



# Women's representation in senior and executive management positions in a South African coal mine: A case study

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## ABSTRACT

With the policies and laws in place in South Africa, it is desirable to have more women representation in senior and executive management level where the government leaders and mine management are encouraged to aim for a 50:50 representation of all genders. It is crucial to identify the primary factors that impede women from becoming senior or executive managers in the mining industry and how those challenges could be addressed. More than 20 years into democracy, it is important to understand why men still outnumber women in senior and executive management positions in the mining industry. Mine A was used as a case study where in-depth interviews were conducted with 20 participants from core mining, middle management and senior mining positions using a set of questionnaires. It was found that women experience challenges at home and at work that impede them from advancing in their careers to senior and executive management roles. Those challenges range from toxic masculinity, prejudice, socio economic disadvantages and having to have multiple gender identities at work and in the community. The study identified that even though there are policies in place, those policies are insufficient as they only prescribe the end state and not the inclusive process. They also do not stipulate the required number of women per management level but only focuses on women in mining targets. On this basis, several recommendations were presented.

## 1. Introduction

South African policies and legislation governing mining activities in the apartheid era encouraged racial and gender discrimination. For example, women were not allowed to work in underground mines. Post-apartheid, legislation and policies were changed and efforts to balance racial and gender representation in all spheres of the economy were formulated (Chamber of Mines, 2010).

The Mineral and Petroleum Resources Development Act of 2002 (MPRDA) was formulated in line with the 1996 South African Constitution to set right the inequalities that was there during the apartheid era (Chamber of Mines, 2010). The MPRDA mandated the creation of a Broad-Based Socio-Economic Empowerment Charter for the South African Mining Industry (Mining Charter), which is an example of regulations that seek to increase the number of women in the mining industry (Chamber of Mines, 2010).

Through the MPRDA, the state is empowered as the custodian of the country's mineral resources and given the power to implement and monitor the Act to redress previous imbalances (Cawood, 2004). The Act

required that female representation account for at least 10% of the total workforce in the mining industry by the year 2009 from a mere 2% in 2000 (Department of Mineral Resources and Energy (DMRE), 2002).

The DMRE (2004) aspired to have a baseline of 40% Historically Disadvantaged South Africans (HDSA) participation in management positions within five years and to ensure inclusiveness and advancement of women to at least 10% of the total workforce in the mining industry. In the preamble of the 2018 Mining Charter, the DMRE (2018) noted that although there were improvements in complying with the 2010 Mining Charter, there was still a long way to go before the mining industry would be fully transformed.

Even though some companies have embraced the Mining Charter, others are compliance driven only to protect their social license to operate (DMRE, 2018). The latter then results in women facing career advancement challenges while attempting to progress on the corporate ladder to senior and executive management. This then brings about the need to understand those challenges through this study.

Kilic and Kuzey (2016) stated that there are several arguments that exist regarding the relationship between women representation on

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board of directors and how those firms perform. Having diverse board members can imply that the directors can increase the profitability and value of the companies through adding unique abilities, talents and characteristics in the boardrooms (Kilic and Kuzey, 2016). Post & Byron stated that women employees bring different experiences in the board as a result of their roles and experiences outside of the work environment (Post and Byron, 2015).

Credit Suisse Research Institute (2014) found that there is a strong correlation between having women in senior and executive management and scoring high on governance, financial, social and environmental metrics. Lückérath-Rovers (2013) stated that highly diverse companies give a positive signal to existing and potential employees and strengthens competition. Considering all these positive attributes associated with women in the workplace, it is, therefore, desirable to have more women in senior and executive management positions.

