



**Gender Stereotypes and Coping Strategies for women in male-dominated
industries. A Case of the Rail Industry in Gauteng, South Africa**

A Mini Dissertation Submitted in Partial Fulfilment of the Degree of

Master of Business Administration

in the

FACULTY OF ECONOMICS AND MANAGEMENT SCIENCE

at the

UNIVERSITY OF THE FREE STATE

by

Chuma Kobese (2019055587)

Date: September 2024

SUPERVISOR: Dr. Shingirayi Chamisa

DECLARATION

I, Chuma Kobese, declare that the contents of this research project are entirely my own. I have not shared this research project with any other students, have appropriately cited all sources, and have not submitted this document, either fully or partially, to any other educational institution. I am aware of the UFS's anti-plagiarism and academic dishonesty policy.

Signature:

Date:

ACKNOWLEDGMENTS

I would like to express my gratitude to my Lord and Savior; the journey was challenging, but His love and wisdom sustained me during the tough times while conducting this research. I also extend my thanks to Dr. Shingirayi Chamisa for your invaluable assistance; this achievement would not have been possible without your expertise and guidance. I am grateful to my husband, Lekhoromo Boye, for his unwavering support, providing me with the time and encouragement needed to pursue this study, and to our son, Lulibo, who always wanted to join me for my online classes. I appreciate my colleagues for dedicating their time and participating in the research study, and I thank Transnet Freight Rail for allowing me to conduct the research within the organisation. Lastly, I want to acknowledge myself for persevering through the challenges along the way.

ABSTRACT

Progress within the South African technical work environment regarding the eradication of gender stereotyping and the establishment of gender-neutral environments and gender equality in managerial positions has been disappointing. This research investigates the gender-specific challenges faced by women managers and the coping mechanisms they adopt in the male-dominated Transnet Freight Rail, South Africa. The study adopted a constructivism paradigm and utilised qualitative research framed by resilience theory. Purposive sampling was used to select 12 female managers at Transnet freight Rail Johannesburg, who participated in the study. Data collection was conducted utilising semi-structured interviews, and the data was analysed using thematic data analysis.

The study sheds light on both the advancements and ongoing obstacles experienced by female managers at Transnet Freight Rail concerning gender stereotypes. Despite the company's stated commitment to gender equity, female employees continue to face gender-based expectations and a lack of gender-sensitive facilities, such as separate restrooms. Some male colleagues may feel uncomfortable working under female authority figures, which can impede progress towards achieving workplace equity, even where policies exist. The research emphasises the importance of allocating resources and developing infrastructure to tackle these challenges, particularly in predominantly male-dominated industries. Strategies for navigating the system included embracing Affirmative Action Plans and pursuing additional education opportunities, enabling women to assert their managerial authority. While there have been notable changes in the representation of women in traditionally male-dominated positions, significant opposition remains. The study's findings highlight the importance of establishing more transparent policies and enhancing resource distribution to promote gender equality. Women continue to encounter difficulties in managing physical demands and work-life balance, especially during pregnancy, in workplaces that prioritise male employees. Recommendations to address these concerns include implementing structured mentorship programmes, establishing clear policies, and continuing with ongoing transformation initiatives.

Keywords: Gender stereotypes, Coping strategies, Male-dominated industries, Gender equality, Transnet Freight rail, work-life balance.

Contents

DECLARATION.....	ii
ACKNOWLEDGMENTS.....	ii
ABSTRACT.....	iii
LIST OF FIGURES.....	ix
LIST OF TABLES.....	x
CHAPTER 1.....	1
INTRODUCTION AND BACKGROUND TO THE STUDY.....	1
1.1 Introduction.....	1
1.2 Background of study.....	2
1.3 Problem statement.....	4
1.4 Research aim and objectives.....	5
1.5 Objectives of the study.....	5
1.6 Research Questions.....	5
1.7 Significance of the study.....	6
1.8 Limitations and Delimitations.....	7
1.9 Brief Literature Review.....	7
1.10 South African female-gender research in male-dominated environment.....	7
1.11 Theoretical Framework.....	10
1.12 Conceptual framework.....	11
1.13 Research Methodology.....	12
1.14 Research Design.....	12
1.15 Data Collection.....	14
1.15.1 Data Collection Tool.....	14
1.15.2 Target population.....	14
1.15.3 Sampling and sample size.....	15
1.15.4 Pilot Study.....	16
1.15.5 Data collection method.....	16
1.16 Data Analysis.....	17
1.17 Research trustworthiness criteria.....	18
1.18 Ethical Consideration.....	18

1.19 Elimination of bias	19
1.20 Chapter Summary	20
CHAPTER 2	21
LITERATURE REVIEW	21
2.1 Introduction	21
2.2 Gender	21
2.3 Gender stereotypes	23
2.4 Gendered stereotyping of Women in Male Dominated Industries	24
2.4.1 Physical body-based stereotyping	25
2.4.2 Dynamics between dominant (male) and minority (female) groups	26
2.4.3 Informal interactions	27
2.4.4 Workplace surveillance	28
2.4.5 Sexual harassment	28
2.5 Resilience: theory and practice	29
2.6 Coping mechanism	31
2.6.1 Feminine advantage	32
2.6.2 Adopting masculine qualities	33
2.6.3 Mentoring	33
2.6.4 Optimistic character	34
2.6.5 Recognition and success	34
2.7 Coping Strategies in the Context of South Africa Railways	35
2.8 Thoughts on fighting gender stereotypes in male dominated environments ...	36
2.8.1 Inclusive recruitment strategies	36
2.8.2 Formulation and implementation of strong gender formal rules	36
2.8.3 Gender diversity and inclusion policy framework	37
2.9 Chapter summary	38
CHAPTER 3	39
RESEARCH METHODOLOGY	39
3.1 Introduction	39

3.2 Research paradigm: ontological, epistemological and methodological considerations.....	39
3.3 Research strategy.....	44
3.3.1 Data collection tool	44
3.3.2 Target population.....	48
3.3.3 Sampling and sample size	49
3.3.4 Pilot Study.....	50
3.3.5 Data collection method	50
3.3.6 Data Analysis.....	51
3.4 Research trustworthiness criteria	52
3.4.1 Credibility.....	52
3.4.2 Consistency/ dependability	52
3.4.3 Neutrality/ conformability.....	53
3.4.4 Transferability	53
3.5 Ethical Consideration	53
3.6 Elimination of bias	55
3.7 Chapter Summary.....	56
CHAPTER 4	57
DATA PRESENTATION AND ANALYSIS.....	57
4.1 Introduction	57
4.2 Demographic information.....	57
4.3 Thematic analysis table.....	58
4.4 The formal and covert organisational gender stereotyping of women managers at Transnet Freight Rail	60
4.4.1 The provision of resources, infrastructure bias, and policy equity.....	61
4.4.2 Gender stereotypes at Transnet Freight Rail	62
4.4.3 Transformation driver and opposer at the Transnet Freight Rail.....	64
4.5 Determining female managers' unique physical, work identity, and work-life balance needs which are used to disadvantage them at Transnet Freight Rail	66

4.5.1 The physical and health-related difficulties women experience at Transnet Freight Rail	66
4.5.2 Discrimination and exploitation of women managers in the workplace	68
4.5.3 Balancing work-life for female managers at Transnet Freight Rail.....	70
4.6 Establishing coping strategies and resources that women managers at Transnet Freight Rail utilise	71
4.6.1 Coping strategies for challenges of a gendered nature	71
4.6.2 Supporting women managers' resilience and addressing gender stereotyping	73
4.7 Conceptualising how negative stereotyping of women managers can be mitigated and coping strategies improved at Transnet Freight Rail	75
4.7.1 Suggested measures for making women managers more resilient and better able to resist gender stereotyping	75
4.7.2 Making the working environment more women and women manager-friendly	76
4.8 Chapter summary	78
CHAPTER 5	79
DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS.....	79
5.1 Introduction	79
5.2 Key findings	79
5.2.1 Objectives 1: To identify the formal and covert organisational gender stereotyping of women managers at Transnet Freight Rail	79
5.2.2 Objective 2: To determine female managers' unique physical, work identity, and work-life balance needs which are used to disadvantage them at Transnet Freight Rail	81
5.2.3 Objective 3: To ascertain the coping strategies and resources that women managers at Transnet Freight Rail utilise	83
5.3 Recommendations	84
5.3.1 Limitations.....	84
5.3.2 Recommendations for future studies	85

5.4 Chapter summary	85
References.....	86
Appendix A: Email Recruitment	
Appendix B: Interview Guide	
Appendix C: Research Approval Transnet Memo	
Appendix D: Ethics Approval Certificate	
Appendix E: Language editing confirmation	
Appendix F: Turnitin report	

LIST OF FIGURES

Figure 1.1: Resilience as a process and outcome.....	11
Figure 1.2: Conceptual framework	12
Figure 2.1: Resilience as a process and outcome.....	31

LIST OF TABLES

Table 3.1: Paradigms and their components	41
Table 3.2: Summary of different data collection methods and applicability.....	45
Table 4.1: Participants demographic information.....	53
Table 4.2 : Thematic analysis.....	54

CHAPTER 1

INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 Introduction

Traditionally, there are jobs that are thought of as, jobs for men and are naturally male-dominated and jobs for women which are in turn female-dominated. Women in male-dominated occupations face unique challenges and use distinct coping strategies affecting their motivation and retention in these occupations (Martin & Barnard, 2013). Therefore, when women enter jobs in predominately male-dominated environments, their presence elicits several reactions as this goes against the norm (Vogel, 2021). It therefore comes as no surprise that women in leadership roles working in male-dominated fields have been reported to face significant gender-specific challenges such as insubordination, gender stereotyping, discrimination and lack of appreciation (Phiona, 2016; Vogel, 2021). The gender-specific challenges are informed by societal stereotypical gender assumptions (Martin & Barnard, 2013; Tabassum & Nayak, 2021). Faced with the gender-specific challenges, women leaders resort to adopting coping mechanisms to enable them to navigate and mitigate the effects of the gender-specific challenges in the male-dominated fields (O'Brien, Hanlon & Apostolopoulos, 2023). The stereotyping and coping mechanisms adopted are complex, dynamic and context-specific; consequently, the impact on women managers' performance and job-retention is also complex, dynamic and context-specific and varies from one individual woman to another (Clarke, 2020).

In Africa, gender stereotyping is a constant significant problem as the entry of women into male-dominated industries has remained low (Aneke, 2015); also, the coping mechanisms have largely been ineffective as retention of women in male-dominated industries is low (Alibhai, Buehren & Papineni, 2015; Aneke, 2015). The persistence of these problems demonstrates that little is known on how to mitigate gender stereotyping and improve coping strategies thus depriving male-dominated industries of "new and abundant" talent in the form of women.

Given the above discussion, the current study intends to undertake an investigation into the central concepts of gender stereotyping, coping mechanisms and the effects of these dynamics on female managers at Transnet Freight Rail, South Africa railways, which is a technical and male-dominated environment of national importance. This chapter serves as the introduction to the study and presents the background of the

study, the rationale for conducting the study, the aim and objectives of the proposed study as well as a brief literature and methodological discussion.

1.2 Background of study

Academic and corporate literature reports have noted a marked expansion in the overall contribution of women to the South African labour force; this increase is due to legislative initiatives and social awareness, which have improved access to education and employment for women (Dinkelman & Ngai, 2022; Kabeer, 2021; Vyas-Doorgapersad & Bangani, 2020). Nevertheless, there has been disappointing progress within the South African technical work environment with regard to eradicating gender stereotyping and ensuring gender-neutral environments and gender equality in managerial positions (Hyde et al., 2020; Statistics South Africa, 2021).

Transnet Freight Rail is a leading player in the transportation and logistics sector in South Africa, with a specific focus on providing rail services. Despite endeavours to foster gender diversity and equitable opportunities, Transnet Freight Rail continues to consist out of mostly male employees, presenting significant gender-based obstacles for women in high-ranking roles (Mnyandu, 2018). Transnet Freight Rail's organisational culture is mostly dominated by males, which might unintentionally marginalise women in positions of leadership (Zuma, 2017). The conspicuous absence of women in high-ranking positions at Transnet Freight Rail is apparent, leading to gender disparities across the organisation (Malan, 2014). South Africa has enacted laws to support gender equality, including the Women Empowerment and Gender Equality Bill.

Nevertheless, the difficulties in carrying out the implementation of the Women Empowerment and Gender Equality Bill continue to affect the gender dynamics of Transnet Freight Rail. The reason for the male-dominance is the highly physical nature of the rail sector and historical perceptions on the unsuitability of women to work in the rail industry which is highly physical in nature (Martin & Barnard, 2013). This male-dominance in the South African rail industry is evident from the lowest levels on the organogram to executive management (Statistics South Africa, 2021). With regard to women in management, their representation continues to be extremely low;

specifically, women constitute 46.8% of the workforce, but their representation in managerial roles is limited to only 40.4% (Duvall, 2021). The representation of women in leadership roles, particularly at the senior level, continues to be disproportionately low. With regards to management positions, there has been an increase of women in the South African rail industry; however, the increase has been slow, and the industry has a marked low retention of female managers (Phiona, 2016; Statistics South Africa, 2021).

According to Yavorsky, Ruggs and Dill (2021) and Lai (2020), women are financially incentivised to enter fields that have traditionally been dominated by males. However, a worrying trend has emerged, indicating that women who go against the grain of traditional female professional paths and work in male-dominated fields generally end up reverting to female-dominated environments or positions that support “their position” as primary caregivers (Bridges, Wulff & Bamberry, 2023; Lekchiri & Kamm, 2020).

As articulated above, the transition and ultimate success and longevity of women managers in male-dominated sectors is fraught with challenges. The challenges generally are a function of social constructs and are reinforced by established gender norms and hierarchies within families and communities (Makarem & Wang, 2020).

Despite policy initiatives at national level to advance gender parity and women’s empowerment, males continue to occupy the position of dominant gender within the conventional structure of the work environment (Coetzee & Moosa, 2020). Subsequently, policy development, while making advances in gender-parity, is handicapped by the fact that most policy makers are men; and decision-makers and influencers at the national level are primarily men (Akinlolu & Haupt, 2020). At the cooperate level, where decisions are profit driven, organisational structures and practices still do not accommodate women’s career paths or their demands to balance work and family life; thus there is an invisible architecture which disadvantages females (Naoum et al., 2020). The “invisible architecture,” refers to the male dominance in institutions which contributes to a culture of paying lip service as Public Relations (PR) obligations to gender empowerment initiatives, while nevertheless continuing with unwritten practices which disadvantage women.

The literature on challenges faced by women in the workplace has also been predominately authored by men as academia and research are also male-dominated

sectors; this in turn can “compromise” the female narrative as men and women are fundamentally different with regards to perceptions in the work place and of the work place itself (Pillay-Naidoo & Vermeulen, 2023). The consequence is that women, to this day, continue to have gender challenges as initiatives to mitigate the gender challenges are influenced by flawed data from investigations done on women from a man’s perspective, which ignores the difference in gendered needs.

1.3 Problem statement

Gender stereotyping is a current and ongoing challenge which has been ineffectively dealt with in most male-dominated work environments, with devastating effects on individuals and organisations (Liu, 2022).

While the literature on occupational coping mechanisms is available, Raghuram (2008) claims that there is a dearth of literature specifically on female experiences and coping mechanisms in male-dominated fields from a woman’s perspective. Furthermore, there is limited literature specifically on female experiences and coping mechanisms in male-dominated fields from an African perspective (Forkuor, Buari & Aheto., 2020; Mushi & Bujane, 2023); developed nation literature is not transferable to the African context due to radically different economic, social and cultural variables.

The situation is worsened by the fact that longitudinal studies which track the evolution of gender stereotyping are complex since women do not often remain in male-dominated jobs for an extended period; hence, information on the dynamic coping mechanisms is hard to produce (Priyashantha, De Alwis & Welmilla, 2023). The lack of information is evident in the adoption of poorly structured and ineffective cultures meant to mitigate the stereotyping and implement strategies to assist females in coping. The notion that the initiatives are not information driven is backed up by women’s continued low adoption of specific careers and the high career change from male-dominated work environments to more female friendly environments (Spinner et al., 2021).

Failing to address the information gap in stereotyping and coping mechanisms for women in male-dominated fields has several adverse effects. The primary effect is that the work environment in male-dominated fields remains toxic for prospective female talent resulting in reluctance among women to join and remain in such

organisations; and if they do join, retention rates are likely to be low (Avolio, Chávez & Vélchez-Román, 2020; Bridges et al., 2023).

1.4 Research aim and objectives

The purpose of the proposed research is to investigate the gender-specific challenges faced by women managers in the male-dominated Transnet Freight Rail, South Africa railways fields. Additionally, it seeks to understand the strategies used by these women managers to stay motivated and succeed despite these obstacles. A manager is taken as someone who has a leadership role and has one or more people working under them (Maphanga, Mokoena & Isabirye, 2024).

1.5 Objectives of the study

The research objectives of the study will be as follows:

- To identify the formal and covert organisational gender stereotypes faced by women managers within Transnet Freight Rail.
- To determine female managers' unique physical, work identity and work-life balance needs which are used to disadvantage them at Transnet Freight Rail.
- To ascertain the coping strategies and resources that women managers at Transnet Freight Rail utilise.
- To conceptualise strategies for mitigating negative stereotyping of women managers and improving coping mechanisms at Transnet Freight Rail.

1.6 Research Questions

The research questions of the study will be as follows:

- What are the formal and covert gender stereotypes within the organisational culture regarding women managers at Transnet Freight Rail?
- Which female managers' unique physical, work identity and work-life balance needs are used to disadvantage them at Transnet Freight Rail?
- What coping strategies and resources do women managers at Transnet Freight Rail utilise?

- How can negative stereotyping of women managers be mitigated and coping strategies improved at Transnet Freight Rail?

1.7 Significance of the study

The study holds management and academic significance. From a management perspective, the study identifies barriers faced by women in leadership roles in the rail and transport industries, revealing gender-based inequalities and biases. It also highlights the strategies women in leadership use to navigate various situations, providing insights into their resilience and adaptability. These insights from the study can be used by management to frame policies which mitigate gender stereotyping and enhance the effectiveness of coping strategies. Additionally, by examining and adopting these techniques, businesses can better understand the instruments that have the greatest influence on addressing gender stereotypes. Organisations can evaluate their existing culture's support for coping strategies by creating an inclusive environment that promotes open discourse, embraces diverse perspectives, and ensures equitable opportunities. Implementing skill development programmes can improve coping mechanisms such as self-confidence and assertiveness. Advocacy and change are crucial for companies to become champions for transformative initiatives within their respective industries. The recommendations provided offer guidance for fostering coping mechanisms, potentially leading to better working conditions, gender equality, and overall well-being for women in South Africa's railway industry.

From an academic perspective, the study will act as a knowledge creation activity. Gender stereotyping and coping strategies are dynamic concepts, so while the study is cross-sectional, it will add knowledge to the longitudinal perspective of gendered stereotyping, as it adds upon the information available up to the year 2024. Also, while there is substantial literature on women in male-dominated environments, the overall focus on coping strategies is minimal (Bridges et al., 2020); this study seeks to address this gap by adding knowledge to this area.

1.8 Limitations and Delimitations

The proposed study is limited to women managers at Transnet Freight Rail, South Africa railways and focuses only on gender stereotyping and the coping strategies of these managers.

1.9 Brief Literature Review

This section presents the preliminary literature on the subject. The review starts with a discussion of South African research on gender issues at work from a woman's perspective in various male-dominated industries to obtain a comprehensive overview of pertinent issues. The literature review then deliberates on the theoretical framework and conceptual framework of the study.

1.10 South African female-gender research in male-dominated environment

Studies conducted in South Africa have examined gender issues in the workplace from a woman's perspective, focusing on specific pre-defined phenomena such as:

1. The relationship between work and home life for women in the workforce, as explored by Brink and De la Rey (2001), Mostert (2009) and (Van Aarde & Mostert (2008).
2. Study on the life-role construction of career-oriented women conducted by Franks, Schurink and Fourie (2006).
3. Van Den Berg and Van Zyl (2008) examined the levels of stress in high-level career women across different cultures.
4. The topic of women and affirmative action by Mathur-Helm (2005).
5. The challenges faced by female school principals in South Africa by Moorosi (2007).
6. Gender differences in perceptions of workplace progression by Lloyd and Mey (2007).
7. The career barriers faced by women engineers have been extensively studied by Du Plessis and Barkhuizen (2012).
8. Women's entrepreneurial self-efficacy has been studied by Urban (2010).

9. The workplace challenges faced by quantity surveyors in South Africa regarding gender and race were explored in a study conducted by Bowen, Cattell and Distiller (2008).

Du Plessis and Barkhuizen (2012) conducted a study that examined the obstacles faced by female engineers in their career progression. Their findings align with global research, as they identified insufficient training and mentorship opportunities as the main obstacles to the inclusion of women in the field of engineering. The authors also reached the conclusion that gender discrimination stands as the most prominent psychological obstacle. In research conducted by Damaske (2011), it was discovered that women often transitioned from male-dominated to female-dominated occupations due to the negative psychological effects they experienced, such as gender stereotyping and discrimination in traditionally male fields. Feyerherm and Vick (2005) asserted that it is not uncommon for women in male-dominated occupations to experience feelings of bias and under-utilisation.

