreme poverty: A review and future research directions. Journal of Business Venturing, 34(1), 197–214.
 - Symon, G., Cassell, C., & Johnson, P. (2018). Evaluative practices in qualitative management research: A critical review. International Journal of Management Reviews, 20(1), 134-154.
 - Szuter, C. Applying Ahl's post-structural feminism to gender entrepreneurship research in Java.
 - Terry, G., Hayfield, N., Clarke, V., & Braun, V. (2017). Thematic analysis. *The SAGE handbook of qualitative research in psychology*, 2, 17-37.
 - The Constitution of the Republic of South Africa, (1996). https://www.gov.za/documents/constitution/chapter-2-bill-rights
 - Tlaiss, H. A., & Kauser, S. (2019). Entrepreneurial leadership, patriarchy, gender, and identity in the Arab world: lebanon in focus. *Journal of Small Business Management*, *57*(2), 517-537 (*Ranked 3*). https://doi.org/10.1111/jsbm.12397

- Terjesen, S., Hessels, J., & Li, D. (2016). Comparative international entrepreneurship: A review and research agenda. *Journal of Management*, *42*(1), 299-344. (Ranked 4*) https://doi.org/10.1177%2F0149206313486259
- Thomas, N., Randolph, A., & Marin, A. (2019). A network view of entrepreneurial cognition in corporate entrepreneurship contexts: A socially situated approach. *Management Decision*. (Ranked 2*) . https://doi.org/10.1108/MD-11-2017-1195
- Ummah, M. A. C. S., Choy, C. S., & Beevi, A. S. (2021). Theorizing a Framework of Factors Influencing Business Performance: A Research Agenda for Muslim Women Entrepreneurs. *Journal of Contemporary Issues in Business and Government*| *Vol.*, 27(3), 1288.
- Vasileiou, K., Barnett, J., Thorpe, S. & Young, T. (2018). Characterising and justifying sample size sufficiency in interview-based studies: systematic analysis of qualitative health research over a 15-year period. *BMC Med Res Methodol*. **18**, 1-18 https://doi.org/10.1186/s12874-018-0594-7
- Villaseca, D., Navío-Marco, J., & Gimeno, R. (2020). Money for female entrepreneurs does not grow on trees: Start-ups' financing implications in times of COVID-19. *Journal of Entrepreneurship in Emerging Economies*. https://doi.org/10.1108/JEEE-06-2020-0172
- Ward, A., Hernández-Sánchez, B. R., & Sánchez-García, J. C. (2019). Entrepreneurial potential and gender effects: the role of personality traits in university students' entrepreneurial intentions. *Frontiers in Psychology*, *10*, 2700. https://doi.org/10.3389/fpsyg.2019.02700
- Waling, A. (2019). Rethinking masculinity studies: Feminism, masculinity, and poststructural accounts of agency and emotional reflexivity. *The journal of men's studies*, *27*(1), 89-107.
- Welsh, D. H., Kaciak, E., Memili, E., & Minialai, C. (2018). Business-family interface and the performance of women entrepreneurs: The moderating effect of economic development. *International Journal of Emerging Markets*. https://doi.org/10.1108/IJoEM-03-2017-0095
- Welsh, D. H., Memili, E., Kaciak, E. & Ochi, M. (2014). Japanese women entrepreneurs: implications for family firms. Journal of Small Business Management, 52(2), 286-305. (Ranked 3). https://www.tandfonline.com/doi/abs/10.1111/jsbm.12099
- Welter, F., & Gartner, W. B. (Eds.). (2016). A research agenda for entrepreneurship and context.