Even though the South African mining industry has a higher percentage of women on the board of directors and in senior management positions, the percentage is still very low, below 25% (PwC, 2015). This is because laws and regulations that empower equality may only address inequality to a certain extent. The mining charter and MPRDA do not stipulate the percentage of women representation per level of employment, they both stipulate the total percentage of the women workforce in the mines. There is a need for more research to be conducted to understand the reasons why men still outnumber women on different levels of management in the mining industry, almost 20 years since the equality laws were enacted in South Africa. Hence, this study answers the following questions:

- a) What are the primary factors that impede women from becoming senior or executive managers in the mining industry?
- b) How do local and national policies better or worsen the challenges women face?
- c) How can policy and intervention support the advancement of gender equity through transformation in senior and executive management positions in the mining industry?

## 2. A global perspective on women representation in higher level positions

Globally, women are underrepresented in company boards, senior management positions and decision-making positions (Teasdale et al., 2012). The latter reflects gender inequalities that women face and a reflection of historical disadvantages that women were subjected to (Sotola, 2019). For more than two decades, gender equality has been featuring on the global agenda but the progress in terms of gender diversity in senior and executive management positions has been very slow (Sotola, 2019).

According to the African Development Bank (2015), there is only 12.7% on average of women in corporate board positions in Africa. The number of women represented in board positions varies across different African countries, with the Southern African regions having a higher percentage at 20% (Sotola, 2019). In Southern Africa, South Africa is ranked as a country with the highest female board membership at 21% (Sotola, 2019).

The low representation of women in those senior positions are also seen in the United States, in Europe and in Asia. There are country's that have made some advancement that saw women entering workplaces and progressing into senior management positions (Teasdale et al., 2012). However, women are still underrepresented in upper levels of work organizations globally (Teasdale et al., 2012).

In order to address gender inequality in boardrooms, Norway imposed a gender quota on state owned enterprises and companies that are publicly traded (Salcedo, 2017). Norway was the first jurisdiction to impose such a quota, and it was then shortly followed by Finland, Quebec in Canada, Israel and Spain (Salcedo, 2017). India, Belgium, France, Italy, Germany and the Netherlands also followed suite (Salcedo,

2017).

## 3. Women representation in senior and executive management positions in mining

In this section the overview of challenges that affect women resulting in lower representation in senior and executive management positions looking into organizational experiences, policies, and interventions were discussed.

### 3.1. Gender inequality

According to Kansake et al. (2021) women constitute less than 20% of the total workforce in the leading mining countries in the world. According to Hughes (2012) in Canada women only represent 14% of the national mining workforce Kilic and Kuzey (2016) stated that women are underrepresented in boardrooms of companies in both developed and developing countries. According to Tolonen (2015), gender inequality is the most significant impediment for the progress of female employees to senior management ranks in the mining companies. Gender discrimination is defined by the binding constraints that do not permit the prioritization of the needs of women (Tolonen, 2015). Gender inequality is a global trend across the mining industry, in the USA women employees make up 13% of the total workforce (Kansake et al., 2021).

Women representation is not only poorly represented in core mining positions but also in managerial positions, the higher you go in the mining organizational hierarchy the percentage of women employees progressively decreases (Kansake et al., 2021). In the Netherlands only about 5% of all executive directors were women (Lückérath-Rovers, 2013). According to Macintyre (2017), insight has been provided into the role of women in mining in developing countries like South Africa and considering women as equal and capable partners in mining can be a positive step towards development.

Not having women as part of each level category especially the senior and executive level is a sign of missed opportunity and weak corporate governance. Diversity has economic and moral advantages (Lückérath-Rovers, 2013).

### 3.2. Disabling institutional cultures

Literature suggests that often disabling institutional cultures are so dominant that they alienate women from leadership positions and exploit the view that they are begrudgingly appointed to those positions only to satisfy government and industrial policy (Botha, 2016). According to Khoza (2015), what is particularly disconcerting about a disabling institutional culture is that it is often unnoticeable but quite consequential. It is expressed informally, for instance, in a prejudicial management that does not invite female managers to a drink at the local bar (Khoza, 2015). Khoza (2015) states that the downstream effect of the latter is that more women view appointment to a boys' club kind of management undesirable and lose the ambition to ascend to these positions.