Additional psychological barriers that hinder women from realising their full potential in occupations that are predominantly male-centred are connected to their own preconceived gender role expectations. The preconceived gender role expectations often revolve around women's competence and societal expectations, which can contribute to feelings of inadequacy, low self-efficacy, and low self-confidence (Damaske, 2011; Lewis-Enright, Crafford & Crous, 2009; Mathur-Helm, 2005; Shantz, Wright & Latham, 2011). Women who strive for success in male-dominated fields often face additional challenges due to the specific behavioural expectations associated with these occupations. In a study conducted by Davey (2008), it was discovered that female graduates perceive success in a male-dominated field as being both masculine and political. Thus, to thrive in male-dominated environments, women must adopt behaviours that may feel unfamiliar to them, as noted in previous research (Chowwen, 2007; Du Plessis & Barkhuizen, 2012). In their organisational contexts, individuals are often expected to adopt assertive male characteristics and engage in competitive interactional styles. A study by Akingbade (2010) suggests that this can put women at a disadvantage.

Other researchers have observed that the disparity in salaries, commonly known as the female-male pay gap, serves as a clear illustration of gender inequality and discrimination, impeding the advancement of women in their careers (Ashraf, 2007;

Feyerherm & Vick, 2005; Hicks, 2013). Consequently, women perceive a lack of recognition from their organisations, limited opportunities, and subsequently, a failure to receive appropriate compensation and positions that align with their abilities.

In occupations that are predominantly male, men possess a greater abundance of resources and authority to perpetuate discriminatory practices, policies, and ideologies (Damaske, 2011; Mathur-Helm, 2006). The seeming lack of concrete strategies to promote women's empowerment in organisations could potentially be attributed to the prevalence of male-dominated and gender-biased management approaches as reported by Willoh (2020). In work environments that are predominantly male, there is a tendency to uphold a career progression model that favours men (Mathur-Helm, 2006). This model associates performance with working extended hours and being physically present at all times which can be challenging for women due to the cultural obligation of being primary caregivers (Cha, 2013; Lewis-Enright et al., 2009). This behaviour, as highlighted by Harris and Giuffre (2010) and Lewis-Enright et al. (2009), can be seen as a subtle form of marginalisation that affects numerous women who have family responsibilities. Cha (2013) further emphasises this point. Balancing the responsibilities of being the main carers in the family, along with the demands of work, can result in women feeling overwhelmed and struggling to manage their time effectively. This can put additional strain on women's ability to achieve a healthy work-life balance.

Davey's (2008) study identified certain behaviours commonly associated with success in a male-dominated environment. These behaviours included engaging in political strategies, displaying assertiveness, engaging in deceitful tactics, focusing on personal gains, exhibiting excessive self-assurance, and manipulating others. Women in male-dominated environments often employ strategies such as seeking mentorship and embracing participatory leadership styles that emphasise qualities like compassion, fairness, and encouragement. These approaches align with their innate feminine tendencies (Chowwen, 2007). In contrast, female graduates in Davey's (2008) study exhibited atypical masculine behaviour, such as self-interest and individualism, in order to thrive. Interestingly, certain viewpoints suggest that women may experience a negative impact on their sense of authenticity and work identity when they adopt typical male behaviours (Du Plessis & Barkhuizen, 2012). Thus, it

appears that women find themselves in a complex position of navigating and responding to masculine politics (Davey & Davidson, 2000).

Women face significant challenges in entering historically male-dominated professions, as well as a lack of support and accommodation once they do. These factors contribute to an unappealing environment that hinders the recruitment and retention of women in these fields. In addition, a limited comprehension of the obstacles that women encounter and their strategies for navigating these settings could contribute to the limited integration and progression of women in traditionally male-dominated fields.

1.11 Theoretical Framework

The research is premised on the Resilience theory. The choice of the theory is informed by the need for resilience among women managers if they are to succeed and it encompasses all the different tactics, they employ to become resilient.

The resilient theory has been applied to a wide array of management and social research within the work environment (Cooper et al., 2020; Hartmann et al., 2020; Labrague, 2021). The premise of the matured Resilience theory is that resilience is both a process and an outcome as demonstrated in Figure 1.1.

Resilience, as defined in this framework, is a sequential process that leads to a certain outcome (Plimmer et al., 2022). The argument around the process and outcome of resilience theory is valid. Resilience theory research focuses on three interconnected components: mediating variables, outcomes, and adversity (Aburn et al., 2020). Resilience, as defined in this framework, is a sequential process that leads to a certain outcome. The primary focus of resilience research is on the mechanisms that mediate this process.

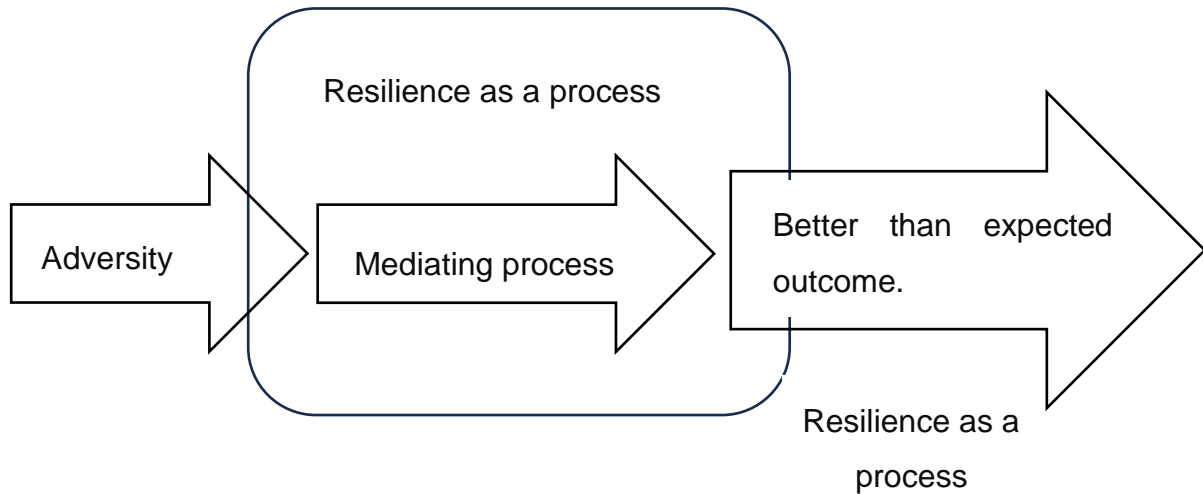


Figure 1.1: Resilience as a process and outcome

(Source: Van Breda, 2018)

The resilience theory is applicable to this study as it enables the recognition of stereotyping challenges as adversities. Coping strategies are then conceptualised as mediating processes. The coping strategies are then also viewed as components of the resilience process. The better-than-expected outcome would then be women managers staying in their workplace, having less stress and excelling; this would then be resilience as an outcome.

1.12 Conceptual framework

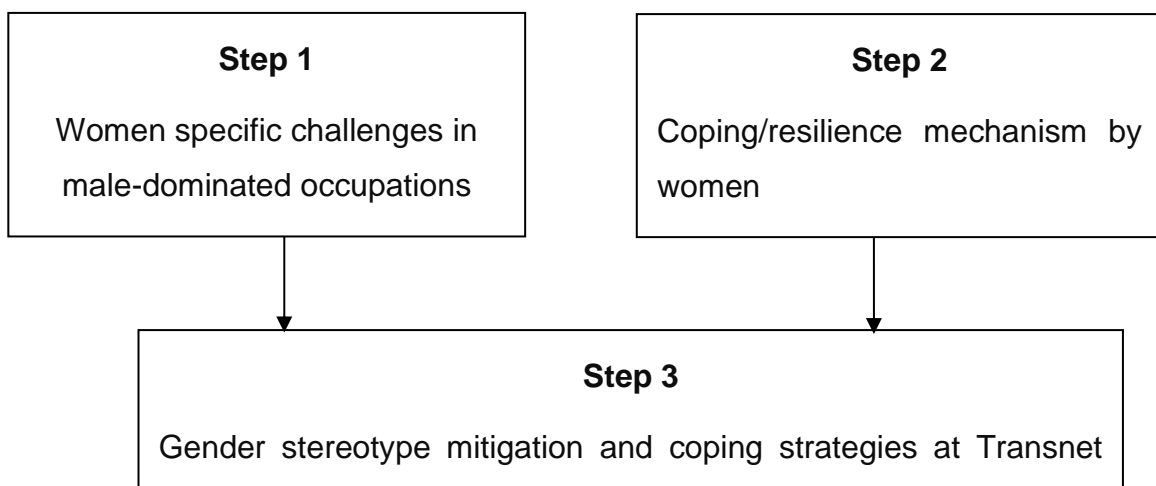


Figure 1.2: Conceptual framework

(Source: Authors own conceptualisation)

The conceptual framework as shown in Figure 1.2 details that the study will first investigate the unique challenges women face in male-dominated occupations. These challenges can include deficient physical and nonphysical resources, biased policies and therefore operationalisation of gender-neutral work environments, spillover of stereotypical gender roles and expectations that relate to women and lack of real transformation because of male resistance and prejudices. After identifying the challenges, the coping/resilience mechanism by women in male-dominated occupations such as physical and health related difficulties women experience, negative work-identity perceptions and work-life balance. An analysis of Step 1 and Step 2 lead to Step 3 which is the conceptualisation of better stereotype mitigation and coping strategy improvement.

The steps of the conceptual framework align with the resilience theory as Step 1 is adversity. Step 2 is the Mediating process and Step 3 is Better than expected outcome.

1.13 Research Methodology

Research methodology details every stage of the research process and provides justification for the choice of specific techniques and strategies. The research design details data collection, data analysis, ethical considerations and research quality.

1.14 Research Design

A research design is a structured plan that guides a researcher's observation and interpretation of phenomena (Babbie & Wagenaar, 2017; Sileyew, 2019a). A research design is a methodological approach employed to gain a comprehensive understanding of an issue within its real-life context. It encompasses the strategic planning of the study, including considerations such as the study's location, sample selection, data collection, and data analysis (Creswell & Clark, 2017).

Research is guided by ontology and epistemology foundations (Varpio & MacLeod, 2020). Ontology explores the fundamental aspects of reality and existence. It helps researchers in comprehending the phenomena present in the domain they investigate. Ontological concerns in research paradigms influence the researcher's viewpoint of the fundamental nature of phenomena and their interconnectedness (Boon, Orozco & Sivakumar, 2022). Epistemology is concerned with the fundamental nature of

knowledge and the process by which it is obtained (Dalton, Wolff & Bekker, 2022). It explores inquiries about the extent of knowledge and the methods by which it may be acquired. Epistemological factors impact the methodologies and procedures that researchers use to acquire knowledge.

Within the ontology and epistemology foundations, paradigms are comprehensive frameworks that direct research, including ontological and epistemological viewpoints (Morss, Lazrus & Demuth, 2021). Positivism is characterised by its alignment with an objective understanding of reality and a reliance on factual evidence for knowledge (Leigh & Brown, 2021). In contrast, constructivism tends to embrace a subjective understanding of reality and an interpretative approach to acquiring knowledge while interpretivism is principally focused on the interpretation and comprehension of human behaviour and social processes (Ugwu, Ekere & Onoh, 2021). The concept highlights the significance of individual interpretations, linguistic expressions, and situational circumstances in influencing societal perceptions. Research paradigms serve as a framework that guides researchers in their approach to investigations, impacting their selection of methodologies and understanding of findings (Allan, 2020; Babbie & Wagenaar, 2017).

The proposed study will adopt constructivism as the aim is to understand a subjective concept, gender stereotyping, and the coping mechanisms of women in male dominated environments. Constructivism is selected over interpretivism as constructivism extends to the broader concept of reality as a socially constructed phenomenon.

In line with the constructivism paradigm, the research will adopt a qualitative research approach (quantitative approach is more suited to positivism and therefore not applicable to the current research which is based on lived experiences and opinions). The qualitative approach is suitable for the current research as it allows for in-depth exploration, adjustment of unclear data for accuracy, and the development of a comprehensive understanding of human experiences within specific contexts. This approach will enable the study to reflect unique perspectives and interpretations. The research will also make use of Transnet Freight Rail as a case study, an approach which is complementary to the information presented above.

1.15 Data Collection

Data collection is a comprehensive process which includes, i) the data collection tool, ii) the sample on which the tool will be applied and iii) the process of application of the data collection tool.

1.15.1 Data Collection Tool

For the purpose of gathering information, qualitative research may make use of methods such as surveys, interviews, focus groups, and observations (Hennink, Hutter & Bailey, 2020).

Interviews using a semi-structured format will be used for the research. Focus groups are not suitable as some of the information to be gathered may be personal and sensitive in nature, potentially inhibiting open discussion in a group setting.

According to DiCicco-Bloom and Crabtree (2006), semi-structured interviews consist of a sequence of pre-determined questions that are posed by the interviewer as questions to the respondent. Due to the fact that the questions are open-ended, the interviewer is able to respond to the question using their own words (Adeoye-Olatunde & Olenik, 2021). It is possible for the interviewer to ask questions that are based on the replies that the respondent has supplied, or they may provide auxiliary questions in order to get further levels of explanation.

Furthermore, Magaldi and Berler (2020) assert that semi-structured interviews also provide the opportunity to explore by means of the use of follow-up questions, which enables the exploration of the autonomous thinking of each person. Interviews that are semi-structured were chosen because, in comparison to interviews that are unstructured, they are much more time efficient (Kakilla, 2021). Also, semi-structured interviews guarantee that all of the essential questions are asked over the course of the interview, which is carried out with the aid of questions that have been prepared in advance (Galletta, 2013).

1.15.2 Target population

A target population is a group of elements or causes whether individuals, objects, or events that conform to specific criteria and to which the intention is to generalise the

results of the research (Rehman & Alharthi, 2016). The target population in this study are the women managers at Transnet Freight Rail Johannesburg, between the aged 18 to 65 years, aligning with the legally recognised employment age bracket in South Africa.

The target population of this study is five thousand women managers at Transnet Freight Rail Johannesburg.

1.15.3 Sampling and sample size

As defined by Thompson (2012), a sample is a subset of the target population that is typical of the whole population that will take part in the study. When doing qualitative research, it is not possible to include the whole target population that is being studied (Lakens, 2022). Therefore, it is essential to select samples that are representative of the population and that make it possible to gather data.

According to Acharya et al. (2013), the process of selecting participants, which is known as sampling, may be categorised as either probability or non-probability sampling. In the course of this investigation, non-probability sampling, more especially purposive sampling, will be used. According to Campbell et al. (2020), purposeful sampling is the process of selecting a sample in a manner that not random but is instead based on certain qualities (inclusion criteria) that the sample has and that align with a particular objective. The inclusion criteria for the study are as follows: i) the participant must be a female manager at Transnet Freight Rail, and ii) must have more than five years of managerial working experience at Transnet Freight Rail (low, middle, or executive management) to ensure that the sample has sufficient exposure to the systems and culture of Transnet Freight Rail.

For the purpose of this research, the sample size will consist of 12 female managers who are employed by Transnet Freight Rail Johannesburg. These managers will be a mix of four (4) Executive Management, four (4) Middle Management, and four (4) supervisors. According to Aguboshim (2021) and (Mwita,2022), the saturation of the sample size is the guiding principle in qualitative research. The saturation point for the study is twelve female managers from Transnet Freight Rail. This is because from each managerial level four respondents are selected and additional respondents may not yield any novel themes in the data collection process.

1.15.4 Pilot Study

Research experience is important to enable smooth data collection (In, 2017). A pilot study is an exercise done prior to the actual research with the aim of testing the data collection instrument and data collection method (Thabane, Ma, Chu, Cheng, Ismaila, Rios, Robson, Thabane, Giangregorio & Goldsmith, 2010). Additionally, the pilot study serves as a training ground for the researcher to become familiar with the methodology and identify any potential problems that may arise, so that they can make necessary corrections (Pearson et al., 2020).

A pilot study with one respondent will be conducted before the interviews of the 12 respondents that form the sample. The pilot study will utilise an interview conducted through Teams or Zoom, with face-to-face interaction preferred. A tape recorder will be utilised to ensure accurate documentation and facilitate the examination of the researcher's probing techniques and verbal responses. The information from the pilot run will not be utilised in the final data analysis.

1.15.5 Data collection method

After the pilot study has been conducted and necessary adjustments made, the interviews with the 12 female managers will then be conducted. The interviews may be facilitated on any video calling platform, for example, Zoom or Microsoft Teams or a physical face to face interview. However, the preference of the researcher is face to face interviews to enable the researcher to get a full view of the respondent. The interviews will be voice recorded after obtaining permission from the participants.

Each interview will begin with greetings and pleasantries followed by the researcher informing the respondent of the aim and objectives of the study. The respondent will be informed of the ethical considerations of the study including the assurance of anonymity as well as the right to stop participation at any point. The respondent will be informed that the interview will be voice recorded. The interview will then start with the researcher asking questions and probing to fully understand the responses of the respondent.

Following the University of Free State's approval of the ethical clearance, the recruiting process will get underway. A formal letter will be written to the gatekeeper of Transnet Freight Rail, who is the Managing Director, in order to request permission. The letter will include extensive information about the study's title, purpose, aims, and

techniques. After receiving approval from the gatekeeper, an internal message will be issued to the female managers at Transnet Freight Rail, asking all those who meet the inclusion requirements to participate in the event. The researcher will then be provided with the emails and phone numbers of all individuals who will have provided positive replies and shown interest in taking part in the study. This will allow the researcher to schedule a convenient time and date for the interview, ensuring that the respondent is physically available. It will be up to the responder to decide whether they would want to do the interviews in person or virtually. All correspondence will be conducted via electronic mail.

1.16 Data Analysis

Qualitative data is primarily analysed by content analysis, narrative analysis, and analytic induction. This study will utilise thematic analysis.

Thematic analysis will be used to transcribe and analyse the collected data according to the Braun and Clarke (2006) methodology following the steps below:

1. Step one: transcription and the researcher looking over the transcripts of the interviews to get familiar with the main data.
2. Step two: After becoming acquainted with the data, the researcher will create preliminary codes to assist in arranging the gathered information in a way that addresses the different study questions and goals in a meaningful and methodical manner.
3. Step three: When codes are created, the researcher looks over the codes to find patterns that include noteworthy data in order to look for themes.
4. Step four: After generating the themes mentioned in step three above, they are examined to make sure they make sense and relate to the goals of the study.
5. Step five: Defining, honing, and establishing the link between each subject and the others.
6. Step six: After discussion and interpretation of the study results, an analytical comprehension report will be created. The goals and objectives of the research will be kept in mind throughout this procedure.

This procedure guarantees a methodical and thorough approach for examining qualitative data and deriving significant insights.

1.17 Research trustworthiness criteria

Qualitative research focuses on trustworthiness as a central quality criterion. Trustworthiness is measured by four criteria: credibility, reliability, confirmability, and transferability (Adler, 2022).

Credibility indicates the study's background and findings have been adequately planned and executed and are therefore acceptable (Rolfe, 2006). Triangulation, debriefing, continuous contact, and member verification will be utilised to boost credibility. Transferability is the applicability of research findings to comparable contexts (Elo et al., 2014). Transferability will be ensured by a thorough and complete description of all stages and aspects of the study in the research report.

Confirmability involves impartiality and accuracy of the research report (Johnson, Adkins & Chauvin, 2020). The research will document all the steps of the study as well employ triangulation through observation, interviews, and other literary sources.

1.18 Ethical Consideration

Ethical consideration forms an integral part of research as it ensures conformity to legal and moral standards (Pietilä et al., 2020). The research will focus on four ethical components as detailed below:

Every research must have the **permission of critical stakeholders** (Bos, 2020). The proposed research will only start when the researcher has obtained permission from UFS through the ethical committee and the academic supervisor. The data collection will only start after approval by the institutional gatekeeper.

Informed consent entails providing all details to participants in a study to ensure that they know what to expect and they agree to participate having received all the relevant information (Drolet et al., 2023). The research will ensure that the gatekeeper and the respondents are informed verbally and through written documentation of the aim of the study, the procedure and the expected outcomes. Also, before the interview starts the respondents will again be told of the aim and process of the study and will be asked to confirm that they understand the aim and process of the research, and acknowledge that their participation is voluntary having been informed of the study components.

Another critical ethical component is to ensure that **no harm comes to the participants** (Cascio, Weiss & Racine, 2021). The study will utilise gender, race, sex and ethnic neutral language. Additionally, all the components of the research are critiqued by a second person (Supervisor) to ensure that the research does not harm anyone. Furthermore, the researcher will also read to the participants their rights as research participants to ensure there will be no infringement of rights. Finally, the collected data will be utilised only for the intended purpose and the names of the respondents will remain confidential.

The researcher will also ensure **confidentiality and anonymity** (Hoft, 2021). The researcher will not collect or record the names or any personal information of the respondents to ensure anonymity. Furthermore, only the researcher will have access to the raw information/data, which will be kept in a secure location. The information will be destroyed five (5) years from the day of collection.

1.19 Elimination of bias

Research bias is a critical concern in any research endeavour. Research bias is any systematic (intentional or unintentional) error that can be introduced during the planning, execution, or analysis of a study and compromise the quality of the research findings (Smith & Noble, 2014). There are several common types of research bias that can significantly impact the validity of a study. These include selection bias, confirmation bias, publication bias, and measurement bias (Popovic & Huecker, 2021).

The researcher is a female and works at Transnet Freight Rail, hence research bias is a concern. The researcher will adopt the following strategies to mitigate research bias:

Detailed Recordkeeping: the researcher will record every aspect of the research, thus creating a comprehensive record to improve traceability and transparency (Sica, 2006).

Honest Reporting: the researcher will endeavour to be honest in all the stages of the research and acknowledge potential biases as transparency promotes credibility (Krishna, Maithreyi & Surapaneni, 2010).

Overview and supervision: the work will be conducted under the supervision of an independent researcher in the form of an academic supervisor hence any bias will be identified and corrected. Additionally, multiple independent researchers in the form of research colleges will review the questions and coding of the data as this fosters diverse perspectives and helps minimise individual biases (Gerhard, 2008).

