Investigating the Prevalence of Gender Stereotypes in a South African Mine

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Abstract

The existence of gender stereotypes is a common phenomenon. Pressure on organisations to establish workforce diversity evolves constantly. However, diversity encourages stereotyping. Once organisations know the stereotypes, they will be able to manage these more effectively. The main aim of this study is to investigate the prevalence of gender stereotypes in a mine in South Africa. Limited research has been undertaken to date on the existence of gender stereotypes in the South African mining industry. A sample of 39 employees from a South African mine was selected and semi-structured interviews were conducted. The data were analysed by means of content analysis. Most of the employees who were interviewed understood the concept of gender stereotypes. The most prevalent stereotypes that were found were in-group stereotypes, out-group stereotypes and perceived in- and out-group stereotypes (meta stereotypes). The existence of gender stereotypes in a mine can be managed through establishing various interventions to assist employees to confront their own stereotypes and valuing employees for their contribution and not according to the gender group they belong to. This study adds to the literature and knowledge of gender stereotypes. Limited studies have been conducted on gender stereotypes in South African mines. The information obtained in this study provides insight into the stereotypes that should be managed in the South African mining industry.

Keywords: gender stereotypes; mining industry; diversity

Introduction

South Africa is known for being a country of diversity. However, this diverse population was, for many years, not reflected in the workplace and, more specifically, in the mining industry. Legislation was one of the contributors to setting gender barriers in the workplace of the mine, as the South African Minerals Act of 1991 prevented women from working underground. This exclusion of women in the mining industry was no longer acceptable, and to deal with these inequities in the workforce, the Employment Equity Act was promulgated in 1998. One of the main purposes of this act is to ensure equal representation of South Africa's population throughout all job-related classifications in the workforce (Republic of South Africa [RSA], 1998). The promulgation of certain legislation such as the Mineral and Petroleum Resources Development Act (RSA, 2002), the Broad-Based Black Economic Empowerment Act (RSA, 2003) and the Mining Charter in 2004 further contributed to the rectification of the imbalances that were created in the past, specifically in the mining industry.

The South African Mining Charter specifically aims to redress imbalances from the past by identifying groups that have been discriminated against in the past. If mining companies do not comply with the Mining Charter, they might lose their licence to mine. The Charter further required mining companies to ensure that by the year 2009 10% of their total workforce should be represented by women and 40% participation of historically disadvantaged South Africans at the management level of the mining companies (Department of Mineral Resources, 2009). In reaction to this, the demographic composition of the mining industry in South Africa has changed from a 2% female representation of the total workforce in 2000 (Minerals Council of South Africa Annual Report, 2018) to 43.4% in 2021 (Statistics South Africa, 2021). However, women still constitute only 12% of the total South African mining population (Smith, 2023). A study by Kansake et al. (2021) found that gender discrimination, income inconsistencies, a lack of colleague support, uncertain career paths and harassment are issues that women in the mining environment are struggling with, which therefore result in the low participation rate of women in this sector.

Although the Mining Charter was only partially successful in achieving the targets as mentioned above (Department of Mineral Resources, 2009), it brought forward a much more diverse workforce for the mining industry in South Africa. Furthermore, although workplace diversity can be a huge advantage to organisations, it comes with challenges. According to Culpin et al. (2015), one of the most challenging obstacles when working with a diverse workforce is changing people's perceived ideas, mindset and attitudes towards those people who are different from them and, at the same time, ensuring that each group's needs, expectations, skills, attitudes and values are met. In other words, diverse workforce challenges are enforced through existing stereotypes and the high need to ensure that one's demands are met. Stereotypes are common in diverse organisations and may lead to conflict and have a negative impact on the organisation's work environment (Buelens et al., 2011). Stereotyping regarding gender in particular

very often occur in a male-dominant field (such as mining) and women in these fields are very often left to deal with the consequences of negative stereotyping (Anani et al., 2023).

The term "stereotype" was coined by Walter Lippmann in the early 1920s, who defined it as an image or picture a person has in their head of the world (Lippman, 1922). When individuals engage in stereotyping, it is believed that individuals from the same group share the same characteristics (Bergh, 2021). Stereotypes are generally based on personal attributes such as race, gender, sexual orientation, occupation, age and nationality (Bergh, 2021). Stereotypes can have a destructive effect as they do not give credit to the unique contribution or attributes of each member of a specific group and generally result in false opinions or even inappropriate behaviour towards them (Bergh, 2021; Luthans, 2010).

To optimise the understanding of stereotypes, it is essential to understand the theory that describes the process of stereotyping, namely the social identity theory (SIT). The SIT (Trepte, 2006) explains that individuals tend to categorise themselves into social groups based on their characteristics that are similar to those of others. Individuals tend to hold positive stereotypes about members of the in-group (the group an individual belongs to), while negative stereotypes are typically held about members of the out-group that individuals do not belong to (Al-Waqfi & Forstenlechner, 2010; Lee et al., 2007). According to Rubin and Hewstone (2004), three main elements are identified from the SIT: the social psychological, the system and the societal element.

The social psychological element refers to appreciating the cognitive and motivational methods linked to creating intergroup discrimination. This results in an unavoidable social identity process, in which the individual conducts a self-analysis to ensure that self-values are aligned with the group's values (Tajfel, 1979; Turner, 1975). Group members are therefore motivated to embrace several cognitive and behavioural identity management strategies to realise the need for self-esteem. Intergroup discrimination is further identified as a strategy for behavioural identity management to convert the prominence of the in-group and/or out-group to create or protect an elevated in-group status (Rubin & Hewstone, 2004).