Hughes stated that even though blatant forms of gender discrimination has reduced in the mining workplaces, disabling cultures in the mining industry still exists through implicit bias, excluding women from informal networks and using subtler forms to discriminate them from the workplace (Hughes, 2012).

Post and Byron (2015) suggested that having more female in board positions should not be a numbers game, there should be a culture that allows their voices to be heard and considered. It was also found that in Canada significant number of women perceive workplace culture as a barrier to their advancement to senior positions in the mines (Hughes, 2012). With disabling institutional cultures, the employer can use a formal process such as training, procedures for employment, assignments to projects or tasks and demotions to "officially" match women

with certain types of mining jobs or positions that are considered more suitable for women (Tallichet, 2000).

### 3.3. Factors increasing the gap between policy and practice in the advancement of women to senior management posts in mining

Policy is a prescriptive of an end state but not the transformation process in women's advancement to senior management or executive level positions. Certain targets are made compulsory, and management has the responsibility to enforce quotas in representation, but policy does not make management responsible for developing and grooming women leaders. Policy does not address the key challenges that women face in the mining industry that resulted in low representation (Kansake et al., 2021). As such, the gap between policy and practice is made open by challenges such as socio-economic disadvantage, multiple societal roles, male exploitation, disabling institutional culture, entry-level and variously acquired gender identities. Khoza (2015) argued that for as long as policy does not adequately address the challenges obstructing the professional development of women, there will always be a gap between the targets set by that policy and practice. Policy should comprehensively prescribe specific steps and articulate the employer's responsibility therein, towards the professional development of women (Mashiane, 2009).

### 3.4. Expanding the responsibilities of the employer

After their study, Moalusi and Jones (2019) stated that the responsibilities ascribed to the employer should not be limited to ensuring an end state based on a quota system but must also be expanded to include the development of suitable women candidates for promotion to various leadership posts in the organization. There should be clear career paths that are openly discussed with employees (Kansake et al., 2021). Moalusi and Jones (2019) stated that mandating quota representation ignores the obstacles that inhibit women from being able to be skilled or qualified enough to thrive in those positions.

Zungu (2012) stated that for women, the demanding roles in the home have a near crippling impact on their career development aspirations. These women cannot devote time and resources to additional skills acquisition and sometimes must turn down the added responsibility of senior positions (Zungu, 2012). Zungu (2012) suggests that at times, travelling to and from work or having to migrate away from the family to be closer to the mine also takes a toll on women more than it does on men. Increasing work flexibility, implementing mentorship programmes, and improving work life balance by the employer have been found as key drivers for advancing and retaining women employees in the mines (Hughes, 2012). Considering the latter arguments, career development policy must be aimed at stimulating women representation in senior management positions and must be linked to regulations regarding Family Friendly Work Practices (FFWPs) (Zungu, 2012).

Moalusi and Jones (2019) also found that childbearing and child rearing is effectively discouraged in South African mines seeing as childcare facilities are often not provided for and maternity leave is frowned upon and only grudgingly granted because it is a legal requirement. Therefore, according to Moalusi and Jones (2019), if women are not strong, they may be forced to leave their jobs as there is often limited support from colleagues and management on top of the social burdens cast by society and culture. Mashiane (2009) found that women mine workers feel that their advancement depends on many other factors such as access to paid maternity leave, family responsibilities, breast feeding and a crèche on site or an alternative location, as this will enhance their ability to cope with pressures. According to Kansake et al. (2021) children play centres and day care facilities should be created where employees should safely leave their children and concentrate on their work.

### 3.5. Making gender sensitization education mandatory and committing to gender related ethics

Mudimba (2017) argues that gender sensitization education and specific steps to make the work environment women-friendly must be comprehensively articulated in policy. The policy should then be implemented and enforced. The aggregate discrimination and abuse suffered by women act as a psychological and social barrier to women's advancement aspirations and processes (Botha, 2016). Botha (2016) argues that for women to thrive in the workplace, aspire for higher office and be confident enough to acquire skills and education necessary for promotion, toxic and discriminatory organizational culture must be reformed. One way of doing this is to consistently provide gender sensitization education in the workplace (Botha, 2016).