External Review: the work will be reviewed by more than one external reviewer after passing internal review as an external perspective can provide valuable insights and identify potential biases.

Research best practice: the research will adopt a thorough research plan informed by literature to ensure that the study includes clear objectives and methodologies. A well-defined plan helps in maintaining focus and reducing biases (Hammersley & Gomm, 1997).

1.20 Chapter Summary

The current chapter provides an overview of the research background, provides the problem statement, defines the research questions, outlines the study's aims and objectives, and introduces and defines the relevant terms utilised in the research. The current chapter includes a discussion of the relevant theoretical frameworks employed by the researcher as well as an outline of the approaches used to comprehensively address all ethical issues.

The next chapter, Chapter 2, is the Literature Review and will focus on the literature relevant to the objectives of the study.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Chapter 2, the literature review, provides a critique of existing literature on women's stereotyping and coping strategies, with a focus on addressing the objectives of the study. The literature review contributes to the current work by detailing what is known, identifying gaps in the literature and demonstrating how all these concepts are integrated into the current work.

Section 2.2 of the literature delves into gender as the central theme of this work; gender's societal origins and how these societal constructs manifest within the workplace. Section 2.3 then examines how women cope with the gendered stereotypes in the work environment. The theoretical framework as well as how it applies to the study is discussed Section 2.5. Section 2.4 frames the gender stereotyping and coping from a resilience perspective in line with the theoretical premise of the study. Section 2.6 then looks at some methodologies from the literature which have been proposed to combat gendered stereotyping and enhanced coping mechanisms.

2.2 Gender

Gender is not an objective concept like sex but is a societal creation based on the differences between biological males (male) and biological females (females) (Lindqvist, Sendén & Renström, 2021). Humans are not born with a gender but they "normally" grow into "their" gender (Helgeson, 2020). To illustrate, young babies will play with a toy irrespective of it being a toy car or baby. Only after a certain age and being continuously told by society (parents, uncles, aunts, neighbours) that boys play with cars (masculinity) and girls play with dolls (femininity) do young boys tend to gravitate towards playing with cars and young girls preferring bright coloured dolls (Acker, 2020). The young male human has grown into his gender of being a man and the young female has grown into her gender of being a woman. Young humans are channelled into their respective genders based on their sex by the society around them (Bhattacharjee, 2021). This illustrates a fundamental connection between sex and gender, showing societal expectations placed on individuals of a particular sex to conform to gender norms. Even when individuals may not personally align with

stereotypical gender preferences, societal pressures often compel them to conform to these norms in order to be accepted (Acker, 2020).

Gender is a collection of social norms it is then incumbent on those who associate with a specific gender to act in a certain way and segregate those who do not conform to their gender's norms (Hodgson, 2022). It is exactly this protection of a gender profile that complicates the lives of women in male-dominated work environments (Gartrell, 2022). Gender is a sword that cuts both ways there are those who are victimised for not belonging to a gender but wanting to be part of the gender, and those who act by victimising yet they do not believe that it is right, but still victimise because the norm is to act that way (Timmermans et al., 2019). It is also critical to note that gender imparts unequal gains and risks. To illustrate, men generally benefit from being male in terms of say, higher salaries, however they carry a higher risk of death in wars (Gartrell, 2022).

The discussion on gender then leads to a definition by Connell (2009, p11) that this study will adopt:

“Gender is the structure of social relations that centres on the reproductive arena, and the set of practices that bring reproductive distinctions between bodies into social processes.”

Here are some significant implications that arise from this definition. Gender, similar to other social structures, possesses multiple dimensions; it encompasses not only elements of labour, authority, identity, or sexual orientation, but all of these simultaneously (Kreimer, 2004; Connell, 2020). Gender patterns can vary significantly between cultural contexts, but they are still "gender" patterns (Best & Williams, 2001; Kamenou, 2020). The difference in genders in different cultures limits the applicability of gender studies from one culture to other cultures. The ability of structures to influence individual behaviour causes gender arrangements to appear static because they are socially rather than biologically reproduced (Roxas & Stoneback, 2004; Dzansi, 2022). However, gender arrangements are in a constant state of flux, due to the fact that human behaviour generates novel circumstances and structures develop crisis inclinations. Ultimately, gender has a past and potentially a future as gender rules and norms are dynamic, being influenced by variables which cannot be

predicted; hence, it is impossible to predict what gender will look like in the future (Dzansi, 2022).

2.3 Gender stereotypes

Gender stereotypes, is defined by scholars, as encompassing societal constructions that ascribe particular qualities and competencies to individuals on the basis of their sex, thus implying their suitability for diverse professional and societal positions (Heilman, 2012; Ellemers, 2018). The origins of these stereotypes can be traced back to old ideas and concepts of masculinity and femininity, which are perpetually reinforced through gender-specific behaviours and unequal representation in positions of authority and social standing (Mashilwane, 2019; Kray & Kuipers 2020).

Pervasive stereotypes pose a dual-edged weapon, particularly for women seeking entry into traditionally male-dominated professional spheres. According to Eagle (2023), a prevalent preconception places women at opposite extremities of a continuum separating sociability and competence. The existence of this dichotomy frequently places women in a precarious position within the dynamics of the work environment especially with respect to leadership, as competence may be interpreted as aloofness, whereas amiability may suggest an absence of competence (Lindqvist et al., 2021). Males are frequently perceived as competitive and assertive leaders due to argentic characteristics such as ambition and dominance (Kinicki & Kreitner, 2009; Kray & Kuipers 2020). Finch and Groves (2022) on the other hand assert that, women, who possess communal qualities such as a focus on relationships and sensitivity to others, are frequently confined to positions that emphasise nurturing and cooperative qualities.

The consequences of these stereotypes manifest as a perceptible gender bias in organisational environments, where there are numerous systemic obstacles that impede the advancement of women to leadership positions (Clarke, 2020). The advancement of women to higher positions is impeded by preconceived conceptions; qualities such as assertiveness and resilience, which are frequently praised in male leaders, but are stigmatised when demonstrated by female leaders (Cooper et al., 2021). The prevailing social convention that values composure and friendliness in women over confidence and authority in men sustains a gendered discourse that

diminishes the capabilities and potential of women in positions of leadership. In industries dominated by men, for instance, women's assertiveness may be misinterpreted as aggressive, whereas men's equivalent conduct is commended as assertiveness (Caleo & Halim, 2021).

The persistence of gender stereotypes hinders the advancement of women and confines men to inflexible masculine standards, emphasising the urgency to deconstruct these old concepts (Tiwari, 2023). The establishment of a cultural environment that questions and reinterprets these gendered narratives has the capacity to generate an equal professional environment in which individuals are valued and recognised for their aptitude and ability to lead, without being constrained by gendered stereotypes (Tabassum & Nayak, 2021).

2.4 Gendered stereotyping of Women in Male Dominated Industries

The central theme of this section is to inquire into and critique the challenges faced by women in male dominated work environments. While very informative, it does not specifically address the challenges faced by women managers in a heavy industry like Transnet Freight Rail which is also a public entity. The entry of women into traditionally male work environments can be conceptualised as gender rebellion; this rebellion often faces significant resistance which the women then experience as challenges. Nevertheless, despite the resistance, a noticeable trend towards gender inclusivity is evident in many countries, driven by legislative advancements like the Employment Equity Act of 1998 in South Africa.

The integration of women into sectors that have historically been dominated by males can be attributed to a combination of factors, including rising levels of education, legislative reforms, and changing societal expectations. The entry of women into these domains, frequently prompted by their strong credentials, represents a departure from traditional gendered career structures (Broadbridge & Fielden, 2020). Upon examination of the roles they hold, an array of positions becomes apparent, spanning from entry-level to executive leadership. However, as one ascends the organisational hierarchy, the representation of such roles diminishes considerably (Schock et al., 2019). Numerous studies have consistently demonstrated that women who enter traditionally male-dominated sectors, including manufacturing, construction, and

professional and business services, frequently possess credentials that are on par with, if not surpassing, those of their male counterparts (Jackson, 2022; Johnson, 2020; Catalyst, 2023). The integration of women into leadership positions in traditionally male-dominated domains elicits a range of responses. The reception these trailblazing female leaders receive is frequently marred by gender stereotypes, which places an additional psychological burden on them (Ely & Meyerson, 2022). Gendered stereotypes in male dominated industries is a complex and multifaceted phenomenon and will be discussed under the following themes; i) physical body based stereotyping, ii) dynamics between dominant (males) and minority (females) groups, iii) Informal interaction on worksites, iv) workplace surveillance, and v) sexual harassment in the skilled trades (Adusei, 2022).

2.4.1 Physical body-based stereotyping

Women are called weak, a demeaning gender stereotypical phrase, due to their phenotype and thus deemed unsuitable in some physical occupations due to hegemonic masculinity. Hegemonic masculinity, as discussed by various researchers, operates by excluding and asserting superiority of male bodies over female types of bodies in physical work environments (Smith et al., 2013; Kamenou, 2020). In their work Payne and Smith (2016), present the argument that male-dominated environments serve as spaces where individuals create and perpetuate a specific form of masculinity, using the physical characteristics of the male body to justify the act of excluding women. According to various studies, the trade and heavy industries which are historically male dominated tend to perpetuate the notion that individuals who do not conform to traditional masculine stereotypes are deemed inferior and incapable of handling physically demanding or dirty tasks (Menches & Abraham, 2007; Kamenou, 2020). The construction worker's body is typically associated with characteristics such as being male able-bodied, and heterosexual, hence entry by women is resisted based purely on the assumption that their body is not able to handle the heavy physical work (Smith et al., 2013). Additionally, there is a social expectation that all employees will adhere to these norms. Individuals who deviate from societal norms, whether due to their gender, sexual orientation, ethnicity, disabilities, or perceived vulnerability, often face resistance and exclusion. Connections can be observed between these cultural norms concerning the male body and unionism (Harris, 2022).

Historically, there have been attempts to enhance the standing and compensation of trade occupations, which were often linked to male worker unionism (Klausen, 1999; Jackson, 2022). The development of masculine identity within the skilled trades can be traced back to the historical struggles of working-class men. As part of this struggle, men have sought to establish their superiority over women as a means of justifying their higher wages (Chase, 2017). Within the context of working-class discourse, individuals who are perceived as tough and masculine often associate their identity with performing what they consider to be "authentic" work. Consequently, they may feel a sense of insecurity or apprehension if women are perceived as capable of performing tasks that they consider to be exclusively within their domain (Young, 2011; Jackson, 2022). This is consistent with concerns that the involvement of women may diminish the prestige of the job, potentially leading to lower compensation.

2.4.2 Dynamics between dominant (male) and minority (female) groups

Minorities have always been disadvantaged by virtue of non-superiority in number. The work environment is no different as women are a minority in a male-dominated environment (Whitlock, 2002; Kanter, 2022). The concept of tokenism is utilised to mean a minority, and in male-dominated work environments, women are tokens. Tokens, by their small number are susceptible to high visibility, polarisation, and these contribute to their marginalisation (Koenig, 2020). The theory of marginalisation provides an explanation for the increased visibility of women as well as their limited inclusion in social networks within organisations and job sites. Frequently, the dominant group justifies this exclusion by engaging in a process known as polarisation, which involves highlighting gendered differences (Lewis, 2020). It has been observed that certain dominant masculine cultures tend to reject women by virtue of being different sexually, as they do not conform to their established norm, resulting in the marginalisation of women (Denissen, 2010; Hunte, 2016; Lewis, 2020). This serves as a justification for their exclusionary practices.

Extensive research has shown that cultures with a predominantly male presence tend to exhibit hostility towards women as minority groups when it comes to their involvement in physical and heavy occupations (Lewis, 2020). The implementation of exclusionary practices allows males to subject women to heightened scrutiny, leading to criticism, hostility, and the use of derogatory and sexualised humour. In their study,

Kelly (2015) delves into the prevalence of casual sexism and racism in work environments, revealing that gender stereotyping behaviours such as sexist jokes, indecent behaviour, and negative comments have become normalised (Fielden et al., 2000; Hunte, 2016; Ibáñez, 2016; Litzky, 2020). According to Hunte's (2016) study, women may be able to address and overcome instances of sexist and racist bias from their co-workers. However, when faced with a group that has made a collective decision to exclude them based on cultural practices, it becomes extremely challenging to change the hostile atmosphere (Litzky, 2020).

2.4.3 Informal interactions

While organisational policy may or may not be discriminatory, the majority of discrimination is encountered in informal everyday interactions. Informal interactions lead to the formation of a social network known as a boys' club culture, as described by Kelly (2015). It has been observed that certain individuals, particularly women, may seek acceptance into these boys' clubs by displaying an interest in traditionally male-dominated activities such as cars and football (Wright, 2016; Gatrell, 2022). This behaviour can be seen as a way for individuals to conform to societal norms and expectations regarding gender roles (Smith et al., 2013). It is frequently necessary to minimise the expression of femininity and adopt masculine behaviours and attire (Wright, 2013; Hernandez, 2022).

According to Denissen (2010), women who integrate themselves into male-dominated spaces challenge traditional gender norms by erasing the distinctions between genders in terms of physicality and identity. It is evident that women find themselves in a complex situation, where they are expected to maintain their femininity while also conforming to masculine norms (Maclsaac & Domene, 2014; Ibáñez, 2016; Hernandez, 2022). Alternatively, practices such as protective paternalism can be seen as a form of benevolent sexism, where women are assigned roles that are traditionally associated with their gender, such as lighter duties or tasks considered feminine (Taylor et al. 2015; Jackson, 2020). Behaviours that aim to protect individuals can hinder their learning and growth, leading them to appear incapable and having their skills undermined. This has been discussed by various researchers (Denissen 2010; Maclsaac & Domene, 2014; Kelly 2015; Hunte 2016; Acker, 2020).

2.4.4 Workplace surveillance

The literature has highlighted the emergence of surveillance of women workers in the trades workplace as a significant stereotype issue in male-dominated work environments (Brown, 2021). Surveillance is the concept where someone is closely watched; surveillance is amplified by the fact that women are a minority and hence are very visible (Byrd, 1999; Bagilhole, 2020). Men may sometimes appear to blend into the crowd, but they possess a keen eye for observing women.

Because of female surveillance, women get the perception that they have to perform as they are few and thus very visible. This involves surpassing expectations and assimilating into the male-dominated environment (Ibáñez, 2017; Dzansi, 2022). It is widely acknowledged in academic literature that increased surveillance in the workplace often leads individuals to feel the need to demonstrate their worth by exerting additional effort (Maclsaac & Domene, 2014; Connell, 2020).

2.4.5 Sexual harassment

Sexual harassment is widely recognised as a significant stereotype problem for women in the skilled trades workplace (Bridges et al., 2023; Byrne et al., 2005; Fielden et al., 2000). It is worth mentioning that nearly all reports on women work place experiences in the man-dominated industries acknowledge this problem (Fielden et al., 2000). According to Maclsaac and Domene (2014), there have been several instances of significant and intense harassment documented in various studies. Agapiou (2002) and Ness (2012) assert that there is a perception that when a woman accuses a male employee of sexual harassment (Jenkins et al., 2019) or displays her sexuality, it can lead to trouble and disruption (Byrd, 1999; Adusei, 2022), which some argue is a valid reason not to hire women.

According to a study conducted by Denissen (2010, p. 298), there are notable differences in the experiences of sexual harassment; they reported that women in male-dominated and blue-collar jobs tend to encounter more frequent and forceful instances of sexual misconduct. However, it is worth noting that they may not always classify these incidents as sexual harassment (Adusei & Adu-Gyamfi, 2022). Unacceptable or increasingly aggressive behaviour that goes beyond acceptable boundaries and instils fear can lead to the decision to resign, confront the perpetrator, or follow formal complaint procedures (Denissen, 2010; Gartrell, 2022). In Denissen's

study, women reported experiencing various forms of retaliation, such as being laid off, isolated, finding pornographic materials in their locker, having their tools glued together, finding faces in their hardhat, or discovering urine in their thermos. In a study conducted by Hunte (2016) and Hernandez (2020), various incidents were documented where women reported instances of sexism and racism to their supervisors. Unfortunately, instead of receiving the support they deserved, these women were often dismissed with claims that the behaviour was merely a joke or faced even more hostility in return. Hunte (2016) discovered that a significant portion of the objectification of women occurs through the use of jokes, seemingly innocent remarks, and is often open to interpretation (Haq, 2020; Harris, 2022).

2.5 Resilience: theory and practice

Resilience theory explores the process of navigating challenges and thriving. It takes a strengths-based approach, emphasising the inner resources and external supports that help individuals bounce back from adversity (Carlson et al., 2012). Resilience theory argues that it's not the nature of adversity that is most important, but how we deal with it. Resiliency theory provides a conceptual framework for considering a strengths-based approach to understanding child and adolescent development and informing intervention design (Fergus & Zimmerman, 2005; Zimmerman & Brenner, 2010). Resiliency theory supplies the conceptual scaffolding for studying and understanding why some youth grow up to be healthy adults in spite of risks exposure (Garmezy, 1991; Masten, Cutuli, Herbers, & Reed, 2007; Rutter, 1987; Werner & Smith, 1982).

Resiliency theory focuses attention on positive contextual, social, and individual variables that interfere with or disrupt developmental trajectories from risk to problem behaviours, mental distress, and poor health outcomes (Carlson et al., 2012). Resilience is a central concept to this study as it details perseverance and, in some cases, thriving (coping) in the face of adversity (gender stereotyping). Resilience can be utilised to frame coping strategies as well as the outcome of those strategies (Hernandez, 2022). The concept of resilience building is most applicable to recommendations aimed at improving coping mechanisms and mitigating the effect of gender stereotyping. Kim-Cohen (2007) defines a resilient individual as one who stays healthy and functional despite hardship. A resilient employee thrives in unpredictable

settings and adapts and learns during and after crises (Kuntz, Connell & Näswall, 2017; Gatrell, 2020). The study is underpinned on the Resilience theory with resilience as a process and outcome as shown in Figure 2.1.

The Resilience Theory, which examines resilience as a dynamic process and a measurable result, proves to be a valuable framework for analysing the phenomenon of gender stereotyping among women in male-dominated settings and comprehending their strategies for dealing with it (Kim-Cohen, 2007). Resilience, as a process, perfectly aligns with the ever-changing nature of women's experiences in settings that are predominantly male dominated. It recognises the ongoing ability of individuals to adapt and respond to the challenges presented by gender stereotypes (Naswall, et al., 2017). By adopting a process-oriented approach, researchers are able to delve into the ever-changing strategies that women utilise when navigating these environments.

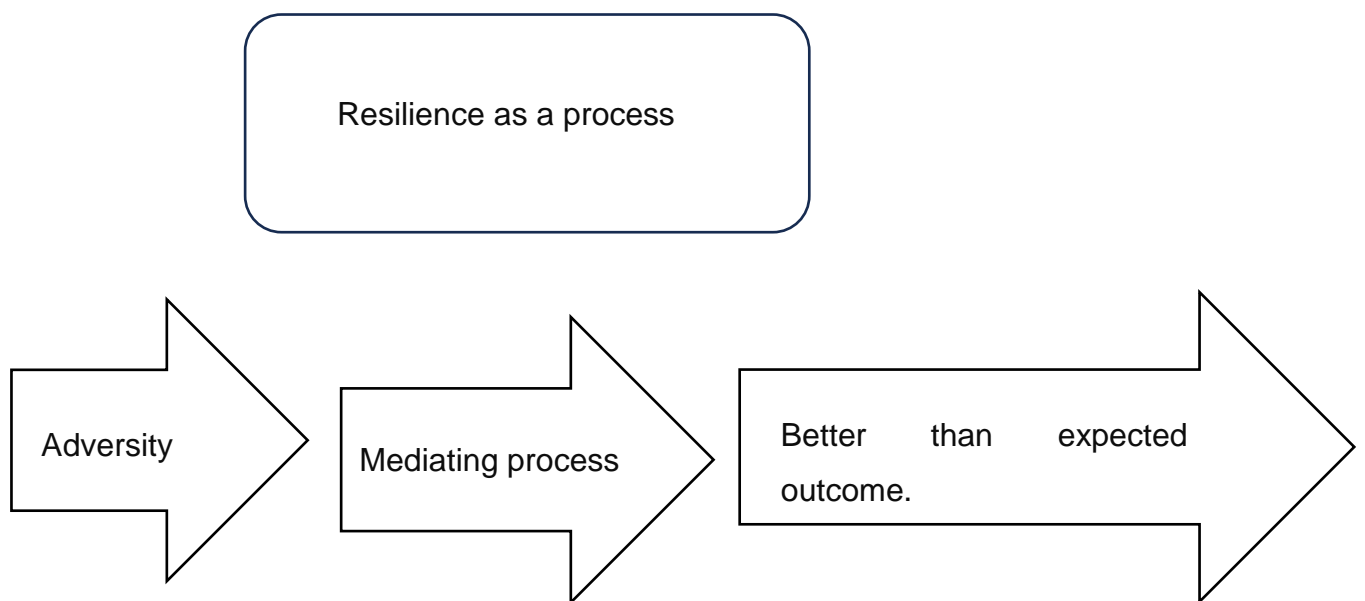


Figure 2.1: Resilience as a process and outcome (Source: Van Breda, 2018)

By recognising resilience as an outcome, we can shed light on the remarkable ability of women to develop positive adaptations and strengths in the face of adversity. When examining gender stereotyping, this particular viewpoint allows for the recognition of effective strategies for dealing with it and assessing how well they work (Van Breda, 2018). Resilience Theory offers a comprehensive framework that takes into account various factors, both individual and contextual, that shape women's experiences.

Understanding the intricate dynamics of gender stereotyping and the various coping mechanisms utilised by women is of utmost importance (Harris, 2022).