The system element determines whether the phenomenon of intergroup discrimination will occur or not and is centred on three socio-structural variables, namely, the perviousness of group boundaries, the solidity of the position of the intergroup, and the intergroup's rightfulness. The system element can therefore foresee that intergroup discrimination will transpire when group boundaries are watertight and the status of the intergroup is unsound and illegitimate (Tajfel & Turner, 1979, as cited in Rubin & Hewstone, 2004).

The societal element of the theory refers to the historical, cultural, political and economic background that encompasses the various groups and their status (Rubin &

Hewstone, 2004). Two predominant features of the societal background are the societal norms and the societal value of intergroup performance; in other words, despite the fact that the societal norms suggest the background of intergroup relations against which intergroup discrimination may be projected to be activated, the societal value of intergroup behaviour determines the possibility of the in-group status to be created, protected and elevated (Rubin & Hewstone, 2004). According to Tajfel (as cited in Sigrid, 2017, p. 10), the SIT sees the individual relationship with the group in the society as "an individual's knowledge that he belongs to certain social groups together with some emotional and value significance to him of this group membership".

Moore (2006) indicated that stereotypes could lead to acts of viciousness, seclusion and discernment against groups that are in the minority. Therefore, as women in the mining workplace often find themselves to be in the minority, gender stereotyping and integration of women in the workplace are some of the many challenges that the mining industry has to face continuously. Kreitner and Kinicki (2010) outline gender stereotypes as philosophies that males and females are appropriate to fulfil different roles owing to each gender's different traits and abilities. Madden (2011) states that gender stereotypes are seen as unfavourable and clearly affect all behaviour of males and females. Onwunta and August (2007) mentioned that the majority of the stereotypes that come to mind are predominantly negative. They furthermore mentioned that although some aspects of stereotyping may be constructive, the popular stereotypes are largely negative and rarely any positive stereotypes regarding females are ever heard.

According to Glick and Fiske (2001), any resentment towards women who contest the power of men is seen as hostile sexism. However, a more discreet form of systematic oppression has been identified as benevolent sexism, where women are stereotyped as caring, gentle and sensitive (Glick & Fiske, 2001). These stereotypes are then wrongfully viewed as being positive. Those who consent to benevolent sexism typically perceive women as incompetent outside the boundaries of traditional domestic roles (Glick & Fiske, 2001), and treat women accordingly. Because of the benevolent sexist perceptions that women hold, they will not interpret this patronising behaviour of men as negative stereotypes but rather as acts of caring and being protected (Glick & Fiske, 2001). In addition, men see themselves as more powerful or knowledgeable than women and therefore treat them accordingly (Dardenne et al., 2007), thereby strengthening the benevolent sexist behaviour.

Gender stereotypes can have an extremely negative impact on the working relationships among employees and may lead to aspects such as workplace conflict and workplace tension. These aspects, in turn, might lead to labour unrest, a poor work climate and unfair labour practices—aspects that no organisation can afford, but pressure is added continuously to transform the organisations' workforce to a more diverse one. Hunt et al. (2015) stated that diversity in the workplace is essential, not only because legislation is adding pressure to organisations but also because women and racial minorities offer a variety to organisations that can lead to an increase in communication and

performance benefits for the organisation, and a more creative workforce with improved decision-making skills.

Although gender stereotyping should become a crucial discussion point in the mining industry, little literature could be found regarding this issue in South Africa, and no literature was found on gender stereotypes in South Africa in a mining work environment. In this study, we therefore aimed to explore the prevalence of gender stereotypes in the mining industry.

General Objective

The general objective of this study is to identify and explore the existence of gender stereotypes in a mine in South Africa.

Research Design

In this study, we followed a qualitative descriptive research design, as we aimed to describe the gender stereotypes held by participants rather than to require a conceptual rendering of a phenomenon (Sandelowski, 2000).

Study Participants

Face-to-face, semi-structured interviews were conducted with men and women working in a Northern Cape mine in South Africa. A quota sampling strategy was used to select the participants for this study. Specifically, the sample consisted of more or less an equal number of male ($n = 19$) and female ($n = 20$) participants ($n = 39$) who are permanently employed at the mine. The characteristics of the participants are presented in Table 1.

Table 1: Profile of participants

Item	Category	Frequency	Percentage
Gender	Male	19	49
	Female	20	51
Race	Black	13	33
	Coloured	14	36
	Indian	3	8
	White	9	23
Age	20–30 years	12	30
	30–40 years	17	44
	40+ years	10	26
Division	Operational	24	62
	Admin	15	38
Occupational level	Middle managers	8	21
	Junior managers	13	33
	Semi-skilled	18	46

A relatively equal number of females (51%) and males (49%) participated in the study. The majority of participants were coloured (36%) and black (33%), and between 30 and 40 years of age (44%). Most of the participants occupy positions in operational divisions of the mine (62%), and the majority represent the semi-skilled occupational level (46%).

Data Collection

The data were collected via semi-structured face-to-face interviews in a private room at the participating mine. The female participants were interviewed by a female researcher, and the male participants by a male interviewer.

Informed consent was obtained from the participants before the interview. They were informed of the purpose of the study, that the study is entirely voluntary and that the findings will be published.