Hill et al. (2016) argue that gender ethics must not be left to the strength of informal organizational culture but must be implicitly written into organizational policy and adhered to. Hill et al. (2016) further suggest that addressing gender inequality in the extractive industries demands a fundamental shift within company policy structures. The development, implementation and monitoring of company policies should include women in the consultation process to keep management informed on how to support female employees in the industry (Hill et al., 2016).

The policies and systems will ensure that mine management and other mine employees protect and promote women's rights and equality (Mashiane, 2009). To encourage and enforce these policies and systems the company should put in place accountability, verification, and incentive mechanisms (Mashiane, 2009). Furthermore, Mashiane (2009) found that some views are that at national level, companies should encourage the government to develop appropriate capacity, allocate enough resources, and foster the political will necessary to advance women. Government should enforce policies that encourage women representation and discourages discrimination in mining companies (Kansake et al., 2021).

## 4. Research approach

This study researches the primary factors that impede women from becoming senior or executive managers in the mining industry, how local and national policies impact the challenges that women face in the mining industry and how policy and intervention support the advancement of gender equity through transformation in senior and executive management positions in the mining industry.

### 4.1. Data collection

The researcher reviewed literature on gender-based issues impacting women in the mining industry and factors affecting gender in boards of mining companies to understand the dynamics of occupation related gender challenges. The study relied on simple random sampling of women employees across the employment ladder in coal Mine A for in depth interviews. The selected individuals were therefore informed about the research problem, its subject and rationale. The population sample consisted of eight women in core mining of which two were graduates in training, eight women in middle management and four women in senior management at the mine. Table 1 represents the targeted number of participants and the actual numbers of the participants

**Table 1**  
Response rate.

| Participants               | Targeted responses | Actual responses |
|----------------------------|--------------------|------------------|
| Women in core mining       | 10                 | 8                |
| Women in middle management | 10                 | 8                |
| Women in senior management | 5                  | 4                |
| <b>Total</b>               | <b>25</b>          | <b>20</b>        |

from each category.

#### 4.2. The interview questions and process

The interview questions were derived through reading and analyzing past studies on gender equality related topics, observing how women employees at the mine interact with their male colleagues and management in both formal and informal settings, experiences gained in the mining industry and general discussions with employees. The interview sessions were structured following the set of interview questions. The interviews lasted from 30 min to an hour per participant. The questions utilized for the interviews are indicated in Appendix 1. Observation and document analysis were conducted at the mine premises over the course of a quarter.

The interview questionnaires were divided into three sets for the three categories of women interviewed: for women in core mining, for women in middle management and for women in senior management positions. The questionnaire comprised of introductory questions which were to understand the employment level of participants and the number of years they have spent in the industry and level specific questions which were to understand women's perception on the factors that contributed to a lower number of women representations in senior and executive management positions in the mine. Face to face interviews were conducted at the mine premises and via the internet at times convenient and agreed upon with the participants.

#### 4.3. Ethics

Before administering data gathering instruments, a clearance certificate was obtained from the University of the Witwatersrand. The researcher acquired the informed consent of participants by distributing a consent form which was signed by participants before the interviews. Confidentiality was maintained in terms of the name of the mine or participants.

#### 4.4. Data analysis

The responses from the participants were recorded and analyzed. Five main themes that addresses the research objectives were identified, grouped, and explained in the results section below. The study analyzed data observed in the research by utilizing tables and charts that easily capture the different varieties of response rate, number of years that the participants have been working at the mine, entry level qualification of participants and gender of their immediate supervisor. The study presented the questions asked, the responses from the participants and drew a conclusion from these.