Examining resilience as an outcome provides a valuable opportunity to delve into the intricacies of coping mechanisms. One can delve into the examination of how women's resilience plays a role in their capacity to challenge stereotypes, establish networks of support, and embrace participatory leadership styles, as suggested by the search results (Ely & Padavic, 2020). Kuntz et al. (2017) define resilience as a taught behaviour, not a personal trait or attitude, which is crucial for understanding employee resilience. This resilience model acknowledges that individual resilience relies on many organisational resources. According to Lewig (2013), organisations may promote resilience by providing workers with frequent professional and emotional support, autonomy, and job clarity. Additionally, she identifies that hope, optimism, and self-efficacy contribute to resilience, but may be improved with access to essential organisational resources (Gartrell, 2022). Factors affecting individual resilience include culture, inclusive leadership, workplace cohesiveness, employee engagement, work-life balance, and supportive management (Lowe, 2011; Bardoel et al., 2014; Ducheck et al., 2020). High workload, rotating schedules, shift and night work, role stressors, job insecurity, career concerns, poor interpersonal relationships, bullying, and limited job content can negatively impact workers' resilience (Hurrell, 2005; Moen et al., 2011; Ely & Meyerson, 2022).

2.6 Coping mechanism

The main focus of this section is to examine common operationalisation of coping strategies utilised by women in male-dominated environments. Again, the strategies are for women in general in the literature and lack a focused perspective of women managers in heavy state owned industries like Transnet Freight Rail. The concept of coping plays a crucial role in the process of adjustment and the promotion of well-being (Marroquin, Tennen & Stanton, 2017; Dzansi, 2022). It refers to the deliberate actions taken to effectively manage or endure challenging circumstances with the aim of improving or resolving the problem (Ben-Zur, 2020). The utilisation of coping mechanisms has been found to be effective in managing stress-inducing circumstances (Baqtayan, 2015; Haq, 2020). The management of stress can be seen as a systematic approach or method employed when confronted with a circumstance

that induces stress (Nogalski et al., 2018; Connell, 2020). The occurrence is an essential consequence of a distressing and traumatising circumstance. The key focus within the notion of coping pertains to the endeavours undertaken by individuals to effectively navigate and address the demands or challenges that they encounter.

Algorani and Gupta (2023) define coping mechanism as the thoughts and behaviours mobilised to manage internal and external stressful situations. It is a term used distinctively for conscious and voluntary mobilisation of acts, different from defence mechanisms, that are subconscious or unconscious adaptive responses, both of which aim to reduce or tolerate stress (Catalyst, 2022). The effectiveness of coping mechanisms is dependent upon the specific circumstances and the subjective interpretations associated with them. Existing literature indicates that individuals from minority groups employ coping strategies to navigate work contexts characterised by exclusionary practices (Myeza & April, 2021; Hernandez, 2022). What follows in this review are possible coping mechanisms.

2.6.1 Feminine advantage

Appreciation of the feminine advantage falls within the realm of resilience as a process, contributing to the broader understanding of resilience mechanisms. Being a woman can be utilised by women as a coping mechanism based on favourable women characteristics, such as attention to detail (Gatrel, 2020). Research has noted that women had found themselves appreciating and relying on their femininity, and that they had incorporated this into their professional identities (Bridges et al., 2023). The exploitation of femininity for the purpose of manipulation and the use of sexual prowess by women in order to acquire acceptance have been reported as coping strategies, where women utilise their gender as a coping strategy (Kersh, 2018; Jackson, 2022).

The research conducted by Smith et al. (2013) and Kamenou (2020) revealed that the ability of women to make constructive use of their bodies has the potential to be transformational. In the research conducted by Maclsaac and Domene (2014), the women were able to overcome preconceived notions about the female form in order to achieve success. In the research conducted by Ibáñez (2016) and Jackson (2022), it was observed that women interior designers and painters who were self-employed and predominantly engaged in house restoration found their place by virtue of their

visibility as women. The fact that they were believed to possess key feminine attributes such as cleanliness, attention to detail, and excellent taste resulted in an increase in demand for their services and allowed them to avoid working for huge firms or new construction projects (Bagilhole, 2020). In spite of the fact that adhering to established gender norms is considered to be damaging in many aspects, Ibanez (2016) discovered that essentialisms provided women with significant boosts in self-assurance. According to the findings of research conducted by Smith (2013) and Acker (2020), a female customer said that she was under the impression that she would construct superior kitchens, while another client was allowed the liberty to be creative due to their gender.

2.6.2 Adopting masculine qualities

People who participated in a study often mimicked masculine qualities in order to better integrate themselves into their environments (Bridges et al., 2023). These characteristics included participating in aggressive verbal and non-verbal behaviour, as well as using foul language (BarNir, 2021).

2.6.3 Mentoring

Mentoring is a credible coping mechanism utilised by women in male-dominated environments (Bridges et al., 2020). To combat stereotyping in male-dominated work environments, women often find that mentorship and role modelling serve as effective coping mechanisms. Some studies identify mentoring as a key technique for enhancing inclusiveness and professional development (Taylor et al., 2015, Wright, 2016; Lewis, 2020). According to Menches and Abraham (2007), mentorship considerably enhances retention of women in construction at all levels. McGregor et al. (2019) state that industry leaders identified mentorship, buddy systems, all-women teams, networking, and social media as helpful strategies for women in the trades to overcome hurdles and achieve success. Progressive employers can encourage women to join women's clubs or networks consisting of other women in the same trade, to help them vent frustrations and get advice from other women (Ladge, 2022). According to Maclsaac and Domene (2014), supporting male professors, bosses, employers, and colleagues is significant. In male-dominated trades, employer and

colleague support is crucial due to the emphasis on on-the-job learning from experienced workers (Byrne, 2005).

2.6.4 Optimistic character

An optimistic attitude on future professional chances, despite having encountered adversity, aided coping and persistence among study participants (Patterson & Kelleher, 2005). The conviction that things will change for the better and that opposition and negative preconceptions would fade was one many women accepted (Neff, 2021). The women's positive attitudes towards their male counterparts and their recognition of male colleagues' efforts to support the acceptance and integration of female colleagues also demonstrated a sense of optimism (Jogulu & Franken, 2023).

The favourable views that the women had towards their male counterparts, as well as their acknowledgment of the efforts that their male colleagues had made to facilitate the acceptance and integration of female colleagues, were also indicative of optimism (Athanasopoulou, Moss-Cowan, Smets & Morris, 2018). The use of job involvement as a coping technique has been seen among women who are confronted with challenging work situations (Fathima et al., 2020). For the ladies, the nature of their professions had become something they had learned to like, and they had gotten used to the pleasure and involvement that they gained from their work. For women, it was observed that they thrived on the difficulties that were presented to them and that they found satisfaction in triumphing over the odds that were stacked against them (Stewart & Adams, 2020).

2.6.5 Recognition and success

Recognition and success, falls into the resilience as an outcome category within the resilience theory. A coping method that has been used by women in order to continue working in male-dominated industries is drawing upon significant professional success experiences (Martin & Barnard, 2013). The accomplishments that women can point to serve as a source of motivation and reassures them that it is worthwhile for them to continue working in the professions they are already in (Epstein, 2022). If women succeed in male-dominated environments, it not only encourages them but also paves the path for subsequent generations of women who follow in their footsteps. In one

study, acknowledgment by male co-workers, who even nominated a woman for the post of safety representative, which was a position of power, is another example of a coping technique that contributed to the success of the individual's career (Glass & Cook, 2016; Kray & Kuipers, 2020). For women to find value in their professional experiences, it was not necessary for such experiences to be very significant or even to be publicly recognised by male co-workers or the organisation.

2.7 Coping Strategies in the Context of South Africa Railways

Within the patriarchal fabric of South Africa's railway sector, women employ a myriad of coping strategies to proficiently circumnavigate the hurdles in their paths. These strategies, underscored in diverse studies by Pante (2014), prominently include the creation of support groups. Through the formation of such networks, women foster a conduit for sharing experiences and coping techniques, thereby enhancing their collective resilience amidst adversities (Marroquín et al., 2017; Adusei, 2022). Moreover, mentorship has been identified as a crucial coping mechanism, with women actively seeking guidance and support from seasoned female colleagues or advocates to adeptly tackle the nuanced challenges inherent within this male-dominated domain (Lekchiri & Kamm, 2020).

Mentors are instrumental in aiding women, particularly those in leadership echelons, by identifying skills gaps, offering developmental guidance, expanding professional networks, bolstering self-confidence, and providing emotional support amid adversities (Adusei & Adu-Gyamfi, 2022). The sector-specific mentorship in railways engenders avenues for career advancement and strengthens professional affiliations, while also furnishing a sanctuary for deliberation on gender-centric issues, discrimination, and other workplace challenges (Martin, 2020; Kanter, 2022). Furthermore, advocacy for change is another potent mechanism employed by women, entailing active endorsement of policies and procedures aimed at nurturing gender equality, and decisively addressing harassment and discrimination within the sector. This proactive approach is pivotal for altering the entrenched systemic gender biases within the organisational milieu (Maphumulo, 2023). The development of resilience among women is essential for effectively tackling adversities such as harassment and discrimination (Rutter, 1995; Maphumulo, 2023). This resilience is cultivated through a keen focus on self-awareness, self-regulation, continuous learning, skill

enhancement, and seeking mentorship which further fortifies their resilience, bolstering their confidence in navigating the workplace dynamics (Maphumulo, 2023). Moreover, the transition towards participatory leadership among female leaders within the South African railways is noteworthy. This leadership style, characterised by inclusive decision-making, open communication, and fostering ownership, presents a robust response to the gender disparities (Epstein, 2022; Maphumulo, 2023). By engendering a culture of inclusivity and collaboration, participatory leadership not only accommodates diverse perspectives but also empowers women, thereby enhancing the decision-making and problem-solving processes within the organisation (Simmons & Yawson, 2022).

2.8 Thoughts on fighting gender stereotypes in male dominated environments

This section of the study highlight on the various thoughts on fighting gender stereotyping in male dominated industries or workplaces. Inclusive recruitment strategies and the formulation and implementation of strong gender formal rules have been cited as the thoughts on fighting gender stereotypes in male dominated environments.

2.8.1 Inclusive recruitment strategies

Recruitment strategies include targeting information provision where women are most likely to access it (Laursen & Austin, 2020). This includes women only information sessions and training days, i.e. job tasters for women (Bridges et al., 2023) where role models and mentors are present. Advertisements that include images of women working in the trades and information about flexible working hours, mentoring and welcoming messages such as applications from women particularly welcomed, childcare support and gender awareness training for applicants are effective recruitment strategies (Potter & Hill, 2009; Bridges et al., 2023).

2.8.2 Formulation and implementation of strong gender formal rules

Findings from the literature review suggest that simply paying lip service to government legislation and policies targeting equity, diversity and inclusion is not a viable long-term strategy for equity, diversity and inclusion. (Galea et al.,2015; Kray &

Kuipers, 2020) propose that the more robust and revisable the design of the formal rules, the more likely rules are to become entrenched and stick over time. Their research found that policy becomes robust when it is tied with organisational values. Robustness is also achieved through enforcement of rules and a clear description in policy of how this can occur (Koenig, 2020). Senior leadership's appropriate and speedy response to breaches of policy as well as clear messaging, transparency and enforcement were found to be effective means to ensure gender equity in recruitment, promotion and the enforcement of flexible policies (Galea et al., 2015; Lewis, 2022). Their study found that adherence to more informal practices, such as presentism, disrupted formal gender equality policy designed to encourage flexible work hours. Additionally, Litzky (2020) note that formal occupational health and safety policies designed to reduce injury may be undermined by the informal values and practices of hegemonic masculine culture. Robust and adaptable formal policy, tailored to fit cultural values can potentially support practices designed to improve working conditions for all (Fielden et al., 2000; Galea et al., 2015; Laursen & Austin, 2020).

2.8.3 Gender diversity and inclusion policy framework

Companies need to create a culture that embraces diversity. It is important that all leaders in the company are behind the mission. Positive change is most likely to happen when it is championed at the top (Kamenou, 2022). Group Executives shall be held accountable to ensure that there is commitment and resources are made available to create a culture of diversity and inclusion. While South Africa has designed a most comprehensive National Machinery, it must also support it to ensure that it achieves its optimal potential (Maphomulo, 2023). The South African National Gender Programme has been introduced into an institutional framework with established Human Resource norms, standards and practices. A key feature in the recruitment of personnel is the high value placed on administrative and management competence. Managers should be transparent about the problems that exist within the company and set internal targets and measures to address them (Ladge, 2022; Kanter, 2022). It is important to note that the achievement of gender diversity and inclusion in terms of the highlighted priority areas is dependent on the application of a dedicated budget, effective implementation plan and integrated approach as driven through partnerships between government and the private sector (Johnson, 2020; Harris, 2022).

The National Gender Policy Framework is a document that defines the country's vision and states what it plans to do to achieve this vision. It provides the framework by providing broad guidelines (Harris, 2022). It is directive and prescriptive on minimum standards for the institutional framework, key indicators and national goals. All of these have direct impact for the development of sector specific policies and plans of action (Gartrell, 2022). It is a policy framework that is guided by national imperatives. It addresses needs by proposing mechanisms that were articulated by women and men who engaged in the consultative process that resulted in enshrining gender equality into the National Constitution. To this end, monitoring and evaluation tools will be used as catalysts to inform the attainment of expected deliverables as outlined above and reviewed annually, both by all companies (Hernandez, 2020; Maphomulo, 2023).

2.9 Chapter summary

The extensive literature reviewed in the preceding sections underlines the nuanced and multi-faceted challenges women face in male-dominated professional environments, particularly in the railway and construction sectors in South Africa and other global contexts. The review illuminated various coping strategies and mechanisms employed by women, spanning mentorship, advocacy for change, resilience cultivation, and adoption of participatory leadership styles, among others. These strategies, as delineated in numerous studies, are quintessential for navigating the gendered workplace landscapes and fostering a culture of inclusivity and resilience amidst adversities. Mentorship and coping strategies in the context of South Africa Railways were also discussed. The next chapter, Chapter 3 presents the research methodology to be utilised in this study.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

Chapter 3, the research methodology chapter, provides a comprehensive account and justification of the research design and methodology employed by the investigator in the present study. The contribution of the research methodology to the research is to document the research process, thus enabling replication and or critique of the research process and results. Section 3.2 details the various research paradigms and the justification for the selection of the constructivism paradigm and phenomenological qualitative approach based on ontological, epistemological, axiological and methodological considerations. Section 3.3 details and justifies the data collection components encompassing tools, methodology, sampling techniques and data analysis. Section 3.4 focuses on research quality, specifically trustworthiness, since this is a qualitative study. Ethical considerations and elimination of bias are then articulated in Sections 3.5 and 3.6, respectively. The chapter ends with Section 3.7, which summarises its contents and indicates the title of the next chapter.

3.2 Research paradigm: ontological, epistemological and methodological considerations

Thomas Kuhn introduced the concept of paradigm in the work, 'The Structure of Scientific Revolutions' to mean a philosophical framework for thinking (Kivunja & Kuyini, 2017). According to Guba and Lincoln (1994), a paradigm is a fundamental framework or worldview that directs the investigator or researcher. In their study, Saunders, Lewis and Thornhill (2003) propose the use of "philosophy" instead of "paradigm" to refer to the researcher's worldview or assumptions that shape their research. From the definitions above, it is clear that the paradigm is significant, and it is where research must start. Therefore, it is crucial to establish a solid foundation by adopting a paradigm before making any decisions about the research as the paradigm informs the methodology, design, and method (Okesina, 2020).

A paradigm is primarily a function of ontological, epistemological, axiological and methodological considerations (Ugwu et al., 2021). A paradigm delineates a perspective on the world that is shaped by philosophical presumptions concerning

ontology (belief regarding the very nature of reality), epistemology (the means by which we acquire knowledge), ethics and value systems (convictions regarding what is true), and methods of knowing (referred to as axiology) (Patton, 2002). Table 3.1 below details a summary of different paradigms available to the researcher and the critical components of the research falling under each paradigm.

The study explored how women managers in male-dominated work environments experience gender stereotyping and the strategies they utilise to cope with such challenges. Therefore, the study tended to be subjective as the collected information consists of the opinions, experiences and feelings of others (Creswell, 2014). Since the collected information represents the opinions, experiences, and feelings of others, it was subjective as different people experience the same situation or environment differently due to different backgrounds, emotional states and personalities (Okesina, 2020). Additionally, there is a dearth of information within the South African context on women in male-dominated environments, consequently there is need for investigative studies to establish theories and themes in this area. While there have been studies on women in male-dominated environments in developed countries, the results of these studies are not transferable to developing nations as developed nations and developing nations have extremely different professional environments as influenced by radically different social and economic environments (Chilisa, 2019; Okesina, 2020). Having established the above, the appropriate paradigm for this study was the constructivist and interpretivist paradigms as it seeks to understand human behaviour and acknowledges that multiple socially constructed realities exist. The constructivism and interpretivism paradigms are related concepts that focus on understanding the world as others experience it (Chilisa, 2019).

Table 3.1: Paradigms and their components

(Adapted from Chilisa, 2019 and Ugwu et al., 2021)

	POSITIVIST/ POSTPOSITIVIST PARADIGM	CONSTRUCTIVIST/ INTERPRETATIVE PARADIGM	TRANSFORMATIVE/ EMANCIPATORY PARADIGM	POSTCOLONIAL/ INDIGENOUS RESEARCH PARADIGM
Reason for doing the research	The objective is to uncover universal rules that are applicable and regulate the whole cosmos.	To understand and describe human nature	The objective is to debunk misconceptions and enable individuals to profoundly transform society.	In order to counteract negative perceptions and harmful portrayals of those who were formerly colonised, it is necessary to develop a comprehensive understanding that instils optimism and facilitates societal progress among those who have historically been marginalised.
Philosophical underpinnings	The key influences of this approach are realism, idealism, and critical realism.	Informed by hermeneutics and phenomenology	Drawing on critical theory, postcolonial discourses, feminist theories, race-specific theories, and neo-Marxist ideas	Drawing from a variety of sources, including neo-Marxist thought, feminist theory, critical race theory, postcolonial discourses, and indigenous knowledge systems
Ontological assumptions	One reality, knowable within probability	Multiple socially constructed realities	Diverse realities influenced by social, political, cultural, economic, racial, ethnic, gender, and disability perspectives.	Multiple realities are formed via the social construction process, influenced by the various relationships that humans have with their surroundings, including the environment, the cosmos, and both living and non-living entities.
Place of values in the research process	Science is inherently value-neutral, and values only come into play when selecting a research subject.	Values are a fundamental component of social existence; no set of values held by a group is incorrect, but rather distinct.	Every scientific inquiry must be grounded in a certain value stance since some stances are correct while others are incorrect.	Research endeavours should adhere to a relational accountability framework that prioritises respectful portrayal, reciprocal engagement, and protection of individual rights.

Nature of knowledge	Objective	Subjective; idiographic	The objective is to achieve a comprehensive comprehension that is focused on essential action.	Knowledge is inherently interconnected and is the foundation of all indigenous knowledge systems, which are constructed based on these interconnections.
What counts as truth	Based on precise observation and measurement that is verifiable	Truth is context dependent	It is informed by a theory that unveils illusions	It is influenced by the many connections one has with the cosmos.
Methodology	Quantitative; correlational; quasi-experimental; experimental; causal comparative; survey	Qualitative; phenomenology; ethnographic; symbolic interaction; naturalistic	The use of both quantitative and qualitative action research methods, as well as the inclusion of participatory research approaches.	Research techniques and procedures that include indigenous knowledge systems, and are characterised by active participation, liberation, and transformation.
Techniques of gathering data	Mainly questionnaires, observations, tests and experiments	Mainly interviews, participant observation, pictures, photographs, diaries and documents	A combination of techniques in the other two paradigms	Approaches derived from philosophical wisdom, cultural philosophy, linguistic frameworks, traditional knowledge systems, and oral storytelling and discussion circles

The constructive paradigm was selected because it emphasises that realities are socially constructed, and knowledge is subjective, shaped by individuals and their interactions while the interpretivism paradigm focuses on understanding the way people make meaning, seeking empathetic understanding of cultural phenomena (Ugwu et al., 2021). Additionally, the constructivist paradigm was selected over the interpretivist due to ontological reasons, particularly the interpretivist's limitation in acknowledging the existence of a tangible external reality (Chilisa, 2019). Epistemologically, the constructivist paradigm is suitable as it believes that knowledge is subjective, because it is socially constructed; it depends on the individual and truth lies within the human experience (Ugwu et al., 2021). The constructivist paradigm was also suitable as the study sought to collect statements and experiences on what is true or false for the women managers, recognising that these judgements are culturally bound, historically contingent and context dependent, although some may be universal (Chilisa, 2019; Ugwu et al., 2021). Within this context, the women managers' experiences and notions find space as legitimate knowledge.

With respect to axiology, the constructivist paradigm is appropriate since it acknowledges that reality is mind constructed and mind dependent, and knowledge is subjective. Social inquiry is in turn value-bound and value-laden (Babbie, 2016). The women managers' experiences and notions are influenced by their values, which inform the constructivist paradigm's acknowledgement of the value-laden nature of their study. Moreover, the constructivist approach was cognisant of biases related to the topic under study that may interfere with neutrality (Chilisa, 2019). Having established the ontology, epistemology and axiology informing the selection of the constructivist paradigm, the qualitative methodology is then the only viable methodology commensurate with the selected paradigm (Ugwu et al., 2021). The quantitative methodology is not suitable due to the absence of Afrocentric theories on women managers' stereotyping experiences and coping strategies in male-dominated environments, making it challenging to quantitatively test.