The following questions were asked during the interview:

- Do you know of any stereotypes that exist regarding your gender group? If the answer is yes, tell me more about it.
- Do you know of any stereotypes that exist regarding the opposite gender group? If the answer is yes, tell me more about it.

The interviews were recorded with the consent of the participants. The participant responses were transcribed verbatim on an Excel spreadsheet, whereafter the data were analysed.

Data Analysis

The data were analysed through inductive content analysis as the purpose was to describe and summarise the data from the interviews (Kyngäs, 2020). The researchers read through the data to familiarise themselves with the content. The researchers analysed the data independently by breaking down the data into smaller meaningful units and generating initial codes through open coding. Based on the similarity or dissimilarity of the content, the categories were grouped and labelled to reflect the content of the category (Kyngäs, 2020).

Findings

The male and female participants of this study were asked to share their experiences regarding gender stereotypes in the mine. The participants perceived both in-group and out-group gender stereotypes to exist in their workplace. Following is a discussion of in-group and out-group gender stereotypes.

In-Group Gender Stereotypes: Males

The male participants stated that numerous stereotypes exist about their gender group. Men mostly stereotyped themselves in a favourable light. Men were perceived to be stronger than women and, therefore, also able to assist women with physical duties, particularly when they were unable to perform physical duties because of being pregnant:

> Ons kan enige swaar voorwerpe optel, ons dink dat ons fisies meer sterker is as vrouens [we can pick up any heavy items, we think that we are physically stronger than women]. (Participant 24)

> Sometimes you have to lift up heavy equipment, then the female is not that strong than the male, then the men need to go and assist the female. (Participant 30)

> Women fall pregnant, and then the men have to carry the load. (Participant 31)

Men also stereotype themselves as being better than women in specific areas. Men are perceived to be superior and more intelligent than women. They also dislike taking orders from women. Men stereotyped themselves as being suited to the mining environment, as they are tough.

> Where core mining is, men should be; there should be tough people. (Participant 29)

> As jy dink soos mans is altyd slimmer as vrouens . . . [when you think that men are always more intelligent than women]. (Participant 37)

> . . . want 'n vrou kan mos nie vir ons kom sê wat om te doen nie. [because a woman cannot tell us what to do]. (Participant 39)

Despite the stereotypes mentioned above about men being better and more robust than women, men still prefer to speak to women about their problems:

> Ek dink ook as mans 'n probleem het sal hul eerder praat met 'n vrou as 'n man [I also think that if men have a problem, they will rather talk to a woman than a man]. (Participant 23)

In-Group Gender Stereotypes: Females

The female participants mentioned that various stereotypes exist about the female gender. Women stereotyped themselves in both a favourable and unfavourable light. More positive stereotypes included that women are superior to men in the household, administrative duties, and multitasking. Women also stereotyped themselves as better performers, and more competent, responsible and intelligent than men.

> . . . women are good at cleaning . . . (Participant 12)

Ek dink dis maar die admin gedeelte, ons vrouens dink net ons is beter daarmee as die mans [I think it is the admin part, we as women think we are better at it than men]. (Participant 16)

Ek dink vrouens kan meer baie dinge op een slag doen as mans [I think women can do more things simultaneously than men]. (Participant 16)

Vrouens is meer verantwoordelik [women are more responsible]. (Participant 2)

. . . but mind wise women are stronger than men, cause we can think very quickly. (Participant 7)

I would say 80% of the things women can do, men can't do. Even in the mine, we as women can take a hammer and do the same as men. (Participant 9)

Vrouens perform beter [women perform better]. (Female participant 2)

Despite the female participants stereotyping themselves more positively than the male participants, they admitted they lack in specific areas such as driving trucks and performing physical duties. They did, however, mention that they do respect male authority:

Women are not as physically strong as men. (Participant 17)

Die dames los al die swaar werk vir die mans want hulle sien dit nie as deel van hulle werk nie [the ladies leave all the physical work for the men because they don't regard it as part of their work]. (Participant 14)

As daar waste weggegooi moet word, as die kruiwa getiep moet word, dan sê die vrouens dis nie hulle werk nie. [If there is waste to dispose of, if the wheelbarrow has to be used, the women will say it is not their work]. (Participant 14)

Women have this thing of respecting male opinion and respecting male authority . . . (Participant 12)

Ja, en ons kan nie trokke ry soos hulle nie [Yes, and we cannot drive trucks like them]. (Participant 6)

The female participants expressed unfavourable stereotypes toward themselves, such as lacking ambition, being manipulative and engaging in frequent gossiping.

So hulle manipuleer die mans om hulle sin te kry. [So, they manipulate the men to get what they want]. (Participant 15)

. . . women all day, they gossip and gossip. (Participant 7)

. . . dan is daar ander vroumense wat totaal en al nie vorentoe wil gaan nie [and then there are other women who are not ambitious]. (Participant 4)

The female participants specifically mentioned stereotypes relating to working in the male-dominated mining environment. Stereotypes mentioned included that women have to prove themselves and often experience challenges regarding promotion. They compete with fellow females in the same environment and are reluctant to express their femininity at work.