#### 4.5. Data validation

In this study, validity was ensured by creating an interview guide and an observation checklist that detailed the factors related to the research objectives and the responses to which participants can answer the research questions. The study also ensured validity by using simple and understandable terms that the participant can easily comprehend.

### 5. Results

The study did not follow a coding process; however, the responses were grouped into main themes based on the similarity of questions asked. The questions asked to the participants are grouped into themes and are presented below.

#### 5.1. Participant employment level and number of years in the industry

All the participants were asked introductory questions which were to understand the number of years they have spent in the industry and the

level at which the participants entered the mining industry.

Most of the women in core mining indicated that they had less than five years of work experience. Most of the women in middle management and senior management indicated that they had between five- and 10-years' worth of work experience. None of the participants had less than 12 months' work experience, which is satisfactory that the data was collected from a sample that was experienced enough to be aware and likely to articulate the themes of the study well. The number of years at the mining industry of the participants of this research are shown in Fig. 1. Most of the participants indicated that they joined their initial employment positions with either a national diploma, a degree, or a post graduate qualification as indicated in Fig. 2.

All the women participants in middle management indicated that their entry level was middle management, while only one woman in senior management's entry level was middle management. 75% of the women in senior management joined the at senior management positions. None of the women had been elevated from core mining to middle management or senior level. 25% of women in core mining indicated that they joined the mining industry as graduate trainees, which is virtually a middle management entry level, and they are in core mining as part of their training requirements.

#### 5.2. Participant's aspirations

Women in core mining and middle management were asked if they aspire to be in executive positions, this question was asked to determine whether the mining environment had caused their career aspirations to wane. 63% of the women indicated that they aspired to occupy senior management level posts. However, it was notable that 67% of those who answered in the negative, were women in core mining. This suggests that women in core mining may have been exposed to disheartening gender discrimination more than women in middle management. The study found that while 63% of the women do aspire to higher or senior managerial level posts, 50% of the total core mining women participants would want their chances of career progression elsewhere away from the male-dominated mining sector.

#### 5.3. The environment in the mining industry

All the participants in core mining and middle management levels were asked how the male domination of the environment in the mining industry affects their prospects of acquiring leadership positions and if they feel that women have the same opportunities as men to develop their skills and knowledge. 38% indicated that male colleagues generally projected a conduct and behaviour that suggests that they do not think that women belong in the mining industry and therefore simply treat them like they must tolerate them as they are not valid colleagues. According to the participants, this has the effect of denying them

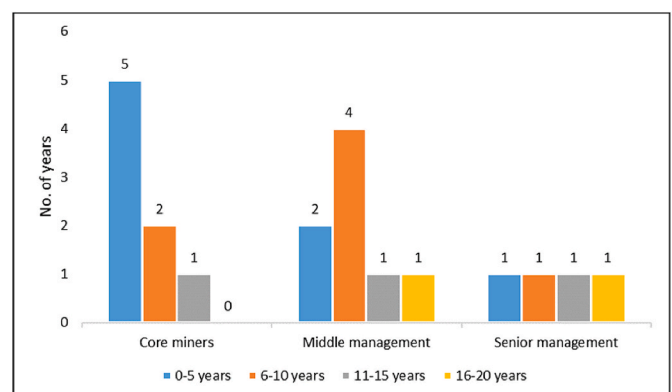


Fig. 1. Number of years working in the mining industry of participants.



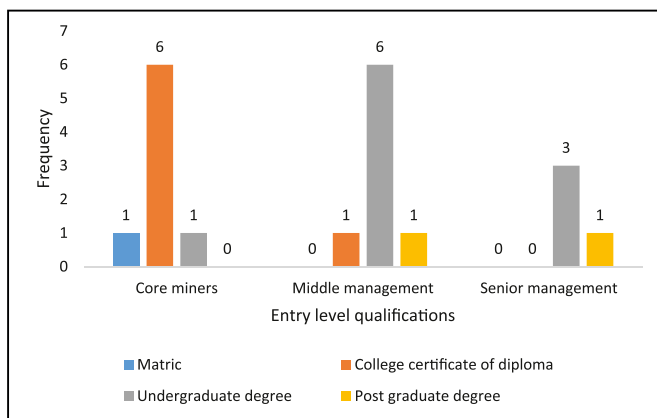


Fig. 2. Entry level qualifications of participants.