- Wrigley, M. (2002, November). Tom Wengraf (2001). Qualitative Research Interviewing: Biographic Narrative and Semi-Structured Method. In *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research* (Vol. 3, No. 4).
- Wood, H. J. (2019). Gender inequality: The problem of harmful, patriarchal, traditional and cultural gender practices in the church. HTS Teologiese Studies/Theological Studies, 75(1).
- Wu, J., Li, Y., & Zhang, D. (2019). Identifying women's entrepreneurial barriers and empowering female entrepreneurship worldwide: a fuzzy-set QCA approach. *International Entrepreneurship and Management Journal*, *15*(3), 905-928. https://doi.org/10.1007/s11365-019-00570-z
- Xie, X., & Wu, Y. (2021). Doing Well and Doing Good: How Responsible Entrepreneurship Shapes Female Entrepreneurial Success. *Journal of Business Ethics*, 1-26. https://doi.org/10.1007/s10551-021-04799-z
- Zeraibi, A., & Jangjua, L.R., (2019). The Role of Small and Medium Enterprises in the-Domestics Product (GDP): A Case Study on Algeria, Business And Management Research Journal, 9(1).
- Zhou, J., Yang, J., Sun, H., Liu, Y., & Liu, X. (2021). The Influence of Entrepreneurial Cognition on Business Model Innovation: A Hybrid Method Based on Multiple Regressions and Machine Learning. *Frontiers in Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.744237
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013). *Business research methods*. Cengage Learning.

APPENDIX A: INTERVIEW INFORMED CONSENT LETTER

Gender-related barriers faced by women entrepreneurs in the South African mining industry.

I am currently an MBA student at the University of Pretoria's Gordon Institute of Business Science. I am therefore completing my research in partial fulfilment of an MBA.

I am conducting research on 'Gender-related barriers faced by women entrepreneurs in South African mining industry'. Your inputs, through an interview, is most valuable. The interview is set to last for about an hour and will help the researcher to understand the gender-barriers faced by women entrepreneurs in a non-traditional industry, that is mining, and how women entrepreneurs navigate those barriers. The research seeks to gain deeper understanding from women entrepreneurs using a feminist approach in order to come up with recommendations regarding gender-related barriers.

Your participation is voluntary, and you can withdraw at any time without penalty. All data will be recorded, reported and stored without identifiers to ensure confidentiality. Anonymity will be maintained. If you have any concerns, please contact my supervisor or me. Our details are provided below.

Researcher name: Research Supervisor Name

Kagisho Dorcas Nondwangu Dr Sherin Ramparsad

Email: 21820172@mygibs.coza Email: Sherin.Ramparsad@gmail.com

Phone: 071031 1225 Phone: 064 908 0043

Signature of participant: ______

Date: _____

Signature of researcher: ______

Date: _____

APPENDIX B: INTERVIEW GUIDE

Interview Discussion guide

Date:	
Participant name:	
Name of Organisation:	
Mining Department:	
Age of business:	

Introduction

Thank you for taking the time to partake and give input in this research. I sincerely appreciate your time and valuable inputs.

The tittle of the research is 'Gender-related barriers faced by women entrepreneurs in South African mining industry'. The aim of the study and this interview is to get an in-depth understanding on the gender-barriers faced by women entrepreneurs in the mining industry, and how they navigate those barriers. The research seeks to gain deeper understanding from women entrepreneurs using a feminist approach in order to come up with recommendations regarding gender-related barriers.

The nature of this research and interview is conversational and exploratory, thus the researcher would like to encourage you to share your thoughts and experiences freely. As indicated in the consent letter, the information shared in this interview is confidential.

Kindly let us start off with signing the consent form and please confirm your comfortability in recording the interview

Questions:

- 1. Can you tell me a little bit about yourself? The environment you grew up in, the culture, education, experience and so forth.
- 2. Kindly give a brief background of your business
- 3. How was the business established? What was your experience in starting your own business?
 - a. How was the entrepreneurial opportunity identified?
 - b. Why a business in mining industry specifically?