. . . want ek gaan daai man wys ek is beter as hy. . . [because I will prove to that man that I am better than he is]. (Participant 2)

. . . behave more like a man so that you can be accepted into the workplace . . . so we need to stop to play our role as a female . . . I cannot be seen as the girl or a woman. I need to fit in. (Participant 12)

. . . maar oor die algemeen is die bevordering van vrouens bietjie stadig [but in general the promotion of women is slow]. (Participant 18)

. . . and feeling that other women are competition . . . (Participant 12)

Out-Group Gender Stereotypes

This category emerged when the participants were asked whether they were aware of any gender stereotypes in the mine regarding the opposite gender. The participants were requested to elaborate by providing examples.

Out-Group Gender Stereotypes: Males

The female participants mentioned numerous stereotypes that they hold of their male colleagues. They often viewed men in a negative light. Stereotypes of this nature included men undermining and disregarding female opinions, treating them unprofessionally, and being ignorant about how to treat women. The female participants also believed that men are not keen to assist them; however, men often do assist women because they fear that the women may hurt themselves when performing a challenging physical task.

For me, it's when a man undermines a woman . . . (Participant 7)

. . . hulle sal eerder na die man se opinie luister voordat hulle die vrouens se opinies in ag sal neem [they will rather listen to the opinion of a man before they will consider the opinion of women]. (Participant 4)

. . . they don't want to help you. (Participant 4)

. . . they don't differentiate between when being at work where you need to be professional and being out of work. (Participant 11)

. . . hulle het nie baie inligting oor vrouens rêrig nie en hoe vrouens gehanteer moet word nie [they do not know much about women and how women should be treated]. (Participant 1)

According to the female participants, men believe that women are not suited to the mining industry and dislike women in higher positions than themselves. Men are further stereotyped as feeling intimidated by women, being sexist, and viewing women as sexual objects.

Die mans voel nog steeds dat die myn nie eintlik 'n vrou se plek is nie [The men still think that the mine is not a place for women]. (Participant 4)

. . . maar mans hou nie daarvan om 'n vrou te hê in 'n pos hoër as hulle nie [but men do not like it when a woman holds a higher position that they do]. (Participant 19)

Mans is seksisties [Men are sexist]. (Participant 15)

Ek dink hulle voel geïntimideerd deur ons vrouens [I think they feel intimidated by us as women]. (Participant 19)

One of the stereotypes is that men give undue attention to women because this is an industry that is not used to women, so we feel it can be sexual. (Participant 12)

Men are further stereotyped as more hardworking and robust than women, therefore more competent to perform physical duties.

Ok, I will say that we think that men are very stronger than us. (Participant 8)

. . . vernaam as dit by fisiese werk kom, dat die stereotipe is ja maar die mans sal dit beter kan doen as wat die vrouens dit sal kan doen [especially regarding physical work, the stereotype is that men are better at it than women]. (Participant 16)

. . . en die mans doen al die werk maar die vrouens nie [and the men do all the work not the women]. (Participant 20)

Men are also stereotyped as inferior to women, specifically regarding household duties, administrative tasks and multitasking.

Yes, it is also like when women think men can't multi-task and cook. (Participant 11)

Mans nie kan admin werk doen nie [males cannot do admin work]. (Participant 3)

The female participants described men as bad, controlling, competitive, unreliable, insensitive and rude.

Hulle wil net in beheer wees, hulle wil alleen in beheer . . . [They just want to be in control, they want to be the only ones in control]. (Participant 4)

Mans is nie so betroubaar in die myn nie [Men are not reliable in the mine]. (Participant 2)

They are insensitive. (Participant 17)

Mans is kompeterend [Men are competitive]. (Participant 19)

Die mans is in meeste gevalle barbare. Hulle is ongeskik in mining [The men are in most cases barbarians. They are rude in the mining environment]. (Participant 6)

Hulle is hierdie horrible people [They are horrible people]. (Participant 15)

The female participants also positively described men as not being fussy. Interestingly, some female participants described men as frequently engaging in gossip, whereas others indicated that men do not gossip and that they prefer working with men.

Hulle is nie regtig so picky soos wat almal hulle uitmaak nie [They are not as fussy and hard to please as everyone says they are]. (Participant 15)

Mans skinder volgens my meer as vrouens [I think men gossip more than women]. (Participant 15)

I rather work with men because they work and do not gossip like women do. (Participant 7)

Out-Group Gender Stereotypes: Females

The stereotypes men hold of women in the mine are presented in this category. Most stereotypes men hold of their female colleagues are negative. Men stereotyped women as less robust than men and that women expected men to assist them with certain tasks.

Most males think that women can't do their work properly . . . you know like the physical work. (Participant 30)

Die fisiese werk, dit is baie keer moeiliker vir 'n vrou om dit te doen as vir die man [The physical work is often more difficult for a woman than for a man]. (Participant 34)

. . . and then the men have to carry the load. (Participant 31)

The male participants also stereotyped women negatively with specific reference to women in the mining environment. They believed that women are not suited to the mine and should not be mine foremen; it might also be why women are believed to need to prove themselves in the mining environment. Women are further stereotyped as disliking working in adverse conditions such as wet and dark conditions. However, women are believed to receive the same remuneration but do lighter work or are appointed in higher positions than their male counterparts. Furthermore, women also

experience a sense of entitlement when it comes to the working environment. They are also believed to feel negative and inferior to men in the workplace.