Qualitative methodologies include Phenomenology, Ethnography, Symbolic Interactionism, and Naturalistic Inquiry. The phenomenological qualitative approach will be utilised as it allows for a nuanced understanding of unquantifiable lived experiences, perceptions and notions and discourages generalisation (Mbeche, 2020). Bansal, Smith & Vaara (2018) highlighted that phenomenological qualitative

research provides novel theoretical frameworks and fresh perspectives. This corresponds with the study's objective of gathering insights from women managers at Freight Rail. It aims to establish deliberate connections between individuals and their contexts, thus revealing the fundamental nature and significance of human encounters. This approach provides valuable insights into a phenomenon, enabling comprehensive understanding and offering additional insights into its contextual framework. It serves as a psychological examination of subjective phenomena (Soini et al., 2011).

3.3 Research strategy

The research strategy encompasses the specific approach, including elements such as the research design and the research methodologies (Bell, 2020). Outlined below are the research strategies utilised in this research and a rationale for their selection. It should be noted that the strategies selected and discussed are specific to the qualitative methodology chosen for this study.

3.3.1 Data collection tool

Data collection in research is the process of gathering numbers, opinions and other variables of interest, in an established systematic fashion that enables one to propose theories, answer stated research questions, test hypotheses, and evaluate outcomes (Willson & Miller, 2014). While methods vary by discipline, the emphasis on ensuring accurate and honest collection remains the same (Sapsford & Jupp, 1996). For research in science, medicine, higher education and other fields, data collection is often a more specialised process, in which researchers create and implement measures to collect specific sets of data. In both the business and research contexts, though, the collected data must be accurate to ensure that analytics findings and research results are valid. There are various data collection tools applicable to the phenomenological qualitative study as detailed in Table 3.2.

Table 3.2: Summary of different data collection methods and applicability (Gupta & Gupta, 2022; Mishra & Alok, 2022; Sileyew, 2019b)

Method	When to use	How to collect
Survey	To get an understanding of the overall personality traits or viewpoints of a group of individuals.	Sample is presented a list of questions to answer in person or over-the-phone
Interview/focus group	to get a comprehensive comprehension of the perspectives or viewpoints of a subject.	Verbally ask participants open-ended questions in individual interviews or focus group discussions.
Observation	To understand something as it would happen in its undisturbed state	Measure or survey a sample without trying to affect them.

Based on Table 3.2 and considering the selected study paradigm, interviews were selected over focus groups as the best research data gathering tool for the study. When participants are in a focus group with peers, they may not be completely honest about some subjects (Gupta & Gupta, 2022; Mishra & Alok, 2022; Sileyew, 2019). Therefore, the researcher wants to probe them individually with incisive, open-ended questions. A portion of the experiences that participants will be sharing can be private or sensitive. Because they may not feel comfortable sharing them in an unstructured group, the research used semi-structured interviews (Gupta & Gupta, 2022; Mishra & Alok, 2022; Sileyew, 2019).

Semi-structured and unstructured interviews are the two types used in qualitative research (Alshenqeeti, 2014). In a semi-structured interview, the interviewee is presented with a list of pre-formulated questions and asked to reply in their own words. To make sure that every respondent provides information on the same subjects, some interviewers employ a topic guide that doubles as a checklist (Magaldi & Berler, 2020). Depending on the respondent's responses, the interviewer may use follow-up questions to get further information (Naz, Gulab & Aslam, 2022). Semi-structured interviews come in use when it is necessary to methodically gather detailed information from several interviewers or respondents. In unstructured interviews, there are no restrictions, restricting practices, pre-established questions, or lists of options

(Bihu, 2020). In order to encourage the responder to open up and have a relaxed, spontaneous chat, the interviewer asks a few lengthy questions (Chauhan, 2022). In order to get more detailed information about the subject, the interviewer also probes deeper with questions and/or looks into conflicts that arise. When there is little information available on a subject, or when the interviewer wants to hear the stories behind respondents' experiences, unstructured interviews may be quite helpful (Osborne & Grant-Smith, 2021). The study utilised the semi-structured interviews to gather data for the following reasons:

1. Semi-structured interviews are a very rapid and efficient procedure to collect data from many participants as compared to unstructured interviews (Adams, 2015).
2. The structured nature in the form of prepared questions is suitable for inexperienced researchers as the questions act as guides to ensure that all relevant questions are asked and asked without introducing bias (Brinkmann, 2014).

To make sure that no data is lost during collection, the researcher employed a digital voice recorder with the participants' consent. Probing, active listening, attention, and empathy are some of the techniques the researcher plans to use to get information from the participants (McMillan & Schumacher, 2014).

The data collection tool is composed of two sections, Section A and Section B, with a total of 16 questions. Section A is composed of 4 questions. Section A questions are filtering questions to ensure that only respondents who satisfy the inclusion criteria are in the study. The filtering questions ensured that:

- i) the participant is a woman
- ii) the participants work at Transnet Freight Rail Johannesburg
- iii) the participant is a manager at Transnet Freight Rail
- iv) has more than five years of managerial working experience at Transnet Freight Rail

Section B questions are focused on the objectives. Each objective had 3 questions therefore there were 12 questions in Section B.

Interview Guide (Annexure B)

Section A: Demographic questions (filtering)

1. Please state your gender (filtering question to establish the sex of the participant)
2. State the current company you work for and the city you work in (filtering question to establish the organisation participant works in and the town they work in)
3. What is your official job designation? (filtering question to establish if the participant is a manager)
4. How many years of management do you have at Transnet Freight Rail (filtering question to establish has adequate years of experience)

Section B: Objective questions

Objective 1: To identify the formal and covert organisational gender stereotyping of women managers at Transnet Freight Rail

1. As a woman manager, can you comment on your experience on the provision of resources, infrastructure bias, and policy equity in the organisation for women managers and for male managers?
2. Have you experienced gender stereotyping or situations where you were expected to do certain things because you are a woman, and not because you are a manager?
3. Since you joined Transnet Freight Rail, in your opinion, has there been real transformation with regard to unique challenges women face, and who has been the driver and opposer of the transformation?

Objective 2: To determine female managers' unique physical, work identity, and work life balance needs which are used to disadvantage them at Transnet Freight Rail

1. Can you articulate the physical and health-related difficulties women experience at Transnet Freight Rail?
2. Can you comment on negative work-identity perceptions that women managers experience at Transnet Freight Rail?
3. Please comment on how your work as a woman manager at Transnet Freight Rail affects your work-life balance?

Objective 3: To establish coping strategies and resources that women managers at Transnet Freight Rail utilise.

1. When you face challenges of a gendered nature, what coping strategies do you use?
2. What resources have been availed to you by Transnet Freight Rail as a woman manager to make you resilient and deal with gender stereotyping at work?
3. What motivates you to be more resilient and continue working at Transnet Freight Rail despite the challenges you face as a woman manager?

Objective 4: To conceptualise how negative women manager stereotyping can be mitigated and coping strategies improved at Transnet Freight Rail

1. If you could implement any measure without interference, what measures would you implement to make women managers more resilient and better able to resist gender stereotyping at Transnet Freight Rail?
2. Also, if you could implement any measure without interference, what measures would you implement to enhance the coping mechanisms of women managers at Transnet Freight Rail?
3. What can be done better to make the work environment more women and women-manager-friendly?

3.3.2 Target population

In research, the term population refers to the whole group of people or components that contain certain qualities, but the term target population refers to a subset of the population that is in accordance with the study objective or criteria (Ingram & Schneider, 1991). The particular group that researchers wish to comprehend or investigate in order to achieve the goal of generalising their results to a more extensive setting is referred to as the target population (Stratton, 2021). When compared to this, the population is comprised of all people who share certain characteristics. In this study the population were women managers at Transnet Freight Rail; the target population are women managers at Transnet Freight Rail Johannesburg. The target population of this study is five thousand women managers at Transnet Freight Rail Johannesburg.

3.3.3 Sampling and sample size

A sample is a representative subset of the target population which participates in a research study (Thompson, 2012). Samples are important as they are representative and make data collection feasible because it is impossible in qualitative studies to involve the whole target population (Lakens, 2022). Sampling, the process of creating a sample, can be categorised into probability or non-probability sampling methods (Acharya et al., 2013). This study utilised non-probability sampling, specifically purposive sampling. Purposive sampling is the non-random selection of a sample based on specific characteristics (inclusion criteria) that they have which fulfils a specified purpose (Campbell et al., 2020). The inclusion criteria for the study are i) the participant must be a female manager at Transnet Freight Rail, and ii) must have more than five years of managerial working experience at Transnet Freight Rail (low, middle, or executive management) to ensure that the sample has sufficient exposure to the systems and culture of Transnet Freight Rail.

The sample size of the study was comprised of 12 female managers working at Transnet Freight Rail who will include a mixture of four (4) in Executive Management, four (4) in Middle Management and (4) supervisors. The guiding concept in qualitative study sample size is saturation (Aguboshim, 2021; Mwita, 2022) which is reached when new data no longer provide additional insights. The target sample size for the study was 12. The recruitment started after ethical clearance has been granted by the University of Free State, with ethical clearance number UFS-HSD2024/0264. An official letter was sent to the Transnet Freight Rail gatekeeper (Managing Director) seeking approval, detailing the title, aim, objectives and methodologies of the study. When the gate keeper approves, internal communication from the gatekeeper was sent to the female managers at Transnet Freight Rail inviting all who meet the inclusion criteria. The emails and contact numbers of all positive responses of people interested in participating in the study were then forwarded to the researcher to enable setting up of times and dates when the respondents were available for interviews. The interviews were physical or virtual depending on the respondent's preference; all communication were through emails.

3.3.4 Pilot Study

A pilot study is an exercise done prior to the actual research with the aim of testing the data collection instrument, data collection method, and analysis method. Additionally, it serves to familiarise the researcher with the methodology, enabling them to identify and correct any potential problems (Pearson et al., 2020). A pilot study with one respondent was conducted before the interviews of the 12 respondents of the sample. The pilot study utilised an interview conducted through Teams or Zoom, with face-to-face interaction preferred. A tape recorder was utilised to ensure accurate documentation and facilitate the examination of the researcher's probing techniques and verbal responses. The information from the pilot run was not utilised in the final data analysis.

3.3.5 Data collection method

Data collection involves systematically gathering observations or measurements in research, which can be qualitative or quantitative. After the pilot study was conducted and necessary adjustments made, the interviews with the 12 female managers were then be conducted. The interviews were facilitated by video calling platform, for example, Zoom or Microsoft teams. However, the preference of the researcher was face to face interviews to enable the researcher to get a full view of the respondent; the interviews were recorded. The interview began with greetings and pleasantries followed by the researcher informing the respondent of the aim and objectives of the study. The respondent were informed of the ethical considerations of the study including the assurance of anonymity as well as the right to stop participation at any point. The researcher distributed the consent letter using two different methods to guarantee that all participants have received adequate information and have given their consent prior to the interview.

1. Before the interview, the researcher sent the consent letter via email to all individuals who have expressed interest in participating in the study. This approach enabled participants to thoroughly review the consent form at their own pace, providing them with ample time to comprehend the purpose of the study, the procedures involved, as well as the potential risks and benefits. By sending the consent form via email, participants had the opportunity to seek

advice or gather additional information from others before the interview, if necessary.

2. Each participant received a physical copy of the consent letter at the beginning of their interview session, in addition to receiving it via email. They had the opportunity to review the consent form once more before commencing the interview. This step is critical because it provided all participants with an opportunity to thoroughly review the information and directly ask any questions to the interviewer in a face-to-face interaction. This individualised approach helped to address any concerns or questions that participants may have.

This process utilised conventional methods to distribute the consent form, ensuring adequate information and opportunities for individuals to willingly and consciously consent before participating in the study. This approach not only adheres to guidelines on informed consent but also considers different preferences for accessing and comprehending information. The respondent were told that the interview will be voice recorded. The interview were started with the researcher asking questions and probing to fully understand the responses of the respondent.

3.3.6 Data Analysis

Qualitative data is primarily analysed by content analysis, narrative analysis, and analytic induction. This study utilised thematic analysis; thematic analysis was used to transcribe and analyse the collected data according to the Braun and Clarke (2006) methodology following the steps below: Step one involved the transcription of the interviews and the researcher reading over the transcripts of the interviews to get acquainted with the primary data. In the second step the researcher, after getting familiar with the data, generated preliminary codes to aid in organising the material acquired in a manner that answers the major study questions and aims in a manner that is both relevant and systematic. The third step involved the researcher going through the codes developed to search for themes. This was done to identify patterns that comprise significant data.

Step four started once the themes discussed in step three have been generated. There were analysed to see whether they are logical and whether or not they are relevant to the objectives of the research. Defining, sharpening, and creating the relationship between each topic and its other subjects comprise the fifth step in the process. The

sixth and final step begin with the creation of an analytical comprehension report, which follows a discussion and interpretation of the findings of the research. Throughout the whole of this process, the aims and objectives of the study was kept in mind. This procedure guaranteed a methodical and thorough approach for examining qualitative data and deriving significant insights.

3.4 Research trustworthiness criteria

Qualitative research focuses on trustworthiness as a central quality criterion. Trustworthiness is measured by four criteria: credibility, reliability, conformability, and transferability (Adler, 2022). Researchers must make judgments regarding the 'soundness of the research in connection to the applicability and appropriateness of the methodologies used and the integrity of the conclusions' when assessing the trustworthiness of study findings (Saunders, Thornhill and Lewis, 2012). Except for quantitative researchers, who use statistical tools to determine the validity and reliability of research findings, qualitative researchers strive to build and adopt methodological procedures that ensure the findings' trustworthiness. These strategies will be briefly discussed.

3.4.1 Credibility

Recognises different realities; investigators detail individual experiences and attitudes that would have caused methodological bias; participants' perspectives are presented simply and truthfully (Robson, 2012). In ensuring credibility, the researcher peer debriefing and aid the investigator in discovering biases taken for granted or suppositions; for instance, the initial qualitative interviews with participants were focused and following interviews were taking a more holistic stance.

3.4.2 Consistency/ dependability

This refers to the method's "trustworthiness," and it is contingent on the researcher keeping a "decision trail," in which the researcher's decisions are clear and visible. An independent researcher should come up with the same or comparable results (Scholz and Tietje, 2002). This was accomplished by providing a transparent and unambiguous account of the research process from the first outline to creating

methodologies and reporting outcomes. In addition, keeping a research diary documenting obstacles and issues will help preserve consistency between the study's goal, design, and process.

3.4.3 Neutrality/ conformability

When credibility, consistency, and application are handled, success is achieved. The focus is on recognising the complexities of long-term involvement with participants and that the methodologies used and the results obtained are inextricably related to the investigators' philosophical viewpoint, experiences, and perspectives. It should all be accounted for and distinguished from the narratives of participants (Schwarndt, 2007). In realising this, emerging themes were discussed with research participants and qualitative research expertise (the supervisor) in an open process where suppositions can be challenged and agreement reached.

3.4.4 Transferability

The findings are evaluated to see if they can be applied to different contexts, places, or groups (Sharma, 2013). Rich detail of context facilitates the assessment of study findings and transferability to other universities. The research documented all the steps of the study and use triangulation through observation, interviews, and other literary sources.

3.5 Ethical Consideration

Ethical consideration forms an integral part of research as it ensures conformity to legal and moral standards (Pietilä et al., 2020). The research focused on four ethical components as detailed below:

Obtaining permission

Permission to conduct research is a critical ethical issue; this is especially true for students under an academic institution due to legalities associated with poorly conducted research (Husband, 2020). Permission is only awarded after a review of all key components by the academic institution to ensure adherence to all legalities (James, 2021). The research only started when the researcher had obtained

permission from UFS through the ethical committee and the academic supervisor. The data collection only started after approval by the institutional gatekeeper.

Informed Consent by participants

Informed consent entails providing all details to participants in a study to ensure that they know what to expect and they agree to participate having received all the relevant information (Laurijssen et al., 2022). The research ensured that the gatekeeper and the respondents are informed verbally and through written documentation of the aim of the study, the procedure and the expected outcomes. Also, before the interviews started the respondents were told of the aim and process of the study and were asked to confirm that they understand the aim and process of the research and their participation is voluntary having been informed of the study components.

Ensure no harm

A critical aspect of ethical considerations is to ensure that no one is harmed (physically, mentally, emotionally and psychologically) (Hammett, Jackson & Bramley, 2022). The study utilised gender, race, sex, and ethnic neutral language. Additionally, all the components of the research are critiqued by a second person (Supervisor) to ensure that the research does not harm anyone. Furthermore, the researcher also read to the participants their rights as research participants to ensure there was no infringement of rights. Finally, the collected data was utilised only for the intended purpose and the names of the respondents remained confidential.

Confidentiality and anonymity

Research, especially of opinions and experiences is potentially damaging to reputations if the source of information is known (Gibson, Benson & Brand, 2013; Wiles et al., 2008). To mitigate the potential dangers of exposure, the study prioritised confidentiality and anonymity (Dube, Mhlongo & Ngulube, 2014). To ensure confidentiality and anonymity, the researcher did not collect or record the names or any personal information of the respondents. Furthermore, only the researcher had access to the raw information or data, which was kept in a secure location. The information will be destroyed five (5) years from the day of collection.

3.6 Elimination of bias

Research bias is a critical concern in any research endeavour. Research bias is any systematic (intentional or unintentional) error that can be introduced during the planning, execution, or analysis of a study and compromise the quality of the research findings (Smith & Noble, 2014). There are several common types of research bias that can significantly impact the validity of a study. These include selection bias, confirmation bias, publication bias, and measurement bias (Popovic & Huecker, 2021). The researcher is a female and works at Transnet Freight Rail, hence research bias is a concern. The researcher adopted the following strategies to mitigate research bias:

Detailed Recordkeeping: The researcher documented every part of the investigation, thus establishing a thorough record that increase both the traceability and transparency of the findings (Sica, 2006).

Honest Reporting: The researcher made every effort to be honest during the whole of the study process and admitted any possible biases that may exist. This is because openness is conducive to trustworthiness (Krishna et al., 2010).

Overview and supervision: the study was carried out under the direction of an independent researcher who acts as an academic supervisor; as a result, any prejudice that may be present was discovered and addressed. In addition, the questions and the coding of the data was reviewed by a number of independent researchers in the form of research colleges. This decision was made because it encourages a variety of viewpoints and helps reduce the influence of individual biases (Gerhard, 2008).

External Review: After the work has been approved by the internal review, it was examined by many external reviewers. This is because an external viewpoint has the ability to bring significant insights and detect possible biases within the work (Popovic & Huecker, 2021).

Research best practices: the research implemented a comprehensive research strategy guided by the literature to guarantee that the study includes defined goals and techniques. The ability to focus and reduce biases is facilitated by having a well-defined goal (Hammersley & Gomm, 1997).

3.7 Chapter Summary

The chapter detailed the research methodology to be employed in this study. The study utilised a constructivist paradigm and a phenomenological qualitative methodology. The data collection tool was semi-structured interviews, and purposive non-probabilistic sampling was utilised to make a sample comprising nine (9) to 12 women managers; data analysis was thematic. The ethics and bias considerations of the study were also detailed. The next chapter is Chapter Four (4) which is the data presentation and discussion of results.

CHAPTER 4

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

The fourth chapter of the research study is concerned with data presentation and analysis; the collected data is organised into various thematic areas, aligning with the research questions and objectives. The verbatim data presentation is complemented by a detailed, in-depth and comprehensive analysis.

4.2 Demographic information

The demographic information of the study participants is critical to the research because it provides a road map for establishing their background and how they relate to the subject under investigation as detailed in Table 4.1.

Table 4.1 Participants demographic information

Participants	Gender	Occupation
Participant 1	Female	Maintenance manager [Road and Track]
Participant 2	Female	Maintenance manager [Parkway Department]
Participant 3	Female	Maintenance manager [Planning]
Participant 4	Female	Depot engineering manager
Participant 5	Female	Head of operations
Participant 6	Female	Senior manager [Corporate Affairs and Stakeholder Management]
Participant 7	Female	Employee wellness specialist
Participant 8	Female	Chief engineering manager
Participant 9	Female	Senior Manager [Maintenance]
Participant 10	Female	Maintenance Manager [Electrical]
Participant 11	Female	Head of People
Participant 12	Female	Safety Manager

(Source: Field Data (2024))

The data collected revealed that all study participants were females who held high profile positions within Transnet Freight Rail, South Africa Railways. Most of the study participants had worked within the organisation for more than five years. Their vast experience served as a valuable foundation for investigating the “gender stereotypes and coping strategies for women in male-dominated industries”. The participant’s feedback during the data collection process was well informed due to their considerable experiences. As the research presents and analyses the responses of the study participants, their names are kept anonymous; hence the researcher refers to them as Participant 1 up to Participant 12.