Barriers

- 4. What were some of the challenges you experienced starting and growing your business in mining?
- 5. What are the challenges you face, as a woman entrepreneur, to run a thriving business within the SA mining industry?
- 6. Describe a recent experience where you were discriminated against based on gender.
- 7. In your experience, what are some of the gender-specific barriers facing women entrepreneurs in mining?
- 8. What is your perception about women entrepreneurs gaining business entrance in mining versus men entrepreneurs?
 - a. How would you compare the business opportunities received by women as compared with male counterparts, in mining?

Socio- Cultural Norms

- 9. What are some of the gender-biases experienced by women entrepreneurs, in mining, due to socio-cultural norms?
- 10. Can you describe the culture and social environment in the mining industry and how does it affect you as a women entrepreneur?
- 11. In your view, is there gender bias to women entrepreneurs due to cultural norms?
 - a. Describe an instance that stands out for you where you were discriminated against as a woman in entrepreneurship, in mining, because of cultural norms
 - b. How has the cultural values affected you as a women entrepreneur?
- 12. How does culture affect and influence your decision making as a women entrepreneur in mining?
- 13. How does your role in your family and community influence your decision-making approach in your business? And how does that impact on the performance of your business? (give examples)

Tactics and approaches

- 14. How did you deal with and overcome gender discrimination and barriers in mining entrepreneurship?
 - a. How do you think gender influences the approach you take to overcome gender discrimination and biases in entrepreneurship?
 - b. In your experience, do women and men use similar or different approaches to deal with entrepreneurship barriers? And give recent instances, in mining, where you and male counterpart were not treated equally?
- 15. What are the entrepreneurship skills needed by women entrepreneurs to start, run and sustain a business as well as overcome aforementioned barriers? Probe in terms of technical skills, behavioural skill,

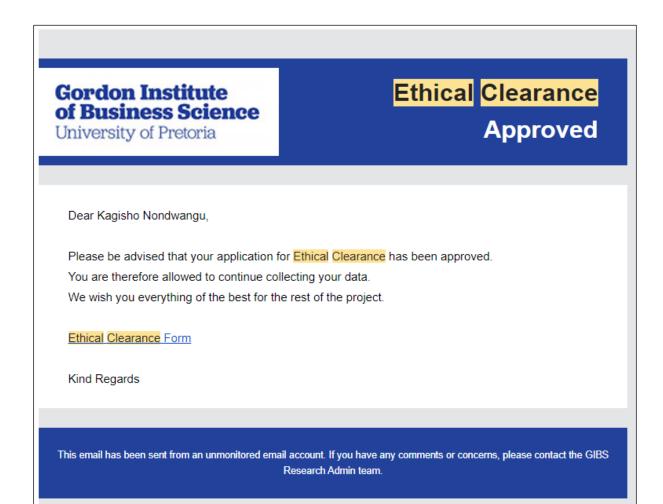
- 16. What has enabled you to start your own business?
- 17. What are the ways in which society, government, family and institutions can do to support women entrepreneurs?
- 18. What are some of the tactics and approaches used by women entrepreneurs to overcome gender-related challenges faced in the mining industry?
- 19. What approach did you use as women entrepreneur to start and run your business in mining?
- 20. What are the factors or strategies needed, by women entrepreneurs, to run a successful business in mining?

APPENDIX C: CONSISTENCY MATRIX

TITLE: Gendered-Barriers faced by women entrepreneurs in the South African mining industry

RESEARCH QUESTIONS	LITERATURE REVIEW	DATA COLLECTION TOOL	ANALYSIS
RQ 1: What are the gendered	Chowdhury et al.,(2018);	Question 3 to Question 7	Thematic analysis: Identify,
and non-gendered barriers facing	Naidu & Chand (2017); Thomas		Analyse content, report patterns,
women entrepreneurs in mining?	et a., (2019);		create Code & generate themes
	Xie & Wu (2021) and Li & Qalati		
	(2019)		
RQ 2: Is there gender-bias to	Brush, Edelman, Manolova &	Question 8 to 11	Thematic analysis: Identify,
women entrepreneurs due to	Welter(2018);		Analyse content, report patterns,
socio-cultural norms	Gupta, Wieland, & Turban,		create Code & generate themes.
	(2019);		
	Lindqvist, Sendén & Renström,		
	(2021);		
	Mehtap, Pellegrini, Caputo &		
	Welsh (2017).		
RQ 3: What are some of the	Sauer & Wiesemeyer (2018);	Question 12 & Question 13	Thematic analysis: Identify,
tactics and approaches used by	Baporikar, & Akino, S. (2020)		Analyse content, report patterns,
women entrepreneurs to	Newman et al. (2019);		create Code & generate themes.
overcome gender-related	Ellemers, 2018.		
challenges faced in the mining			
industry?			