> . . . en ons voel ook dat hul nie bevoeg is of in staat is om in mynbou te wees nie. [and we also feel that they are not competent to work in mining]. (Participant 39)

> Women need the opportunity to prove themselves because it is a whole new environment for them. (Participant 31)

> . . . dat mans nie vrouens kan sien as voormanne nie. [that men cannot imagine women as supervisors]. (Participant 32)

> . . . en wil nie uitgaan en werk as dit donker of nat is nie [and they do not want to work outside when it is dark and wet]. (Participant 25)

> Hulle kry dieselfde pay maar hulle dink hulle moet die softer goed doen [They receive the same salary as men but think they must do lighter work]. (Participant 32)

> Die meeste vrouens voel 'n bietjie minderwaardig teenoor ons in die myn [Most women feel inferior to us in the mine]. (Participant 22)

> . . . they are very negative towards them. (Participant 27)

> Ek dink vrouens voel party keer dat hul entitled is tot sekere dinge in die werksplek [I think that women sometimes feel entitled to certain things in the workplace]. (Participant 24)

> Die een ou wat saam met my werk het al die tyd die werk gedoen, maar toe stel hulle 'n vrou aan wat twee vlakke hoër as hy is om dieselfde werk te doen [The one guy who worked with me did all the work, but then they appointed a women who was two levels higher than his position to do the same work]. (Participant 33)

The male participants think that women should rather perform tasks such as administrative and household duties.

> Ja, mans dink vrouens moet eerder in 'n klerklike pos wees [Yes, men think that women should rather be in administrative positions]. (Participant 24)

> . . . hul hoort eintlik meer in die kombuis [they actually belong in the kitchen]. (Participant 36)

The male participants shared stereotypes such as women being the weaker sex because they are slow, sick and weak. Women are also stereotyped as frequently complaining and being less intelligent than their male counterparts, and that they believe that all men have sexual intentions towards women. The male participants also believe the typical stereotyping of women being incompetent when it comes to driving and that women

frequently engage in gossip. Women are, however, positively stereotyped as being neater than men.

> Hulle sien die vrouens as baie kermerig. Hulle kerm vir enige ding [They see the women as complaining a lot. They complain about anything]. (Participant 32)

> Dit is as jy dink soos mans is altyd slimmer as vrouens [It is when you think men are always cleverer than women]. (Participant 34)

> Ja, ek dink sodra 'n man 'n dood normale geselskap met 'n vrou het, gaan hulle onmiddellik met daardie gedagte van, hy kom hier na my toe, hy soek iets by my, dit is sexual harassment, en in baie gevalle is dit nie so nie. Jy kry baie keer 'n ou wat gemaklik is om met ander mense te praat en omgekeerd, maar nie met seksuele bedoelings nie [Yes, I think that the moment a man has a normal conversation with a woman, she gets the impression that he wants something from her, that is sexual harassment, and in many cases that is not true. Often, some guy is comfortable talking to other people, but without having sexual intentions]. (Participant 23)

> . . . vrouens hou van skinder [women like to gossip]. (Participant 23)

> . . . al die vrouens kan nie bestuur nie [not all women can drive]. (Participant 32)

> . . . view the females as a person that is always sick, weak and very slow. (Participant 27)

> . . . hulle is oor die algemeen netjieser [in general, they are neater]. (Participant 34)

Outline of Findings

The discussion below presents the findings obtained from this study. The general objective of this research study was to identify and explore the existence of gender stereotypes in a mine in South Africa.

The collected data indicated that in-group and out-group stereotypes exist in the mining industry. The male and female participants of this study stereotyped their own gender group (in-group) and the opposite gender group (out-group). Bergh (2021) indicated that several multilayered processes evolve when this occurs, as members of an in-group not only favour their group over out-groups but are also prone to view participants of their group as being very different from others and thereby overemphasising the differences of the in-group. Dovidio et al. (2010) indicated that strong feelings about shared characteristics in an in-group could be developed, and a "we" attitude can be formed. This occurrence is better known as the SIT.

Four categories were identified from the results: (1) in-group gender stereotypes about males; (2) in-group stereotypes about females; (3) out-group stereotypes about males; and (4) out-group stereotypes about females.

In-Group Stereotypes About Males

The responses in this category were quite similar among the male participants. They mostly stereotyped themselves in a favourable light. According to Feldman (2013), individuals tend to attribute positive characteristics to their in-group while undervaluing out-group members—a phenomenon referred to as in-group bias (Aberson et al., 2000). It was often mentioned that men are superior to women regarding physical strength and intelligence. The male participants further believed that they were suited to the mining environment and that women were not. When analysing the data, the researcher found that the findings in the literature concerning the perception of men are aligned, as DeArmond et al. (2006) alluded to the fact that men are regarded as assertive, emotionally stable, strong, competent and top achievers in the workplace.

In-Group Stereotypes About Females

The results indicated that women stereotype themselves in a positive light; however, they mostly stereotype themselves negatively. Positive stereotypes included that women are superior to men concerning intelligence, competence, responsibility, household and administrative tasks, and multitasking. Literature has revealed that in-group members are more tolerant of positive stereotypes about their in-group if they view them as true (Gómez et al., 2009; Swann et al., 2004). The female participants specifically mentioned stereotyping about being employed in the mining environment. They mentioned that they have to prove themselves because they work in a male-dominated environment, and they admitted that they are not as physically strong or able to perform physical tasks as men. They also mentioned that they experience challenges when it comes to promotion. The researcher found this quite interesting as this study was conducted among women in the mine, who fulfil mainly operational roles. However, this confirms the research by Wu (2006) that stereotypes determine the actions perceived as feminine or masculine. Crawford (2012) indicated that these prescriptive stereotypes force men to behave more masculinely and women to act more feminine and can result in limited career choices of individuals, especially when certain professions are regarded as more appropriate for men or women (Whitley & Kite, 2006).