mentorship and hinders their path to senior management as selection of leadership roles is heavily influenced by an informal culture. 25% of the participants were neutral. Six of the 16 women who participated indicated that the male-dominated culture at the mines did not affect their prospects at all. It was however evident from the data that 63% of the women interviewed are negatively affected by the male-dominated culture, which places them at a disadvantage when informal considerations for leadership roles are being made, as male colleagues support each other and tend to be cynical of women leaders.

The question was asked of women in core mining and middle management to ascertain whether they feel there are equal opportunities for career development. 69% of the responses was a decisive “no”. The same 69% of these participants indicated that both organizational culture and the multiple socially constructed roles of women meant that they had less support, less time, and less funding to develop their educational qualifications and skill base. 31% percent of the participants, however, answered in the affirmative, suggesting that women could as easily upgrade their skills and education as men. It was also notable that this minority group was made up of women in middle management. Collectively however, the data shows that 67% of women feel they do not have the same opportunity to develop their skills as men do and the reasons generally range from limited consideration and support to the various gender roles that a woman had to perform at work, at home and in the community.

#### 5.4. Barriers and challenges

Sixty percent of the participants indicated that there was a lack of support structures within the industry for them to develop themselves and become more suitably educated and skilled for executive level posts. 40% of the participants indicated that there was some support but it was not adequate. 75% of the participants indicated that the multiple societal roles and socio-economic disadvantages that confronted women in the industry were significant barriers. 65% of the women also indicated that toxic masculinity, a management that was sometimes aloof to the idea of women elevation and leadership, unless it was government-mandated, were all significant hindrances.

#### 5.5. Policies and procedures

The common message from the participants was that the mining industry can align their policies to support a 50:50 representation of women in senior and executive management positions, with governance measures in place. The mines should intentionally develop and support women for senior and executive management positions through on-the-job training and exposure, formal training, policies, and facilities that support work-life integration.

## 6. Discussions

In this section, research findings based on the responses to each research question were discussed. The discussion of findings was performed in a manner that answers the research questions and was categorized under different broad themes.

### 6.1. The primary factors that impede women in becoming senior or executive managers in the mining industry

It can be deduced from the participant’s responses that factors from support related to work, personal and home life challenges are acting as barriers to the career development of women. To address the work-related challenges, it is necessary for the organizations to introduce culture change programs, which will introduce the change in attitudes of both male and female employees on how they view women and their employment in senior and executive management positions. To measure progress and the efficiency of these programs there should be monitoring systems that are transparent and efficient (Botha, 2017).

The mining industry can also assist by introducing allowances, work-life balance strategies such as affording the employees flexible working arrangements, allowing them to work from home when necessary and introducing child caring facilities (Botha, 2017). To avoid creating unintended consequences, these initiatives should not only be introduced for women but for both men and women in the workplaces to ensure that both groups can achieve the work-life balance Rincon et al. (2017).

Toxic masculinity and prejudice that characterize informal organizational culture, multiple societal and cultural roles in the workplace, home, and community also act as barriers. As a result of these challenges women often leave the mining industry after a few years post joining. These challenging environments are perceived as frustrating and result in women leaving these workplaces thus causing a valuable loss of talent to organizations (Chowwen, 2003).

The study interviewed women in middle and senior management positions, which means that there is a pool of competent women at the workplace. As part of the retention strategy and affording women the practical experience, the mining industry can allow the women an acting opportunity when the men in senior and executive positions are away. This will assist in making women visible, increasing their leadership skills, giving them the zeal to aspire for those positions as well as sending a positive message across the organization.