APPENDIX D: ETHICAL CLEARANCE APPROVAL LETTER



Annexure E

- o Ability to command respect
- o Adversity to risk
- o Aimed at providing support
- o Assemble teams and systems
- Avoid compartmentalization
- o Be Clever
- o BEE negative connotation
- o Built around men
- o Business marketing skills
- o Challenges accessing market
- o Challenges unique to women
- o Collaboration
- o Communication skills
- o Create opportunities for women
- Cultural prescriptions
- o Culture and Social
- o Culture favours men
- Culture Gender Stereotypes
- o Dealing with gender bias
- Decision regulated by business needs
- Decision sustainable and traceable
- Decisions not culturally influenced
- o Deliver excellent results
- o Difficulty instructing males
- Direct Impact
- Discrimination
- o Do not change personality
- o Dress code
- o Educate males
- o Educate yourself
- o Emotional decision making
- enterprise and supplier development initiatives
- o Entrepreneurial skill
- o Essential abilities to overcome
- Expression of sexism
- o Family support
- o Female rejection
- Financial bribes
- Financial skills
- o Gender barriers
- o Gender challenges
- o Gender stereotypes

- Have tech skills
- o Inadequate resources
- o Increased opportunities for men
- Increased opportunities for women
- o Industry culture
- o Industry interaction with women
- o Industry tailored for men
- o Influence of family and culture
- o Inherit character
- Innovation
- Knowledgeability
- o Lack of confidence
- Lack of funding
- o Lack of technical language
- o lack of trust
- o Legislation of women in industry
- Lead unapologetically
- Leadership skill
- Legislation
- Legislation impact
- o male dominated
- o Male end tech users
- Male favouring
- o Male more respected
- Male supremacy
- Men founders
- Men preferred
- Men preference
- Men tendencies
- Men unacceptance of female leaders
- Men use social network for business
- More opportunities for nonqualifying females
- Negotiation
- No budget
- No female presence acknowledging
- No opportunities for women
- Not acknowledging female
- o Opening industry to women
- Overprotection
- o People centered decisions
- Perception of women
- o Personal support

- o Prioritise money
- o Project management
- Pushing women into entrepreneurship
- o Racial bias
- o Religious values
- o Resilience
- o Respect for elders
- Sabotage
- o Self confidence
- o Self-limiting behavior
- o Self reliant
- Sexual favours
- Spousal support
- o Starting a business in mining
- o Stretch limits
- o Strong Back
- Strong character
- Support essentiality
- o Take risks
- o Training children
- o Unaccepted female decisions
- o Under paid
- Undermining tasks given to women
- Understand industry
- challenges
 Understand industry workings
- Understand self-limits
- o Understand women challenges
- o Unethical practices
- Unwavering stance
- o Unyielding self-assurance
- o Value influenced decisions
- Women bound emotions
- Women don't talk back
- Women emotional for business
- Women in non-traditional industries
- o Women leaders not accepted
- o Women less experience
- Women need protection
- o Women no tech skills
- Women prove themselves
- Women shielded from dangersWomen submission

- o Giving back to community
- o Government support and enablers of women entrepreneurs
- o Plan execution
- o Preconceived Ideas on women
- o women supporting women
- o Women supportive role
- o Women to formal