The researcher believes that a stereotype threat might be occurring among the women in this mine. A stereotype threat refers to the fear of knowing that stereotypes are accurate and true, and if members of a specific group become aware of the stereotypes, their performance can be affected significantly (Carducci, 2009). In response to a stereotype threat, three consequences have been identified: cognitive, emotional and behavioural (Inzlicht et al., 2011; Vick et al., 2008). As the female participants mentioned mostly negative in-group gender stereotypes, it is plausible that when they became aware of the gender stereotypes that the men in the mine have about them, stereotype threat occurred, and they responded in a cognitive way. This finding further confirms the finding by Block et al. (2011) that the effects of cognitive responses towards stereotype threats can lead to in-group members having doubtful beliefs about their performance. In this study, there are behavioural consequences, where the female

participants mentioned that they must prove themselves and that women are not suited to the mine and should occupy traditional roles.

Out-Group Stereotypes About Males

The out-group stereotypes about males were determined when the female participants were asked whether they knew of any stereotype regarding the men in the mine. The majority of the stereotypes about men were negative. It was believed that men behaved mostly negatively towards women, such as undermining them, treating them unprofessionally, disregarding their opinions, and not being keen on their being employed in the mine and occupying higher positions than themselves. These findings agree with other research that indicated that stereotypes generally imply that men are regarded as more suitable for leadership roles than women (Koenig et al., 2011). Men were negatively stereotyped as being rude, insensitive and controlling. Literature supports this finding. This finding is aligned with the findings that stereotypes about members of the out-group are more likely to be viewed negatively or destructively and that groups that are perceived to compete with one another are viewed more unpleasantly and hostilely (Al-Waqfi & Forstenlechner, 2010; Esse et al., 1993; Falkenberg, 1990; Lee et al., 2007). By negatively stereotyping others, individuals protect themselves and their self-esteem (Whitley & Kite, 2006). A few positive stereotypes about men included that they are hardworking and robust.

Out-Group Stereotypes About Females

The findings of this section were obtained when the male participants were asked whether they were aware of any gender stereotypes concerning women in the mine. The results indicated that the male participants held mostly negative stereotypes of women. The male participants negatively stereotyped women for working in the male-dominant mining environment. They believed that women were not suited to such an environment, should not be appointed as supervisors, and disliked working in harsh physical conditions. Instead, the women had to focus on administration and household duties. This was likely why women are stereotyped as needing to prove themselves in the mining environment. When individuals are aware of being negatively stereotyped, they may fear that they will behave in a way that confirms these negative stereotypes (Plous, 2003). This may result in the individual experiencing negative emotions and thoughts and becoming anxious, which may also harm the performance of various tasks (Aronson et al., 2013; Steele, 1997). Women, however, were positively stereotyped to be neater than men.

Practical Implications

Although studies have been conducted internationally and in South Africa concerning exploring gender stereotypes in the workplace, a study about the identification and existence of gender stereotypes, in the mining industry in particular, has not been conducted before. This study indicated that gender stereotypes exist in the mine in the

form of in- and out-group gender stereotypes (the personal views of self and others). As the mining industry is continuously under pressure to diversify its workforce, research has indicated that the more diverse the employees are, the more gender stereotypes will occur. Gender stereotypes must therefore be addressed and overcome by valuing each employee's unique contributions regardless of gender so that the true significance of a diverse workforce can be rightfully experienced.

Without intervention, gender stereotyping can have several serious adverse effects in the workplace, and although current South African regulation is forcing women to be employed in various positions across the organisation, in this case the mines, it is clear from this study that men will have to go a long way before they will acknowledge women as their equal partners. Women in mining operations are in the minority and, most often, they are not readily accepted by their male counterparts. Women experience stereotype threats, which not only affect their cognitive, behaviour and emotional status but can also have a tremendous impact on the organisation's culture, in this case the mine, resulting in poor organisational performance and industrial actions.

Limitations and Recommendations

This study was conducted in a specific mine in the Northern Cape. The employees of this mine are mostly locals from the community, being raised in a very conservative nature where traditional roles are still highly honoured. Testing this study's findings in another mining company that is not in a rural district will be recommended to see whether the findings correspond. According to the work of Burgess and Borgida (1999), Eagly and Karau (2002), and Heilman (2001), gender stereotypes have both descriptive and prescriptive properties. Descriptive gender stereotypes inform what men and women are like, whereas prescriptive gender stereotypes focus on how men and women should be. Since this current study was focused on obtaining descriptive stereotypes, further studies should focus on obtaining prescriptive stereotypes.

Conclusion

In conclusion, the results found in this study indicated that men and women still have very strong views and beliefs about their gender groups and the opposite ones. These results are similar to the social role theory (Eagly, 1987; Eagly & Karau, 2000; Hogg 2003), and because gender stereotypes replicate discernments about the social roles of men and women, these perceptions can change with any redeployment of social roles. Projecting the future, gender variances should be seen to disappear over time, and by absorbing more female employees into the workplace, ensuring that they are adequately skilled with the relevant technical and managerial competencies, employees will not view one another's capabilities in the mining operations based on their gender, but on their ability to successfully perform the job.