4.3 Thematic analysis table

Objectives	Questions	Themes
Objectives 1: To identify the formal and covert organisational gender stereotyping of women managers at Transnet Freight Rail	Q1: As a woman manager, can you comment on your experience on the provision of resources, infrastructure bias, and policy equity in the organisation for women managers and for male managers?	The provision of resources, infrastructure bias, and policy equity
	Q2: Have you experienced gender stereotyping or situations where you were expected to do certain things because you are a woman, and not because you are a manager?	Gender stereotypes at Transnet Freight Rail
	Q3: Since you joined Transnet Freight Rail, in your opinion, has there been real transformation	Transformation driver and opposer at Transnet Freight Rail

	with regard to unique challenges women face, and who has been the driver and opposer of the transformation?	
Objective 2: To determine female managers' unique physical, work identity, and work-life balance needs which are used to disadvantage them at Transnet Freight Rail	Q1: Can you articulate the physical and health-related difficulties women experience at Transnet Freight Rail?	The physical and health-related difficulties women experience at Transnet Freight Rail
	Q2: Can you comment on negative work-identity perceptions that women managers experience at Transnet Freight Rail?	Discrimination and exploitation of women managers at the workplace
	Q3: Please comment on how your work as a woman manager at Transnet Freight Rail affects your work-life balance?	Balancing work-life for female managers at Transnet Freight Rail
Objective 3: To establish coping strategies and resources that women managers at Transnet Freight Rail utilise	Q1: When you face challenges of a gendered nature, what coping strategies do you use?	Coping strategies for challenges of a gendered nature
	Q2: What resources have been availed to you by Transnet Freight Rail as a woman manager to make you resilient and deal with gender stereotyping at work?	Supporting women managers' resilience and addressing gender stereotyping

<p>Objective 4: To conceptualise how negative stereotyping of women managers can be mitigated and coping strategies improved at Transnet Freight Rail</p>	<p>Q3: What motivates you to be more resilient and continue working at Transnet Freight Rail despite the challenges you face as a woman manager?</p>	
	<p>Q1: If you could implement any measure without interference, what measures would you implement to make women managers more resilient and better able to resist gender stereotyping at Transnet Freight Rail?</p>	<p>Suggested measures for making women managers more resilient and better able to resist gender stereotyping</p>
	<p>Q2: Also, if you could implement any measure without interference, what measures would you implement to enhance the coping mechanisms of women managers at Transnet Freight Rail?</p>	
	<p>Q3: What can be done better to make the work environment more women and women manager-friendly?</p>	<p>Making the working environment more women and women manager-friendly</p>

4.4 The formal and covert organisational gender stereotyping of women managers at Transnet Freight Rail

4.4.1 The provision of resources, infrastructure bias, and policy equity

The study sought to examine gender stereotypes and coping strategies for women in male-dominated industries, using Transnet Freight Rail, South Africa railways, as a case study. In this regard one of the study objectives was to identify both formal and covert organisational gender stereotyping of women managers at Transnet Freight Rail. The interviewed female managers were asked to share their experiences regarding the provision of resources, infrastructure bias, and policy equity within the organisation for both women and male managers. The study participants voiced their concerns by highlighting that:

“So in terms of policy, being specific for women or for males, and they aren't or haven't not seen any policies which will be a specific gender specific. And the Transnet policies do cater for everybody that is within the work environment. So if an employee of Transnet, you will see that our policy will state that it causes us for, for all employees, yeah.” (Participant 1)

“Yeah, I can say that in Transnet, we do have those policies, umm, around the women leadership; I can confirm we do have such policies.” (Participant 2)

“I did not...OK, from my own experience....Uh, I feel like us as woman we have been provided for in the space that we are working in. Equal opportunities are given, obviously based on competence. Well, excluding connections...Yeah, based on a confidence. So I feel like we are equally specially if I'm at, I feel like there's more female managers than actually males in this depot. So yeah, there's a balance on the both genders here.” (Participant 5)

“Yeah, there is equity it that is been used which favors both male and female and in the workplace not to discriminate in case of gender. So that one is effective from what I've observed.” (Participant 6)

Observations from the collected data revealed that a portion of the study participants acknowledged the existence of policies supporting the provision of resources, addressing infrastructure bias, and promoting policy equity for women and male managers within the organisation. However, another group of participants expressed the view that no such policies exist at Transnet Freight Rail. They voiced their concern by stating that:

“There's nothing like that, I think within Transnet Freight rail, where it is stage that we are all treated equally. So there are no resources that are specifically for women and less things that are very sensitive like ablution facilities. We make sure that it's separated the restrooms in the operational space. It's separated and that is not management level you understand. But even at management level where we are sitting, we sit together as all the managers in the bottoms.” (Participant 3)

“Umm, there's actually no policy for women or special treatment. Umm for woman, if I can put it like that throughout all the same.” (Participant 4)

The study participants called for improvements in the provision of resources, infrastructure bias, and policy equity for female and male managers at Transnet Freight Rail. The findings revealed contradictory perceptions among participants regarding gender stereotyping and the various coping strategies used by female managers. Some participants acknowledged the existence of policies that support the provision of resources, policy equity and address infrastructure bias. Nevertheless, others refuted this, stating that no such policies exist. In support of the above findings a study by Broadbridge and Feilden (2020) revealed that, there is lack of support for female managers working in male dominated industries, raising concerns over the absence of separate ablution facilities for female employees at the company. The findings of the study underscored the need for the company to address these existing disparities by improving the policies on equity and equality. Bridging the gap between male and female employees will foster a more inclusive working environment that promotes gender equity and equality and challenges all forms of gender stereotyping.

4.4.2 Gender stereotypes at Transnet Freight Rail

The study sought to explore the participants' perceptions of gender stereotyping at Transnet Freight Rail. The evidence from the collected data revealed that there are traces of gender stereotyping within the organisation. The participants summarised their experiences in the following words:

“Yes, I have...Before umm and I think when we enter a board room and you find that there is no one take minutes and your male counterparts or your male

heads will tend to look at a female in the boardroom to that's umm...You click, your secretary is sectionalist, so your male counterparts helpful to look at females to do such activity.” (Participant 1)

“I'm trying to think since I...Because I'm a woman and not because you are a manager. Uh...Yeah...And by the time I was just supervisor, you find that when we are in supervisors meeting, like when I was in a supervisor level every Friday morning will have a supervisors meeting...And I will be the one who cares about offering cup of coffee...And when the meeting is ongoing, I'll be standing there at the cupboard making sure that everybody's created for everybody is getting coffee and it's all because of my appraising and in space of humanity, principles and values.” (Participant 2)

“Especially now that I'm in manager, I think stereotypes they come like when we back, then 2010 when we're still young and getting trained and all that and when we still had those old white, you know bosses where when we were coming in as young females, this one it was like we can't do the job and all that...But I think as time went by, Umm, we actually not experience thing that I'm not sure if it's still there on that level or maybe you know it's because I'm on a different level now that it's not there.” (Participant 5)

Observations from the collected data revealed that some female managers at the Transnet Freight Rail experienced gender stereotyping, where they were expected to perform certain tasks because were women, rather than in their capacity as managers. Nevertheless a study by Dzansi (2022) highlighted that, some of the women in male dominated industries had never encountered any form of gender stereotyping or situations where they were treated differently because of their gender. The following quotes suggest a more positive perception in this respect:

“Personally, I haven't had...I don't have a personal experience of that nature. I think in terms of the field that I am in, it is dominated by females and we've got males who are now joining in the field. But I think because of the field that I'm in with within the Wellness space, I haven't had such an experience.” (Participant 10)

“Umm in my experience, you know, in Transnet I don't think I was in such kind of situation...Yes I will say...All the all the tasks that I've performed...It was not given to me just because I'm a woman or, you know, and I think it was just it was all about my capability. No, I've never been in a situation whereby I was given a task because I'm a woman.” (Participant 5)

“Yeah, I never experienced that thing...For me it's it has been, yeah, we've been treated equal. Maybe it would be there and there, but I never witness it to fully to say, just be yes.” (Participant 7)

Observations from the collected data revealed that the interviewed study participants had different experiences with regard to gender stereotyping. Some participants highlighted that they had experienced gender stereotyping or were assigned to certain tasks because there were women and not managers, while others articulated that they had never experienced such treatment.

The findings of the study revealed a nuanced and complex landscape of gender stereotyping at the company. A study by Hernandez (2022) revealed that, some female managers in male dominated industries recalled incidents where they were compelled to execute certain tasks based on their gender; despite holding managerial roles, they were asked to serve coffee or take minutes during meeting just because they were female. This is a clear indication that gender stereotyping and gender biases do exist within the organisation. Nevertheless, some of the study participants reported that they did not experience any form of gender stereotyping and were treated equally. Transnet Freight Rail should take action to dismantle and address any form of gender stereotyping within the organisation.

4.4.3 Transformation driver and opposer at the Transnet Freight Rail

There were mixed reactions regarding whether there has been real transformation in addressing the unique challenges women face, and who has been driving or opposing this transformation. The study participants phrased their concerns this way:

“I think from the time I came in...Luckily for me, my line manager has been a female. However, with top management, it's mostly male-dominated, but steps have been taken to move forward, especially for females, to give them a seat

at the table and make their presence valued. Females, especially in TFR, have taken steps to create a platform for women, including a former port manager who intentionally promoted qualified females to top management. She wanted females who knew what they were doing and afforded them the opportunity to contribute. The industry is male-dominated, but there is space for women. We need to leave a legacy by mentoring young females to take our places and make decisions. I dislike it when males interrupt females while they're speaking, undermining their contributions. Luckily, we had a sharp port manager who wanted to build up young women and make them feel valued.” (Participant 12)

“When I joined Transnet, I was a train assistant in a male-dominated and white-dominated environment. As a woman, I faced challenges, including an unwelcoming reception, barriers, and acceptance issues. We had to prove ourselves, as there was a perception that women couldn't do the job. The work was labor-intensive, and even when struggling, males would laugh and not offer help, unless someone with a good heart intervened. These were the challenges we faced in a male-dominated space.” (Participant 2)

“So, I think the shift in Transnet's leadership has influenced the environment, making it more receptive to women. With female leadership, we're seeing a change in how women are perceived and treated. More females are being promoted to leadership positions across various levels. Although targets have always been set, they were previously unattainable, and penalties were accepted rather than striving to meet them. But now, with the shift in leadership, we're seeing a positive change.” (Participant 3)

“Oh, of course... There have been many changes in the workplace to ensure all genders can perform their duties comfortably. In Transnet, we adapt to changing times, making the organisation flexible to accommodate all genders. The transformation is an ongoing process, and we're continuously evolving, not just changing and then pausing.” (Participant 4)

There has been noticeable transformation at Transnet Freight Rail with women increasingly securing positions in male dominated departments. While train-related jobs were previously male dominated, the collected data revealed significant changes

as more and more females were occupying these roles. These findings concurred with the findings of the study by Gatrell (2022) which stated that, as more and more females entered this space, the working environment also transformed to better accommodate them. With this shift, it became clear that as more females moved into male dominated spaces, especially management and leadership positions, they began lobbying for the rights of other females as well as calling for improvements in working conditions. However, their efforts were challenged by their male counterparts who felt threatened by the authority and capabilities of the female employees.

There is a mixed assessment of the transformation within the organisation regarding the challenges faced by women. Acknowledgements have been made regarding the existence of equity and equality among male and female employees within the organisation; this has seen an increasing number of women taking up previously male dominated positions in the work place. Female mentorship, willingness and leadership capabilities have all been highlighted as key factors enabling this progress (Acker, 2020). Nevertheless, some of the data revealed that female managers and employees within the organisation still experience challenges, including resistance and interruptions from their male counterparts. Female managers and employees play a key role in fostering gender equity and equality, actively seeking to improve the working conditions for females in a male dominated industry.

4.5 Determining female managers' unique physical, work identity, and work-life balance needs which are used to disadvantage them at Transnet Freight Rail

4.5.1 The physical and health-related difficulties women experience at Transnet Freight Rail

There were mixed reactions regarding the physical and health-related difficulties women encounter at Transnet Freight Rail. The study participants expressed their concerns in the following words:

“Basically, my job is physical, but not extremely physical. As a female, I need to be on site, but I realise that as I age, like my line manager who is getting older, I may face limitations in the technical space. While men can work until retirement, age becomes a factor for women, especially with maternity

restrictions. However, when we're young, we can work just as much as men.”
(Participant 1)

“Physical activities like coupling pipes require strength and muscles, making it difficult, especially when bending down or kneeling on rails or ballast stones. As a woman, I faced challenges, particularly during pregnancy, as there was no pregnancy policy in place when I started. I had to hide my pregnancy to avoid being removed from operational duties, which would impact me financially. Even now, women face health-related difficulties, including menstrual challenges, making it essential to consider these factors in the workplace.” (Participant 2)

The evidence from the collected data revealed that the playing field was not equal for female and male employees at Transnet Freight Rail, as female employees experienced more physical and health-related difficulties than their male counterparts. This evidence concurred with the findings of the study by Adusei (2022) which revealed that, the male dominated working environment posed greater challenges for women, particularly pregnant employees who often feared disclosing their status due to fear of being removed from their positions—a scenario that could negatively affect their financial stability. The study participants phrased their concerns this way:

“So, on site level, we're fighting for women representation and equality, but some positions require strength and manual labor, posing challenges. Dynamics change when women are appointed to these positions, and negotiations can put them at a disadvantage, making them prove themselves in a man's world. If they can't meet expectations, they're at a disadvantage, struggling to perform at their best.” (Participant 3)

“I haven't experienced challenges myself, but in production meetings, I've heard leaders report on teams' struggles, like lack of accommodations for women, including private facilities for personal hygiene during periods. Transnet is trying to address these challenges and accommodate everyone.” (Participant 4)

The rest rooms and toilets at the company are not up to standard, posing a health risk to the female employees at Transnet Freight Rail. Additionally, most tasks at the company require physical strength which is often presumed to be lacking in women,

even though some female employees are assigned to physically demanding roles. Such scenarios pose both physical and health threats for the women at Transnet Freight Rail.

The collected data revealed that female employees within the organisation face numerous health-related and physical challenges, due to the physical demands of their tasks. Kray and Kuipers (2020) articulated that, the manual labour involved in many roles proves to be challenging for the female employees. Furthermore, there is a lack of infrastructure to support their needs, such as private facilities, separate ablutions, and adequate restrooms for female employees. These challenges create an uneven working environment, ultimately affecting the performance of the female managers and employees within the organisation.

4.5.2 Discrimination and exploitation of women managers in the workplace

The study sought to explore the negative work-identity perceptions that women managers experience at Transnet Freight Rail in South Africa. In this context, the study participants voiced their concerns, stating:

“Most of the time that the negative comments that you hear is obviously when you climb the corporate ladder; you must have had a carpet interview. Yeah...so I unfortunately. Hey, it's still not perceived that you you've got that position because you are good enough. You know the connotation of you still going through the carpet interview is still being seen, as you know, the only way and unfortunately, I mean the environment, we can't share away from is that such a request are still available. Where men believe that in order for you to get anything done, you must go through that cop its interview, or bring in some sexual favour.” (Participant 7)

“I wouldn't say it's Transnet, because maybe even in other organisation there are still those guys who like say that, you know, and because you are a woman or let's do this for the woman, you know, it might be that if they are not that stereotypes is that they acknowledge that there's a female. But for me it's just that if you are sitting in the boardroom, there's no female in, there's no male.

We are just employees or colleagues, you know, trying to tackle whatever we are trying to tackle.” (Participant 6)

It is generally perceived that, for women to be promoted in the workplace, they must offer something in return. Some male employees are of the view that females undergo “carpet interviews,” where sexual favours are expected in exchange for managerial promotions. Discrimination against women has also been cited as a negative work-identity perception that women managers experience at Transnet Freight Rail. Such issues are reportedly unique to Transnet Freight Rail but are prevalent in other organisations as well. Coming from this background Dinkelman and Ngai (2022) argued that, the workplace should be non-discriminatory, with female and male employees working collaboratively to solve problems and achieve set targets. The study participants further stated that:

“So, we want to know if there's a negative attitude towards women managers... I haven't experienced it, but I've observed it. Our DE is a female, and some males feel uncomfortable being told what to do by a woman. They resist her leadership and decisions, even though she's made positive changes since arriving at the depot, like implementing changes from her MBA experience in Freight. There's a lot of resistance and hatred towards her for changing things.” (Participant 5)

Observations from the collected data revealed that many male employees opposed the idea of having women managers, believing that female employees do not deserve such positions. It is as a result of such perceptions that female managers face significant resistance from male subordinates in the workplace (Duvall, 2021). The data also highlighted widespread negativity regarding work environment at Transnet Freight Rail. The general observation was that female employees are not hired or promoted on merit and ability but rather, on what they can offer in exchange. Some participants suggested that female employees achieve success through “carpet interviews,” where sexual favours are exchanged for promotions. There is a considerable resistance and discrimination against women in the workplace, and the organisation seems to overlook the capabilities and competencies of female employees, a scenario which poses a significant challenge to the promotion of women in the company.

4.5.3 Balancing work-life for female managers at Transnet Freight Rail

When asked to comment on how working as a woman manager at Transnet Freight Rail affects their work-life balance, the study participants expressed their concerns stating:

“As a woman, I'm fortunate to have a husband living in another province, so I can maintain a work-life balance. I can attend late meetings without issues. However, I understand that female colleagues with families may face challenges, especially if their partners aren't in the industry. They might not comprehend the 24/7 demands of our operational industry, where you're always on standby. This can affect work-life balance, but for me, it's manageable since I live alone.” (Participant 1)

“As women, we have multiple responsibilities at home and must still deliver equally at night, like men. That's why we've been advocating for work-from-home options through Wellness, to help females juggle both worlds. Our work doesn't end at 4 pm, we take our laptops home and continue working, while handling 100 other responsibilities. This puts us at a disadvantage, requiring us to work extra hard without complaining or showcasing the extra hours we put in.” (Participant 7)

Evidence from the collected data revealed that while some female managers are able to balance work and life, it remains a big challenge for those living with their families. These findings concurred with a study by Epstein (2022) which revealed that, some of the female managers have to juggle responsibilities such as preparing their school-going children and husbands for the day before taking care of their own preparations for work or household tasks. As wives and mothers, they are expected to fulfil her domestic duties irrespective of their professional roles, and as managers, they must make sure they perform well at work despite their responsibilities at home (Forkour et al., 2020). Additionally, some participants argued that:

“Yes, it does... As women, we must balance work and home life, while also bearing children and managing pregnancy fatigue. Sometimes male managers don't understand our needs, like rest during long desk hours. However, our organisation has been flexible and understanding. We must find a way to strike a balance between work, family, and personal responsibilities, like dropping

off/picking up children, preparing dinner, and catching up on studies and duties as a wife. It gets hectic, but we must find a way to manage.” (Participant 2)

“...here what is happening is that sometimes I don't even find time to focus and do homework with my child and all of that because there's always a memo I need to do this. I need to consolidate the chief engineer wants this at this time, so I end up really focusing a lot on work than on my personal life because it's like most things. Whatever memo where they are requesting money, I need to check it before it goes to the CE....So it becomes a lot and in all of this you still need to do me things...So I tend to postpone a lot of work to after-hours where I don't have a million meetings. Then again, that means after hours I'm not having time to myself and to my family in such a way that even when I'm on leave, like approved leave, I'll find myself at home opening a laptop and working.” (Participant 5)

Female managers experience anxiety, fatigue and burnout as they try to balance work and personal life. They feel overwhelmed by the demands of both household and office work, since they have to balance being both a wife and a manager. At times it is difficult for them to spend quality time with their families, as they have to attend to office tasks while at home. The data collected revealed that it is difficult for female managers to achieve a healthy work-life balance (Finch & Groves, 2022). Participants highlighted several challenges that affect their ability to balance work and personal life, including family obligations, long working hours, burnout, fatigue, and blurred boundaries between work and personal life. Given these challenges, it is important for the organisation to establish a flexible and supportive working environment that enables female employees manage both work and personal responsibilities effectively.

4.6 Establishing coping strategies and resources that women managers at Transnet Freight Rail utilise

4.6.1 Coping strategies for challenges of a gendered nature

There were mixed reactions regarding the coping strategies for challenges of a gendered nature at Transnet Freight Rail. The study participants expressed their concerns in the following words:

“See the only coping mechanism I have is just to tell my truth I say it right then and there to say that, as I'm saying, when we come here and start working, you

know we're not female and male where all here we are workers. Your opinion is as good as mine. You know, I need an opportunity to voice whatever you also need the same, you know, opportunity to do that. You know, I think that's just how I say it. You know, when I come, that's why, you know, when I'm at work, I lose them. Oh female head and I start being an employee because I don't want anyone to be judging me because I'm a mother. Yes, I want someone to judge me based on my job output.” (Participant 6)

“One on one I will call you on the side then address the issue at the end so that it doesn't repeat.” (Participant 4)

Observations from the data collected revealed that the interviewed female managers had different coping strategies for challenges of a gendered nature, as shown in the above quotations. These strategies have proven effective, according to the study participants' responses. The participants stated their concerns in the following words:

“In most cases, especially in my career, and that different, could being strategies that I try to, you know, use or implement to for me to be able to cope and they are problems solved and I can say problem forecast strategies and we by when I feel like oh I'm not coping in this in this in this career or in my WEG based on gender I find something to focus on you know. And for me, that has been waking. It's for me to be to up skill myself and for me to be able to. To learn more, you know in in, in my job and also emotionally, I'm one person who always general my emotions and I always make sure that physically unfit for me to be able to, to try and cope, you know, in the workplace.” (Participants 1)

“When I joined Transnet, I faced cultural and gender challenges as a woman from Northwest managing Zulu men who didn't believe a woman could lead. As a supervisor, I had to assert myself and learn cultural diversity through development programmes, which taught me coping strategies for dealing with difficult employees who didn't value me. These programmes empowered me with interpersonal skills, communication, and confidence, which Transnet has consistently provided to help me grow.” (Participant 3)

Some of the study participants articulated that investing in supervisory development programmes has helped them deal with the multicultural workplace environment, while

others found that engaging with employees on a one-on-one basis has helped them cope with the challenges of a gendered nature. There are diverse coping strategies used by female managers and employees at Transnet Freight Rail to address these challenges. Assertiveness, up-skilling, emotional regulation, cultural diversity and physical well-being were cited as key areas for improvement as also stated by Finch and Groves (2022). The findings suggest that there is need for the organisation to invest in staff development programmes targeting female managers and employees; such initiatives could serve as mechanisms for addressing the gender-based obstacles faced by female managers and employees within the organisation.