Other primary factors are socio economic disadvantages that inhibit women from upgrading their qualifications and skills that would make them more suitable for leadership positions; and multiple gender identities that women must adopt as they are climbing the ladder and in different mining spaces. The mining industry and the women themselves should play a role in educating the female employees to ensure that they improve their confidence, capabilities and efficiency, which will assist them in improving their managerial and leadership skills. Mining companies should take further responsibility for the development of women by providing financial, logistical support and sanctioning manpower development leave. The revised mining charter also mandates human resource development and encourages mineral right holders to develop and educate their employees (DMRE, 2018). The multiple gender roles women must perform and the lack of support result in these roles being an obstacle to career development. Modern literature on gender guiding this study argues that there should not have to be a choice between home commitments and career advancement if support structures are present at work to cater for these multiple commitments.

Post and Byron (2015) stated that female board representation is positively related to accounting returns, and this could be because of different knowledge, experience, values, being able to deeply discuss and integrate the knowledge and information and that each member brings to the board. Female board members are likely to bring different cognitive frames to the board as compared to their male counter parts and this is due to the differences in their experiences and knowledge

(Post and Byron, 2015). Rincon et al. (2017) also stated that organizations which are diverse in upper management levels have a great chance of obtaining better performance and this was supported by the results obtained from Norwegian companies which have women on their boards. It was established that there is a positive relationship between the effectiveness of a company and the proportion of the women it has in its senior positions (Rincon et al., 2017).

The positive accounting was found in countries with stronger shareholder protection (Post and Byron, 2015). Given the later it is critical to support women through the challenges they experience so that they can aspire and acquire senior and executive level positions. This expands the talent and knowledge pool in the organization and represents career possibilities to prospective candidates.

### 6.2. How national and local policies improve or worsen these challenges

Policies and procedures are documents that provide direction on how specific activities should be conducted and they also regulate those activities (Botha, 2017). The mining companies should develop policies and procedures that addresses how the women representation will be increased in senior and executive positions. The latter mentioned policies and procedures should be made transparent in the workplaces in order to be effective, with reduced misunderstandings amongst employees (Botha, 2017).

Currently Policies only prescribe the end state and not the inclusive process. Policies also do not stipulate the required number of women per management level but only focuses on women in mining targets. In several countries such as Netherlands, Spain, Norway, and France there is quota-legislation addressing gender representation in the boardrooms (Lückerath-Rovers, 2013). In Spain and Norway, the law stipulates that each gender on the board should account for at least 40% of those board members (Lückerath-Rovers, 2013).

Each mining company should set internal aspirational targets for achieving gender diversity on all levels. These targets should form part of the internal policies and procedures. Through the study, it was established that at the mine where the research was conducted, there is a pool of competent women in middle management positions who are ready to take on senior management positions. Therefore, to avoid unintended consequences, women should be promoted because they are competent, and not because the organization wants to meet the set targets. The targets can start of as voluntary and gradually become mandatory (Sotola, 2019).

The government should introduce an incentive to recognize companies that are doing well in terms of gender diversity in all management levels. These awards can be similar to the safety awards that are awarded to the mines for their safety records. This could be the name and fame culture where companies are recognized for their efforts towards gender diversity. This could assist in encouraging the mines towards a gender equality behaviour (Sotola, 2019). Similar incentives have been adopted by some organizations such as Catalyst in the United States and Federation of Business Professional Women in South Africa (Izraeli & Adler, 1996).

### 6.3. How policy and intervention can support transformation of gender relations to advance gender equity in senior and executive management positions

Interventions such as sensitization workshops and having men, especially men in senior positions to advocate for gender equality could change the gender imbalance in the organization. Men in executive positions have the power to employ women for senior management positions and they also have the power to influence their networks to employ a woman for a senior or executive position (Sotola, 2019).

Compelling gender ethics by writing them into company rules and regulations and appointing women leaders from core mining roles should be implemented to enhance the career advancement of women.