References

Aberson, C. L., Healy, M. R., & Romero, V. L. (2000). Ingroup bias and self-esteem: A meta-analysis. *Personality and Social Psychology Review*, *4*(2), 157–173. https://doi.org/10.1207/S15327957PSPR0402_04

Al-Waqfi, M., & Forstenlechner, I. (2010). Stereotyping of citizens in an expatriate-dominated labour market. *Employee Relations*, *323*, 64–381. https://doi.org/10.1108/01425451011051596

Anani, A., Potter, J., & Antonio, C. (2023). *Impact of Occupational Gender Segregation on Female Workers' Well-Being and Retention in the Mining Industry*. SME Annual Conference, Denver, CO.

Aronson, J., Burgess, D., Phelan, S. M., & Juarez, L. (2013). Unhealthy interactions: The role of stereotype threat in health disparities. *American Journal of Public Health*, *103*(1), 50–66. https://doi.org/10.2105/AJPH.2012.300828

Bergh, Z. (2021). Sensory and perceptual processes in work behaviour. In Z. Bergh (Ed.), *Introduction to Work Psychology* (pp. 162–194). Oxford University Press.

Block, C. J., Koch, S. M., Liberman, B. E., Merriweather, T. J., & Roberson, L. (2011). Contending with stereotype threat at work: A model of long-term responses. *Counseling Psychologist*, *39*(4), 570–600. https://doi.org/10.1177/0011000010382459

Buelens, M., Sinding, K., WaldstrØm, C., Kreitner, R., & Kinicki, A. (2011). *Organisational Behaviour* (4th ed.). McGraw-Hill.

Burgess, D., & Borgida, E. (1999). Who women are, who women should be: Descriptive and prescriptive gender stereotyping in sex discrimination. *Psychology, Public Policy, and Law*, *5*(3), 665–692. https://doi.org/10.1037/1076-8971.5.3.665

Carducci, B. J. (2009). *The Psychology of Personality* (2nd ed.). John Wiley & Sons.

Crawford, M. (2012). *Transformations: Women, gender and psychology* (2nd ed.). New McGraw-Hill Higher Education.

Culpin, V., Millar, C., & Peters, K. (2015). Multigenerational frames of reference: Managerial challenges of four social generations in the organization. *Journal of Managerial Psychology*, *30*(1). https://doi.org/10.1108/JMP-08-2014-0231

Dardenne, B., Dumont, M., & Bollier, T. (2007). Insidious dangers of benevolent sexism: Consequences for women's performance. *Journal of Personality and Social Psychology*, *93*(5), 764–779. https://doi.org/10.1037/0022-3514.93.5.764

DeArmond, S., Tye, M., Chen, P. Y., Krauss, A., Rogers, D. A., & Sintek, E. (2006). Age and gender stereotypes: New challenges in a changing workplace and workforce. *Journal of Applied Social Psychology*, *39*(6), 2184–2214. https://doi.org/10.1111/j.0021-9029.2006.00100.x

Department of Mineral Resources. (2009). *Mining Charter Impact Assessment Report (October 2009)*. https://www.gov.za/sites/default/files/gcis_document/201409/miningcharterimpact.pdf

Dovidio, J. F., Hewstone, M., Glick, P., & Esses, V. M. (2010). Prejudice, stereotyping and discrimination: Theoretical and empirical overview. In J. F. Dovidio, M. Hewstone, P. Glick & V. M. Esses (Eds.), *The Sage Handbook of Prejudice, Stereotyping and Discrimination* (pp. 3–28). Sage. https://doi.org/10.4135/9781446200919.n1

Eagly, A. H. (1987). *Sex Differences in Social Behavior: A Social-Role Interpretation*. Erlbaum.

Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, *109*(3), 573–598. https://doi.org/10.1037/0033-295X.109.3.573

Esse, V. M., Haddock, J., & Zanna, M. P. (1993). Values, stereotypes, and emotions as determinants of intergroup attitudes. In D. M. Mackie & D. L. Hamilton (Eds.), *Affect, Cognition, and Stereotyping: Interactive Processes in Group Perceptions* (pp. 37–166). Academic.

Falkenberg, L. (1990). Improving the accuracy of stereotypes within the workplace. *Journal of Management*, *16*, 107–118. https://doi.org/10.1177/014920639001600108

Feldman, R. S. (2013). *Understanding Psychology* (11th ed.). New York, NY: McGraw-Hill.

Glick, P., & Fiske, S. T. (2001). An ambivalent alliance: Hostile and benevolent sexism as complementary justifications for gender inequality. *American Psychologist*, *56*(2), 109–118. https://doi.org/10.1037/0003-066X.56.2.109

Gómez, A., Seyle, C., Huici, C., & Swann, W. B. (2009). Can self-verification strivings fully transcend the self–other barrier? Seeking verification of ingroup identities. *Journal of Personality and Social Psychology*, *97*(6), 1021–1044. https://doi.org/10.1037/a0016358

Heilman, M. E. (2001). Description and prescription: How gender stereotypes prevent women's ascent up the organisational ladder. *Journal of Social Issues*, *57*(4), 657–674. https://doi.org/10.1111/0022-4537.00234

Hogg, M. A. (2003). Social identity. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of Self and Identity* (pp. 279–462). Guilford Press.