4.6.2 Supporting women managers' resilience and addressing gender stereotyping

The study participants were asked to share their perceptions regarding the resources available at Transnet for female managers to build their resilience and address gendered stereotyping at work. Some of the participants said:

"I don't think this the resources available just for females really.....but I have never seen and such a resources that being available. I think when you're a manager in translates, you are treated the same so they don't see a male old and they don't see a female. Umm, which is unfortunate and especially. In this industry, the ports where you find so many.....And male senior management....So obviously, if there's a male manager....They have a good chance of finding a mental in a senior management who's a male. Then you finding a female, especially because you want to. You want that female to tell you how they navigated through all these things and whether it's employees, whether it's other managers and all that. So sometimes really you are left hanging or you just speak to your peers to say, OK, I'm going through this. How would you handle this and this and yeah, so yeah, there's no resources."
(Participant 1)

"OK, we have I can mention the mentoring, mentoring programmes that you have....So, as a woman, a woman manager. I know that I have that kind of a mental whereby and I mean we have those programmes in the workplace whereby the, the, the, the, the, the company is encouraging us to be part of and

also they are social programmes as well whereby you can have a group of friends where you can be able to do to share your challenges and yeah. So I think there are whole lot of programmes that can be able to help one to cope in the workplace, but it's up to one person. It's up to you as a manager, if you are willing or not to be able to reach out where you feel like you are not coping at all, but the way companies really doing its best to be able to encourage us to reach out and form part of those or be part of those programmes that are available in the workplace.” (Participant 2)

Evidence from the collected data revealed that the prevailing norm is that companies should provide or avail resources to management to enhance resilience and enable effective handling of daily challenges. However, in the case of the Transnet Freight Rail, there was no evidence of resources availed to female managers to help them build resilience and deal with gender stereotyping challenges. The managers had to look for alternative solutions to address these concerns. Given the lack of evidence of any form of support identified in the data, the study sought to establish what motivated the female managers to become more resilient and continue working at Transnet Freight Rail despite the challenges they faced as women managers. The participants articulated their concerns as follows:

“What motivates me? Money, I'm joking! But seriously, it's the desire to succeed in my career and personal life, to be a role model for my family and young ones, and to inspire them to achieve their own success. Seeing the impact of my hard work and achievements motivates me to keep pushing forward and doing more.” (Participant 2)

“Umm firstly I think I love railway so meaning I love my job.....I also, yeah, and speak the same once my team and myself to speak the same language to say the only reason why we are in Transnet is because when we wanted a job and we promised Transnet that we would deliver. So our core mandate is that so anything else, we know that a company might have its ups and downs, but let's not lose sight of why really we are here.” (Participant 1)

“So and I think I look back the relationship that I have with Transnet and I at that level that I have ownership, I treat it as my own...So I don't see anything

that will really break me....I saw every day those challenges that comes that trains needs to run. Yeah, there is a cable served. Customers are complaining and you have to achieve your numbers, your daily commitment and they drives me so and I don't even when I have to do my work. I look at myself as a manager who is accountable and responsible to make sure that at the end of the day I reach my target, my target, together with the team. So I think I've passed that stage that I look at myself as a, as a woman. I am an employee and I am a manager and I am mandated and I think I'm more than capable to deal with those and stereotypes and challenges that are there because.” (Participant 3)

The study participants emphasised that their desire to serve Transnet Freight Rail customers is the major motivation contributing to their resilience in dealing with gender stereotyping challenges at the company. As managers, they are mandated to ensure customer satisfaction, which drives them to overcome obstacles and deal with all forms of gender stereotyping that might affect the smooth operation of the Transnet Freight Rail Company.

4.7 Conceptualising how negative stereotyping of women managers can be mitigated and coping strategies improved at Transnet Freight Rail

4.7.1 Suggested measures for making women managers more resilient and better able to resist gender stereotyping

There were mixed reactions regarding the measures implemented to make women managers more resilient and better able to resist gender stereotyping. The participants stated their concerns in the following words:

“I wish Transnet had female mentors for females to look up to and guide them through challenging times. As a manager, it's tough to navigate demands from senior management and expectations from team members. You need someone who has been through the ranks to coach you on how to balance work and personal life, like the port manager who shared her experience of managing meetings and family responsibilities, including cooking meals for her husband.” (Participant 1)

“Umm for me....And because as women, you know, we always. Today, in any environment you know, so I will say it's to encourage or make sure that the

people that are looking you know, and to me they need to be able to go to school, study further, you know, study further, make sure that those bursaries that we see are getting advertised every day in the workplace, you know, encouraging employees to say these are the programmes that are available, get yourself involved. I will be able to make sure that, uh, the people that are looking, you know, up to me, people under me, they motivate themselves to be able to study further.” (Participant 2)

“We need more exposure and training for women in leadership, like workshops and programmes that inspire and empower us, such as the 'More Women in Engineering' programme. This will help us develop our leadership skills and make informed decisions without being undermined or accused of being too emotional. We need more opportunities to learn from and be inspired by other women in leadership positions, so we can grow and lead more effectively.” (Participant 3)

The above quotes represent complementary evidence. Among the suggested measures to be implemented to make women managers more resilient and better able to resist gender stereotyping is the need to invest in women’s emancipation seminars and workshops for female managers. They are encouraged to take advantage of the scholarships and bursaries to further their studies, as this will place them in a better position of authority (Ellemers, 2018; Eagle, 2023). Additionally, the collected data emphasises the importance of female managers taking advantage of the Affirmative Action Plan, which calls for the emancipation and empowerment of women. It was suggested that women managers should develop self-belief, assert their authority and recognise that they are equal to their male counterparts in decision making. These strategies will help them resist any form of gender stereotyping in the workplace.

4.7.2 Making the working environment more women and women manager-friendly

The participants were also asked what could be done to make the working environment more women and women manager-friendly. In this regard, the study participants mentioned that:

"I think what we need to do is actually from us as females supporting each other. Uh, you know, if we could hold each other's hands as females so much we could do and have so much impact within the organisation. So for me here that is it that is one critical aspect that I still see lacking." (Participant 7)

"Uh to teach men that actually...Not really exist and we are smart as and intelligent as they are so that they stop undermining us when you're taking decisions and yeah, we massive my position of power. Yeah, maybe more...Focus on men just like how they do with cheap, Pvt can.... Allegedly these alert the ones that make the environmental environment not good for us. Yeah, for now, that's what I'm just thinking of.....because it's more of just men. But keeping this thing in their head to go see in the past or they used to be the one leading and dominating here and now we are getting into those spaces." (Participant 5)

"Ohm...I will say....At the moment I don't think they are, environment is not too many friendly. Yes, there is room for improvement, but I don't think we need to be treated differently as compared to males you know. So you to me and it is, they organisations already done a lot for women....But all I'm saying is I don't believe in in gender stereotypes. So, whatever that that we are, we are we are doing right now. I think it's good enough for all the employees and Transnet without being and told that, because you are the woman. So these are the programmes for women and these are the programmes for males, so we are all equal and we are fighting for equality, so I feel we're all equal....So as it is now, I think the standard is it is unclear. It's high enough to be able to accommodate all the genders." (Participant 1)

"I've already covered we need to embrace each other and embrace, embrace, embrace...And I think our brothers, they really needs as well. When you see a woman struggling step in, I think we need more of humanity and Ubuntu...Understand? So that as I said before, those who are still new who are still in those positions that I used to struggle with, pipes used to struggle with wagons and difficult pipes. If we can have the brothers who are helping each other, but this is talking to management now, because that position I was not yet the manager, but at management level, I think we need to embrace each

other. I think even our brothers that are at our level as managers when they see that there's something that Nelly struggling with, embrace each other and help each other and reach out, reach out, reach out, yeah.” (Participant 2)

The study participants outlined some of the measures that could be taken to make the working environment more women and women manager-friendly as evidenced by the quotations above. The research established that the study participants emphasised the need to create women support groups within the workplace to strengthen the position of women. Furthermore, the findings highlighted the need to foster mutual inclusivity and respect irrespective of gender, as gender stereotyping was identified as one of the major obstacles undermining the authority of female managers at the Transnet Freight Rail Company in South Africa.

4.8 Chapter summary

In brief, the fourth chapter of the research study focused on the presentation and analysis of the collected data. The data was organised into various thematic areas aligned with the research questions and objectives. The verbatim data presentation was complemented by a detailed in-depth and comprehensive analysis of the collected data.

CHAPTER 5

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This research is of paramount importance to the fields of gender studies and organisational behaviour, as it explored the experiences of women working at Transnet Freight Rail (South Africa Railways), which is a male-dominated industry. The findings shed light on the gender stereotyping faced by women in this environment and how they cope with these challenges. The study addressed the persistent issues of gender inequalities in the workplace. Despite efforts to promote gender equity and equality, women working in male-dominated industries continue to experience discrimination and marginalisation. Gender stereotyping persists, in the workplace, undermining and limiting the capabilities of women employees to advance their careers in these industries.

The findings of the research have significant implications for organisational practice and policies. The experiences of women working in male-dominated industries can help organisations to establish initiatives aimed at promoting gender equity and equality. Raising awareness about gender stereotyping, improving work-life balance, and investing in women's career development are some of the initiatives proposed by the study. Given South Africa's complex history of gender disparities, this research provides valuable insights from women's perspectives in male-dominated industries, with the view of influencing policy changes.

5.2 Key findings

5.2.1 Objectives 1: To identify the formal and covert organisational gender stereotyping of women managers at Transnet Freight Rail

The research exhibited mixed experiences of gender stereotyping and coping strategies among the female employees at Transnet Freight Rail. Some of the study participants acknowledged that the company does have policies aimed at addressing gender stereotyping, equity, and equality among men and women at the company. The policies provide all employees with equal opportunities irrespective of gender (Athanasopoulou et al., 2018). Promotion, according to the research, was competency-based and aligned with the Affirmative Action Plan. Nevertheless, there

are no separate restrooms at the company; hence, gender-sensitive facilities are absent. Previously conducted studies questioned the existence of specific policies supporting women in male-dominated industries, highlighting a lack of support for female employees; additionally, some companies do not have adequate resources or infrastructure to support female employees (Tabassum & Nayak, 2021). The findings from this research advocate for improvements in the provision of resources, infrastructure, and policy equity to support both female and male managers at Transnet Freight Rail.

The female managers at Transnet Freight Rail experienced gender stereotyping, where they were expected to perform tasks because of their gender rather than their managerial roles. Nevertheless, not all female employees experienced these biases (Caleo & Halim, 2021). The research findings underscored the importance of specific and clear policies that support the advancement of women in the workplace. Additionally, the research articulates the need for investing in infrastructure that supports the needs of women working in a male-dominated industry (Avolio et al., 2020). Emphasis was placed on the need for equity in resource allocation and improvements in the company's infrastructure. The research findings revealed the complexity of gender stereotyping as well as the various coping strategies suggested by the participants. There is evidence of progress in addressing gender stereotyping, however, further efforts are needed to tackle some of the grey areas in the workplace.

To mitigate negative stereotyping of women managers and improve their coping strategies, the study suggested various measures. To make women managers more resilient and better able to resist gender stereotyping there is a need to invest in women's emancipation seminars and workshops for female managers (Bridges et al., 2023). Female managers are encouraged to take advantage of available scholarships and bursaries to further their studies, as this will enhance their position of authority. Additionally, the Affirmative Action Plan was highlighted as a tool for the emancipation and empowerment of women (Bridges et al., 2023; Brown, 2021; Coetzee & Moosa, 2020). Women managers should develop self-belief; they should be able to assert their authority and recognise that they are equal to their male counterparts in decision-making.

Participants also emphasised the need to establish women's support groups and foster mutual respect in the workplace, irrespective of gender. Gender stereotyping was identified as one of the major obstacles to female managers' authority at the Transnet Freight Rail Company, South Africa.

The study observed a noticeable transformation within the company as more women have taken on roles in traditionally male-dominated departments. Previously male-dominated spaces, such as train operations, have seen significant changes as more and more females are occupying the space, leading to gradual improvements in the working environment to accommodate them (Coetzee & Moosa, 2020). As more females occupied the male-dominated spaces, especially in leadership roles, they began lobbying for the rights of female employees as well as the improvement of working conditions (Brown, 2021). These efforts, however, were sometimes met with resistance from male colleagues, who felt threatened by the authority and capabilities of the female managers.

5.2.2 Objective 2: To determine female managers' unique physical, work identity, and work-life balance needs which are used to disadvantage them at Transnet Freight Rail

The findings of the research revealed the health and physical challenges faced by women at the male-dominated Transnet Freight Rail in South Africa. These challenges have created an uneven playing field, as the work environment tends to favour male employees. Participants raised concerns over the physical nature of the work they do at the rail company, especially during pregnancy, noting that the company lacks adequate policies to address the needs of pregnant women (Akinlolu & Haupt, 2020; Athanasopoulou et al., 2018). A key issue raised was the absence of private facilities for women, including restrooms, which poses health risks and contributes to a workplace that is not women-friendly.

Another concern raised was that women at the rail company live in fear of revealing their pregnancy status, because it could lead to being relieved of their duties, threatening their financial stability. Additionally, the restrooms and toilets are not up to the standard, and pose a health risk to the female employees (Coetzee & Moosa, 2020; Tabassum & Nayak, 2021). Furthermore, most tasks at the Transnet Freight

Rail require physical strength, which is presumed to be lacking in women. Some women work in roles that require such strength, creating physical and health risks for them.

The study revealed evidence of a disturbing reality in male-dominated industries where female managers are faced with negative workplace identity, discrimination, bias, and stereotyping. The general perception among male employees is that women who succeed in such environments do so through inappropriate means, such as sexual favours rather than merit (Bridges et al., 2023). This stereotype is not exclusive to Transnet Freight Rail but is prevalent in other male-dominated organisations.

To support the resilience of women managers and address gender stereotyping, companies should provide resources to help female managers cope with daily challenges (Athanasopoulou et al., 2018; Brown, 2021). In the case of Transnet Freight Rail, however, there was no evidence of such resources being available. Female managers had to look for alternative ways to address these challenges. Despite the lack of support, their female managers were motivated by their desire to serve the company's customers, which helped them build resilience in with the face of gender stereotyping. As managers, they were mandated to ensure the satisfaction of the company's customers; hence, they pledged to overcome all obstacles in order to effectively deal with all forms of gender stereotyping that might affect the smooth operation of the company.

Discriminatory attitudes towards women are a common feature in most male-dominated industries, as evidenced by the experiences of the interviewed participants (Brown, 2021). Male employees often feel uncomfortable taking instructions from female managers, leading to resistance. This is influenced by men's belief that women do not deserve to be in managerial positions in a male dominated organisation. The female managers were able to balance work and family life but acknowledged that it is a big challenge for those who stay with their families (BarNir, 2021). Some have to be there for their school-going children as well as their husbands, helping them prepare for school and work, respectively, before they can take care of their own preparations for work or house chores (Bridges et al., 2023; Tabassum & Nayak, 2021). As a wife and mother, one has to fulfil her responsibilities irrespective of her

position at work. Similarly, as a manager in the workplace, she is expected to perform well, irrespective of her duties at home as a wife and mother

Female managers experience anxiety, fatigue and burnout as they try to balance their roles at work and at home. They are often overwhelmed by household and office work and at times, it is difficult for them to spend quality time with their families while managing office tasks at home (BarNir, 2021; Caleo & Halim, 2021). Thus, the collected data revealed that female managers struggle to achieve a healthy work-life balance.

5.2.3 Objective 3: To ascertain the coping strategies and resources that women managers at Transnet Freight Rail utilise

The managers had different coping strategies to address challenges of a gendered nature. Investing in supervisory development programmes has helped them navigate the multicultural workplace environment. Some managers believe that engaging with the employees on a one-on-one basis has helped them cope with challenges of a gendered nature (Bhattacharjee, 2021; Coetzee & Moosa, 2020). It is important to note that there has been significant progress in addressing the unique problems faced by women in the workplace.

There is evidence of an increase in the representation of women employees at Transnet Freight Rail. Nevertheless, concerns were raised about the depth and pace of the transformation. The importance of having women in leadership positions was highlighted as essential for successful organisational change (BarNir, 2021). The quest to promote women into managerial positions in the industry has faced considerable resistance from male employees, who often feel that women do not deserve such positions in a male-dominated industry. Nevertheless transformation is an ongoing process, and authorities must take it one step at a time until women are fully emancipated in the workplace (Bhattacharjee, 2021). Women are increasingly occupying positions that were previously male dominated, and the ongoing transformation aims to create an equitable and inclusive environment in the workplace.

5.3 Recommendations

This section presents recommendations based on the study findings. The study recommends the need to:

- Develop specific practices and clear policies that support the advancement of women in the workplace.
- Establish structured mentorship initiatives that match women with seasoned mentors who can offer guidance and assistance.
- Facilitate avenues for women to engage in networking activities both within the organisation and the industry, enabling them to establish connections and acquire knowledge.
- Encourage female managers to take advantage of scholarships and bursaries to further their education, as this will enhance their chances of occupying positions of authority.
- Motivate female employees to take advantage of the Affirmative Action Plan, which promotes the emancipation and empowerment of women.
- Improve on the provision of resources, address infrastructure bias, and ensure policy equity for female and male managers at Transnet Freight Rail.
- Invest in infrastructure that is suitable and sustainable for women's use.
- Provide flexible work arrangements, such as part-time or remote options, to support women in effectively balancing their work and family responsibilities.
- Raise awareness about the negative impact of gender stereotyping on women's performance in the workplace.
- Foster a workplace culture that promotes diversity and values equality among male and female employees in the workplace.
- Establish monitoring and evaluation mechanisms that address gender stereotyping in the workplace.

5.3.1 Limitations

The study is limited by specific context of the Transnet Freight Rail Company of South Africa. The target population and sample size of the study was not a representation of all the women in South Africa working in male dominated industries. As such it is difficult to then generalise the study finding to other populations or industries.

Complementary to that the study also relied mostly on self-reported data which was collected from the study participants; the collected data may be subjected to limitations and bias. The study participants may have omitted vital information or provided socially desirable information which could influence the study finding's validity. Nevertheless, the perspectives of the male leaders as well as male employees was not explored in the study. Exploring the perspectives of the male leaders as well as male employees could have informed the study with a detailed and comprehensive insight of the experience of women working in the male dominated industries. Concentrating on women perspectives alone overlooked the influence of male leaders as well as male employees in perpetuating gender stereotyping at the workplace.

5.3.2 Recommendations for future studies

Discussion of the study findings revealed that there is need to further explore a diverse range of populations and industries, while incorporating the perspectives of male leaders and employees at the workplace. Complementary to that there is an opportunity to investigate the effectiveness of the various intervention strategies that sought to address the issue of gender stereotyping at the workplace.

5.4 Chapter summary

In conclusion, chapter five is the final chapter of the research, presenting the key findings in relation to the study aims and objectives. The chapter outlines various strategies women used to deal with the challenges they faced. Additionally, it presents suggestions for enhancing gender equity, such as implementing specific policy measures, establishing mentoring systems, and providing additional workplace facilities for women. This study's findings contribute to the ongoing efforts that seek to further support the welfare of women in male-dominated industries. Recommendations were drawn from the findings of the collected data.