This will deconstruct the informal culture which considers women as not being suited to the mining industry's environment.

Mentorship programs can also add value in preparing women for senior and executive positions (Sotola, 2019). It has been noted that women wait until they 100% meet the job criteria before they can apply for it, mentorship can play a role in encouraging women to apply for those senior and executive positions. The mentors can be a combination of men and women to ensure effectiveness of the program. Matotoka and Odeku (2021) mentioned that training and development plays a critical part in increasing the prospects of any employee from being promoted.

The mining industry is encouraged to not treat government mandated quotas of women that are appointed to executive level posts as a minimum or a burden and must aim for a culture with 50:50 representation of both genders at the highest level. Botha (2017) also acknowledged that by appointing women in non-traditional positions, senior leaders will be playing a meaningful role in supporting the vision for gender diversity. Botha (2017) encouraged the senior leaders to appoint more than one woman in a team to create critical mass. The concept of critical mass was also supported by Salcedo (2017), in that companies should take positive actions towards building critical mass of women in strategic decision-making positions, management and executive positions. Chowwen (2003) noted that it is easier for men to be appointed in traditional male positions not because women are being actively discriminated against, but because senior leadership (who are men) would favour men over women because of similar interests, similar way of communication and a sense of male bonding. Therefore, senior leaders need to be intentional in increasing women representation in senior and executive management positions.

Policy and practice must exhibit a consciousness to the seriality of women. Policies should not solely be based on economic purposes, they should also include ethical and social reasons (Kilic and Kuzey, 2016). Kilic and Kuzey (2016) stated that it is unethical and discriminatory to exclude women in positions based on their gender.

### 6.4. A business case for women in senior and executive positions

Educating women, developing their leadership skills and allowing them opportunities to act in senior positions increases the company's talent pool, leads to greater motivation and improved productivity which then leads to better company performance. The latter mentioned initiatives also increases the possibilities of retaining women within the organization which helps in building and maintaining institutional memory.

Having women in senior and executive positions gives an organization a competitive advantage as global competition is looking at companies effectively utilizing their human capital (Izraeli and Adler, 1996). Successfully achieving the gender equality in senior and executive positions allows the organization to fully utilize the women's skills which then gives the organization an opportunity to outperform organizations that have not achieved gender equality (Izraeli and Adler, 1996).

It has been identified through the study that women are constantly striking a balance between work, family life and social responsibilities in such a way that they are sometimes willing to delay their career growth to pursue their family responsibilities. Similarly, previous studies have identified that organizations that have achieved gender equity in senior and executive management positions tend to do well in corporate social responsibilities and this type of performance is spreading over to other aspects of the business such as the environment and operational ethics. Corporate social responsibilities and taking care of the environment are requirements for mining companies (de Castro et al., 2018).

## 7. Conclusions

This study investigated the primary factors that impede women from becoming senior or executive managers in the mining industry, how local and national policies impact the challenges that women face in the

mining industry and how policy and intervention support the advancement of gender equity through transformation in senior and executive management positions in the mining industry.

As part of data collection, in depth interviews were conducted with 20 participants from different professional levels at a mine. It was found that women experience challenges at home and at work that impede them from advancing in their careers to senior and executive management roles. Those challenges range from toxic masculinity, prejudice, socio economic disadvantages and having to have multiple gender identities at work and in the community.

The study identified that even though there are policies in place, those policies are insufficient as they only prescribe the end state and not the inclusive process. They also do not stipulate the required number of women per management level but only focuses on women in mining targets.

Attaining gender equity in senior and executive level positions has both social and economic benefits, therefore change is required within the industry. Future business leaders will be measured on equity, how well the different genders are represented in different positions and their effectiveness in utilizing their human capital.

#### Authors' contribution

Thusani Mkhathswa: Conceptualization, Formal analysis, Writing – original draft. Bekir Genc: Supervision, Validation, Writing, Review and editing, Project Administration.

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#### Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.resourpol.2022.102957>.

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