Hunt, V., Layton, D., & Prince, S. (2015, 1 January). *Why diversity matters*. McKinsey & Company. https://www.mckinsey.com/business-functions/organization/our-insights/why-diversity-matters

Inzlicht, M., Tullett, A. M., Legault, L., & Kang, S. K. (2011). Lingering effects: Stereotype threat hurts more than you think. *Social Issues and Policy Review*, *5*(1), 227–256. https://doi.org/10.1111/j.1751-2409.2011.01031.x

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. https://doi.org/10.1016/j.resourpol.2020.101962

Koenig, A. M., Eagly, A. H., Mitchell, A. A., & Ristikari, T. (2011). Are leader stereotypes masculine? A meta-analysis of three research paradigms. *Psychological Bulletin*, *137*, 616–642. https://doi.org/10.1037/a0023557

Kreitner, R., & Kinicki, A. (2010). *Organizational Behavior* (9th ed.). McGraw-Hill/Irwin.

Kyngäs, H. (2020). Inductive content analysis. In H. Kyngäs, K. Mikkonen & M. Kääriäinen, (Eds.), *The Application of Content Analysis in Nursing Science Research* (pp. 13–21). Springer. https://doi.org/10.1007/978-3-030-30199-6_2

Lee, N., Sandfield, A., & Dhaliwal, B. (2007). An empirical study of salesperson stereotypes amongst UK students and their implications for recruitment. *Journal of Marketing Management*, *23*, 723–744. https://doi.org/10.1362./026725707X230018

Lippmann, W. (1922). *Public Opinion*. Harcourt: Brace.

Luthans, F. (2010). *Organisational Behaviour: An Evidence-Based Approach* (12th ed.). McGraw Hill.

Madden, M. (2011). Four gender stereotypes of leaders: Do they influence leadership in higher education? *Wagadu*, *9*, 55–89.

Moore, J. R. (2006). Shattering stereotypes: A lesson plan for improving student attitudes and behavior toward minority groups. *Social Studies*, *97*(1), 35–39. https://doi.org/10.3200/TSSS.97.1.35-39

Onwunta, I. E., & August, T. H. (2007). Stereotyping in communities: A story of the endangered gender in Nigeria. *Practical Theology in South Africa*, *22*(2), 139–145.

Plous, S. (2003). The psychology of prejudice, stereotyping, and discrimination: An overview. In S. Plous (Ed.), *Understanding Prejudice and Discrimination* (pp. 3–48). McGraw-Hill.

Republic of South Africa. (1998). *Employment Equity Act, 1998 (Act No. 55 of 1998)*. Pretoria: Government Printers.

Republic of South Africa. (2002). *Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002)*. Pretoria: Government Printers.

Republic of South Africa. (2003). *Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003)*. Pretoria: Government Printers.

Rubin, M., & Hewstone, M. (2004). Social identity, system justification, and social dominance: Commentary on Reicher, Jost et al., and Sidanius et al. *Political Psychology*, *25*(6), 823–844. https://doi.org/10.1111/j.1467-9221.2004.00400.x

Sandelowski, M. (2000). Whatever happened to qualitative description? *Research in Nursing & Health*, *23*(4), 334–340. https://doi.org/10.1002/1098-240X(200008)23:4%3C334::AID-NUR9%3E3.0.CO;2-G

Sigrid, R. (2017). The we in me. Considering terrorist desistance from a social identity perspective. *Journal for Deradicalization*, *13*, 1–28. https://journals.sfu.ca/jd/index.php/jd/article/view/122

Smith, T. (2023, 14 February). *Changing the Narrative Around Women in Mining*. ESI Africa. https://www.esi-africa.com/international/changing-the-narrative-around-women-in-mining/

Statistics South Africa. (2021). *South African Labour Market is More Favourable to Men than Women*. https://www.statssa.gov.za/?p=14606#:~:text=Women%20accounted%20for%2043%2C4, Elementary%20and%20Domestic%20work%20occupations

Steele, C. M. (1997). A threat in the air. *American Psychologist*, *52*(6), 613–629. https://doi.org/10.1037/0003-066X.52.6.613

Swann, W., Polzer, J., Seyle, D., & Ko, S. (2004). Finding value in diversity: Verification of personal and social self-views in diverse groups. *Academy of Management Review*, *29*(1), 9–27. https://doi.org/10.2307/20159006

Tajfel, H. (1979). Individuals and groups in social psychology. *British Journal of Social and Clinical Psychology*, *18*(2), 183–190. https://doi.org/10.1111/j.2044-8260.1979.tb00324.x

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The Social Psychology of Intergroup Relations* (pp. 33–47). Brooks/Cole.

Trepte, S. (2006). Social identity theory. In J. Bryant & P. Vorderer (Eds.), *Psychology of Entertainment* (pp. 255–272). Lawrence Erlbaum.

Turner, J. C. (1975). Social comparison and social identity: Some prospects for intergroup behaviour. *European Journal of Social Psychology*, *5*(1), 1–34. https://doi.org/10.1002/ejsp.2420050102

Vick, S. B., Seery, M. D., Blascovich, J., & Weisbuch, M. (2008). The effect of gender stereotype activation on challenge and threat motivational states. *Journal of Experimental Social Psychology*, *44*(3), 624–630. https://doi.org/10.1016/j.jesp.2007.02.007

Whitley, B. E., & Kite, M. E. (2006). *The Psychology of Prejudice and Discrimination*. Thompson Wadsworth.

Wu, M. (2006). Perceptions about male and female managers in the Taiwanese public relations field: Stereotypes and strategies for change. *Public Relations Quarterly*, *51*, 36–42.