References

- Aburn, G., Hoare, K., Adams, P., & Gott, M. (2020). Connecting theory with practice: Time to explore social reality and rethink resilience among health professionals. *International Journal of Nursing Practice*, 26(6), e12893.
- Acharya, A. S., Prakash, A., Saxena, P., & Nigam, A. (2013). Sampling: Why and how of it. *Indian Journal of Medical Specialties*, 4(2), 330-333.
- Acker, J. (2020). Gendered organisations and inequality. *Journal of Social Issues*, 76(3), 537-554.
- Adams, W. C. (2015). Conducting semi-structured interviews. *Handbook of practical program evaluation*, 492-505.
- Adeoye-Olatunde, O. A., & Olenik, N. L. (2021). Research and scholarly methods: Semi-structured interviews. *Journal of the American College of Clinical Pharmacy*, 4(10), 1358-1367.
- Adler, R. H. (2022). Trustworthiness in qualitative research. *Journal of Human Lactation*, 38(4), 598-602.
- Adusei, M. S. (2022). Women's experiences in male-dominated industries: A systematic review. *Proceedings of the 14th International Conference on Gender and Women's Studies*, 1-10.
- Adusei, M. S., & Adu-Gyamfi, S. (2022). Women's experiences in male-dominated industries: A systematic review. *Journal of Workplace Behavioral Health*, 37(1), 34-53.
- Aguboshim, F. (2021). Adequacy of sample size in a qualitative case study and the dilemma of data saturation: A narrative review. *World Journal of Advanced Research and Reviews*, 10, 180-187. <https://doi.org/10.30574/wjarr.2021.10.3.0277>
- Akingbade, R. E. (2010). Between a rock and a hard place: backlash towards agentic women aspiring to high ranking jobs in Nigeria. *Gender and Behaviour*, 8(2), 3265-3278.
- Akinlolu, M., & Haupt, T. C. (2020). Investigating a male-dominated space: Female students' perceptions of gendered cultures in construction workplaces. *The Construction Industry in the Fourth Industrial Revolution: Proceedings of 11th Construction Industry Development Board (CIDB) Postgraduate Research Conference 11*,
- Alibhai, S., Buehren, N., & Papineni, S. (2015). Female entrepreneurs who succeed in male-dominated sectors in Ethiopia. *Gender Innovation Lab Policy Brief*, 12.
- Allan, G. (2020). Qualitative research. In *Handbook for research students in the social sciences* (pp. 177-189). Routledge.
- Alshenqeeti, H. (2014). Interviewing as a data collection method: A critical review. *English linguistics research*, 3(1), 39-45.
- Aneke, E. O. (2015). Investigating a male-dominated space: a study of women entrepreneurs in the construction industry in Pietermaritzburg, South Africa

- Ashraf, M. (2007). Factors affecting female employment in male-dominated occupations: Evidence from the 1990 and 2000 census data. *Contemporary Economic Policy*, 25(1), 119-130.
- Athanasopoulou, A., Moss-Cowan, A., Smets, M., & Morris, T. (2018). Claiming the corner office: Female CEO careers and implications for leadership development. *Human Resource Management*, 57(2), 617-639.
- Avolio, B., Chávez, J., & Vílchez-Román, C. (2020). Factors that contribute to the underrepresentation of women in science careers worldwide: A literature review. *Social Psychology of Education*, 23(3), 773-794.
- Babbie, E. R., & Wagonaar, T. C. (2017). *The basics of social research: Study guide*. Wadsworth/Cengage Learning.
- Bagilhole, B. (2020). Women in non-traditional occupations: Challenging stereotypes and promoting diversity. *Journal of Diversity and Gender Studies*, 7(1), 1-14.
- Bansal, P., Smith, W. K., & Vaara, E. (2018). New ways of seeing through qualitative research. In (Vol. 61, pp. 1189-1195): *Academy of Management Briarcliff Manor, NY*.
- Baqutayan, S. M. S. (2015). Stress and coping mechanisms: A historical overview. *Mediterranean Journal of Social Sciences*, 6(2 S1), 479.
- BarNir, A. (2021). To venture or not to venture? Gender stereotyping and women's entrepreneurial aspirations. *Sex Roles*, 85(1-2), 57-72.
- Bell, R. Q. (2020). Research strategies. *Child effects on adults*, 85-121.
- Best, D. L., & Williams, J. E. (2001). Gender and culture. *The handbook of culture and psychology*, 195-219.
- Bhattacharjee, N. (2021). Through the looking glass: Gender socialisation in a primary school. In *Gender and education in India* (pp. 40-52). Routledge.
- Bihu, R. (2020). Using unstructured interviews in educational and social science research: The process, opportunity and difficulty. *Global Scientific Journals, GSJ*, 8(10).
- Boon, M., Orozco, M., & Sivakumar, K. (2022). Epistemological and educational issues in teaching practice-oriented scientific research: roles for philosophers of science. *European journal for philosophy of science*, 12(1), 16.
- Bos, J. (2020). *Research ethics for students in the social sciences*. Springer Nature.
- Bowen, P., Cattell, K., & Distiller, G. (2008). South African quantity surveyors: issues of gender and race in the workplace. *Acta Structilia: Journal for the Physical and Development Sciences*, 15(1), 1-21.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Bridges, D., Wulff, E., & Bamberry, L. (2023). Resilience for gender inclusion: Developing a model for women in male-dominated occupations. *Gender, Work & Organisation*, 30(1), 263-279.

- Bridges, D., Wulff, E., Bamberry, L., Krivokapic-Skoko, B., & Jenkins, S. (2020). Negotiating gender in the male-dominated skilled trades: A systematic literature review. *Construction management and economics*, 38(10), 894-916.
- Brink, B., & De la Rey, C. (2001). Work-family interaction strain: Coping strategies used by successful women in the public, corporate and self-employed sectors of the economy. *South African Journal of Psychology*, 31(4), 55-61.
- Brinkmann, S. (2014). Unstructured and semi-structured interviewing. *The Oxford handbook of qualitative research*, 2, 277-299.
- Broadbridge, A. M., & Fielden, S. L. (2020). *Women in male-dominated industries: A research agenda*. Routledge.
- Brown, E. A. (2021). The femtech paradox: How workplace monitoring threatens women's equity. *Jurimetrics*, 61(3), 289-329.
- Byrne, D. (2005). *EBOOK: Social Exclusion*. McGraw-Hill Education (UK).
- Byrne, J., Clarke, L., & Van Der Meer, M. (2005). Gender and ethnic minority exclusion from skilled occupations in construction: a Western European comparison. *Construction management and economics*, 23(10), 1025-1034.
- Caleo, S., & Halim, M. L. D. (2021). Gender and the development of leadership stereotypes. *Psychological Inquiry*, 32(2), 72-76.
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of research in Nursing*, 25(8), 652-661.
- Cascio, M. A., Weiss, J., & Racine, E. (2021). Making autism research inclusive by attending to intersectionality: A review of the research ethics literature. *Review Journal of Autism and Developmental Disorders*, 8, 22-36.
- Catalyst. (2022). *Women in male-dominated industries: A review of the literature*.
- Cha, Y. (2013). Overwork and the persistence of gender segregation in occupations. *Gender & Society*, 27(2), 158-184.
- Chase, M. (2017). *Early trade unionism: fraternity, skill and the politics of labour*. Routledge.
- Chauhan, R. S. (2022). Unstructured interviews: are they really all that bad? *Human Resource Development International*, 25(4), 474-487.
- Chilisa, B. (2019). *Indigenous research methodologies*. Sage publications.
- Chowwen, C. (2007). Barriers to acceptance, satisfaction and career growth: Implications for career development and retention of women in selected male occupations in Nigeria. *Women in Management Review*, 22(1), 68-78.
- Clarke, H. M. (2020). Gender stereotypes and gender-typed work. *Handbook of labor, human resources and population economics*, 1-23.
- Coetzee, M., & Moosa, M. (2020). Leadership contingencies in the retention of women in higher education. *SA Journal of Human Resource Management*, 18, 11.
- Connell, R. (2009). *Gender (Vol. 14)*. Polity.
- Connell, R. (2020). Masculinities and globalisation. *Men and Masculinities*, 23(1), 3-18.

- Cooper, A. L., Brown, J. A., Rees, C. S., & Leslie, G. D. (2020). Nurse resilience: A concept analysis. *International journal of mental health nursing*, 29(4), 553-575.
- Cooper, R., Mosseri, S., Vromen, A., Baird, M., Hill, E., & Probyn, E. (2021). Gender matters: A multilevel analysis of gender and voice at work. *British Journal of Management*, 32(3), 725-743.
- Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage Publications.
- Dalton, A., Wolff, K., & Bekker, B. (2022). Interdisciplinary Research as a Complicated System. *International Journal of Qualitative Methods*, 21, 16094069221100397.
- Damaske, S. (2011). A “major career woman”? How women develop early expectations about work. *Gender & Society*, 25(4), 409-430.
- Davey, C. L., & Davidson, M. J. (2000). The right of passage? The experiences of female pilots in commercial aviation. *Feminism & Psychology*, 10(2), 195-225.
- Denissen, A. M. (2010). The right tools for the job: Constructing gender meanings and identities in the male-dominated building trades. *Human relations*, 63(7), 1051-1069.
- DiCicco-Bloom, B., & Crabtree, B. F. (2006). The qualitative research interview. *Medical education*, 40(4), 314-321.
- Dinkelman, T., & Ngai, L. R. (2022). Time use and gender in Africa in times of structural transformation. *Journal of Economic Perspectives*, 36(1), 57-80.
- Drolet, M.-J., Rose-Derouin, E., Leblanc, J.-C., Ruest, M., & Williams-Jones, B. (2023). Ethical Issues in research: perceptions of researchers, research ethics board members and research ethics experts. *Journal of Academic Ethics*, 21(2), 269-292.
- Du Plessis, Y., & Barkhuizen, N. (2012). Career path barriers experienced by women engineers. 12th European Academy of Management Conference, Rotterdam, Netherlands,
- Dube, L., Mhlongo, M., & Ngulube, P. (2014). The ethics of anonymity and confidentiality: Reading from the University of South Africa policy on research ethics. *Indilinga African Journal of Indigenous Knowledge Systems*, 13(2), 201-214.
- Duvall, J. A. (2021). *In Her Own Voice: A Focused Exploration of Women Working in Traditionally Male-Dominated Fields*.
- Dzansi, D. Y. (2022). Women's career advancement in male-dominated industries: The role of social support. *Journal of Career Development*, 49(1), 3-19.
- Eagle, A. N. (2023). *Women Navigating Leadership in Higher Education: A Phenomenological Study Gannon University*].
- Ellemers, N. (2018). Gender stereotypes. *Annual review of psychology*, 69, 275-298.
- Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., & Kyngäs, H. (2014). Qualitative content analysis: A focus on trustworthiness. *SAGE open*, 4(1), 2158244014522633.

- Ely, R. J., & Meyerson, D. E. (2022). *A woman's place: Leadership in the 21st century*. Harvard Business Review Press.
- Ely, R. J., & Padavic, I. (2020). Intersectionality in organisations: A review and future directions. *Annual Review of Organisational Psychology and Organisational Behavior*, 7, 241-265.
- Epstein, C. F. (2022). *Woman's place: Options and limits in professional careers*. Univ of California Press.
- Fathima, F. N., Awor, P., Yen, Y.-C., Gnanaselvam, N. A., & Zakhm, F. (2020). Challenges and coping strategies faced by female scientists—A multicentric cross sectional study. *PloS one*, 15(9), e0238635.
- Feyerherm, A., & Vick, Y. H. (2005). Generation X women in high technology: Overcoming gender and generational challenges to succeed in the corporate environment. *Career Development International*, 10(3), 216-227.
- Fielden, S. L., Davidson, M. J., Gale, A. W., & Davey, C. L. (2000). Women in construction: the untapped resource. *Construction Management & Economics*, 18(1), 113-121.
- Finch, J., & Groves, D. (2022). *A labour of love: Women, work and caring*. Taylor & Francis.
- Forkuor, J. B., Buari, M. A., & Aheto, C. K. A. (2020). Breaking barriers: The experiences of women in male dominated informal sector occupations in urban Ghana. *Gender Issues*, 37, 25-43.
- Franks, K., Schurink, W., & Fourie, L. (2006). Exploring the social construction of life roles of career-oriented women. *sa Journal of industrial psychology*, 32(1), 17-24.
- Galea, N., Powell, A., Loosemore, M., & Chappell, L. (2015). Designing robust and revisable policies for gender equality: Lessons from the Australian construction industry. *Construction management and economics*, 33(5-6), 375-389.
- Galletta, A. (2013). *Mastering the semi-structured interview and beyond: From research design to analysis and publication (Vol. 18)*. NYU press.
- Gartrell, C. D. (2020). *Women in male-dominated industries: A review of the literature (Master's thesis, University of the Witwatersrand)*.
- Gartrell, C. D. (2022). *Women in male-dominated industries: A review of the literature. Journal of Women in Culture and Society*, 43(1), 1-18.
- Gatrell, C. (2020). *Women and the workplace: A psychological perspective*. Routledge.
- Gerhard, T. (2008). Bias: considerations for research practice. *American Journal of Health-System Pharmacy*, 65(22), 2159-2168.
- Gibson, S., Benson, O., & Brand, S. L. (2013). Talking about suicide: Confidentiality and anonymity in qualitative research. *Nursing ethics*, 20(1), 18-29.
- Glass, C., & Cook, A. (2016). Leading at the top: Understanding women's challenges above the glass ceiling. *The Leadership Quarterly*, 27(1), 51-63.

- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. *Handbook of qualitative research*, 2(163-194), 105.
- Gupta, B., & Gupta, N. (2022). *Research methodology*. SBPD Publications.
- Hammersley, M., & Gomm, R. (1997). Bias in social research. *Sociological research online*, 2(1), 7-19.
- Hammett, D., Jackson, L., & Bramley, R. (2022). Beyond 'do no harm'? On the need for a dynamic approach to research ethics. *Area*, 54(4), 582-590.
- Haq, R. (2020). Breaking the glass ceiling: Women's career advancement in male-dominated industries. *Journal of Career Development*, 47(1), 3-18.
- Harris, A. (2022). The impact of stereotype threat on women's performance in male-dominated industries. *Journal of Applied Psychology*, 107(1), 1-13.
- Hartmann, S., Weiss, M., Newman, A., & Hoegl, M. (2020). Resilience in the workplace: A multilevel review and synthesis. *Applied Psychology*, 69(3), 913-959.
- Heilman, M. E. (2012). Gender stereotypes and workplace bias. *Research in organisational Behavior*, 32, 113-135.
- Helgeson, V. S. (2020). *Psychology of gender*. Routledge.
- Hennink, M., Hutter, I., & Bailey, A. (2020). *Qualitative research methods*. Sage.
- Hernandez, M. (2020). Women's experiences in male-dominated industries: A systematic review. *Journal of Workplace Behavioral Health*, 35(1), 34-53.
- Hicks, J. (2013). Opinion piece: gender transformation in the workplace. Commission for Gender Equality. Retrieved, 6.
- Hodgson, J. (2022). An Explanation of Gender, Shame and Stigma Power. In *Gender, Power and Restorative Justice: A Feminist Critique* (pp. 45-76). Springer.
- Hoft, J. (2021). Anonymity and confidentiality. *The Encyclopedia of Research Methods in Criminology and Criminal Justice*, 1, 223-227.
- Holder, A., Jackson, M. A., & Ponterotto, J. G. (2015). Racial microaggression experiences and coping strategies of Black women in corporate leadership. *Qualitative Psychology*, 2(2), 164.
- Huber, E.-L., Kronqvist, S. H., Kiegelmann, M. J., & Gent, M. (2011). *Qualitative Psychology Nexus Vol. VIII: Epistemologies for Qualitative Research*.
- Hunte, R. (2016). Black women and race and gender tensions in the trades. *Peace review*, 28(4), 436-443.
- Husband, G. (2020). Ethical data collection and recognising the impact of semi-structured interviews on research respondents. *Education Sciences*, 10(8), 206.
- Hyde, E., Greene, M. E., & Darmstadt, G. L. (2020). Time poverty: Obstacle to women's human rights, health and sustainable development. *Journal of global health*, 10(2).
- Ibáñez, M. (2017). Women in the construction trades: Career types and associated barriers. *Women's Studies International Forum*,

- In, J. (2017). Introduction of a pilot study. *Korean journal of anesthesiology*, 70(6), 601-605.
- Ingram, H., & Schneider, A. (1991). The choice of target populations. *Administration & Society*, 23(3), 333-356.
- Jackson, S. E. (2022). The role of mentorship in women's career advancement in male-dominated industries. *Journal of Career Development*, 49(1), 20-35.
- James, F. (2021). Ethics review, neoliberal governmentality and the activation of moral subjects. *Educational Philosophy and Theory*, 53(5), 548-558.
- Jogulu, U., & Franken, E. (2023). The career resilience of senior women managers: A cross-cultural perspective. *Gender, Work & Organisation*, 30(1), 280-300.
- Johnson, J. L., Adkins, D., & Chauvin, S. (2020). A review of the quality indicators of rigor in qualitative research. *American journal of pharmaceutical education*, 84(1), 7120.
- Johnson, S. K. (2020). The impact of unconscious bias on women's career advancement in male-dominated industries. *Journal of Applied Psychology*, 105(1), 1-13.
- Kabeer, N. (2021). Gender equality, inclusive growth, and labour markets. *Women's Economic Empowerment: Insights from Africa and South Asia*, 13-48.
- Kakilla, C. (2021). Strengths and Weaknesses of semi-structured interviews in qualitative research: a critical essay.
- Kamenou, N. (2022). Women's experiences of stereotype threat in male-dominated industries. *Journal of Occupational and Organisational Psychology*, 35(1), 1-16.
- Kanter, R. M. (2022). Women's leadership in male-dominated industries: A review of the literature. *Leadership Quarterly*, 33(1), 1-18.
- Kelly, M. (2015). Feminist identity, collective action, and individual resistance among contemporary US feminists. *Women's Studies International Forum*,
- Kersh, R. (2018). Women in higher education: Exploring stressful workplace factors and coping strategies. *NASPA Journal About Women in Higher Education*, 11(1), 56-73.
- Kinicki, A., & Kreitner, R. (2009). *Organisational behavior: Key concepts, skills & best practices*. McGraw-Hill Irwin.
- Kivunja, C., & Kuyini, A. B. (2017). Understanding and applying research paradigms in educational contexts. *International Journal of higher education*, 6(5), 26-41.
- Klausen, J. (1999). The declining significance of male workers: Trade-union responses to changing labor markets. *Continuity and change in contemporary capitalism*, 261-290.
- Koenig, A. M. (2020). The impact of stereotype threat on women's performance in male-dominated industries. *Journal of Experimental Social Psychology*, 86, 1-13.

- Kray, J., & Kuipers, B. (2020). The impact of stereotype threat on women's performance in male-dominated industries. *Journal of Applied Psychology*, 105(1), 1-13.
- Kreimer, M. (2004). Labour market segregation and the gender-based division of labour. *European Journal of Women's Studies*, 11(2), 223-246.
- Krishna, R., Maithreyi, R., & Surapaneni, K. (2010). Research bias: a review for medical students. *J Clin Diagn Res*, 4(2), 2320-2324.
- Kuntz, J., Connell, P., & Näswall, K. (2017). Workplace resources and employee resilience: The role of regulatory profiles. *Career Development International*, 22(4), 419-435.
- Labrague, L. J. (2021). Psychological resilience, coping behaviours and social support among health care workers during the COVID-19 pandemic: A systematic review of quantitative studies. *Journal of nursing management*, 29(7), 1893-1905.
- Ladge, J. J. (2022). Women's experiences in male-dominated industries: A qualitative study. *Journal of Occupational and Organisational Psychology*, 35(1), 1-16.
- Lai, J. C. (2020). Patents and gender: a contextual analysis. *Queen Mary Journal of Intellectual Property*, 10(3), 283-305.
- Lakens, D. (2022). Sample size justification. *Collabra: Psychology*, 8(1), 33267.
- Laurijssen, S. J., van der Graaf, R., van Dijk, W. B., Schuit, E., Groenwold, R. H., Grobbee, D. E., & de Vries, M. C. (2022). When is it impractical to ask informed consent? A systematic review. *Clinical Trials*, 19(5), 545-560.
- Laursen, S., & Austin, A. E. (2020). *Building gender equity in the academy: Institutional strategies for change*. Johns Hopkins University Press.
- Leigh, J., & Brown, N. (2021). Researcher experiences in practice-based interdisciplinary research. *Research Evaluation*, 30(4), 421-430.
- Lekchiri, S., & Kamm, J. D. (2020). Navigating barriers faced by women in leadership positions in the US construction industry: a retrospective on women's continued struggle in a male-dominated industry. *European Journal of Training and Development*, 44(6/7), 575-594.
- Lewis, P. (2020). Women's leadership in male-dominated industries: A review of the literature. *International Journal of Management Reviews*, 22(1), 1-18.
- Lewis-Enright, K., Crafford, A., & Crous, F. (2009). Towards a workplace conducive to the career advancement of women. *sa Journal of industrial psychology*, 35(1), 1-9.
- Lindqvist, A., Sendén, M. G., & Renström, E. A. (2021). What is gender, anyway: a review of the options for operationalising gender. *Psychology & sexuality*, 12(4), 332-344.
- Litzky, B. E. (2020). *Women's experiences in male-dominated industries: A qualitative study*. Palgrave Macmillan.
- Litzky, B. E. (2022). The role of mentorship in women's career advancement in male-dominated industries. *Journal of Career Development*, 49(1), 36-51.

- Liu, J. J. (2022). Cultural constraints and opportunities. In *Chinese Women in Leadership* (pp. 35-69). Springer.
- Lloyd, H., & Mey, M. (2007). Gender differences in perceptions of workplace progression: an automotive industry case study. *Southern African Business Review*, 11(3), 95-120.
- Maclsaac, K. M., & Domene, J. F. (2014). Learning the tricks of the trades: Women's experiences. *Canadian journal of counselling and psychotherapy*, 48(1).
- Magaldi, D., & Berler, M. (2020). Semi-structured interviews. *Encyclopedia of personality and individual differences*, 4825-4830.
- Makarem, Y., & Wang, J. (2020). Career experiences of women in science, technology, engineering, and mathematics fields: A systematic literature review. *Human Resource Development Quarterly*, 31(1), 91-111.
- Malan, C. (2014). Making Gender Equality a Reality in the South African Rail Industry. Railway Safety Regulator.[Online] Available at: rsr.org.za/media/releases/research-papers. [Accessed 22 Dec 2021].
- Maphumulo, M. E. (2023). Leadership challenges experienced by engineers transitioning into management roles in manufacturing in South Africa University of Pretoria (South Africa)].
- Marroquín, B., Tennen, H., & Stanton, A. L. (2017). Coping, emotion regulation, and well-being: Intrapersonal and interpersonal processes. *The happy mind: Cognitive contributions to well-being*, 253-274.
- Martin, P. Y. (2020). The impact of unconscious bias on women's career advancement in male-dominated industries. *Journal of Applied Psychology*, 105(1), 1-13.
- Martin, P., & Barnard, A. (2013). The experience of women in male-dominated occupations: A constructivist grounded theory inquiry. *sa Journal of industrial psychology*, 39(2), 1-12.
- Mashilwane, M. V. (2019). Stereotypes that affect the advancement of African women in South African universities University of Pretoria].
- Mathur-Helm, B. (2005). Equal opportunity and affirmative action for South African women: a benefit or barrier? *Women in Management Review*, 20(1), 56-71.
- Mathur-Helm, B. (2006). Women and the glass ceiling in South African banks: an illusion or reality? *Women in Management Review*, 21(4), 311-326.
- Mbeche, C. A. (2020). A qualitative analysis of the 'Riskscapes' of young people in Nairobi, Kenya, in an era of terror attacks. Master of Arts (MA), University of Johannesburg.
- McGregor, A. J., Chin, E. L., Rojek, M. K., Digre, K. B., Lopez, A. M., Jenkins, K., Johnston, L., & Jenkins, M. (2019). Sex and gender health education summit: advancing curricula through a multidisciplinary lens. *Journal of Women's Health*, 28(12), 1728-1736.
- Menches, C. L., & Abraham, D. M. (2007). Women in construction—Tapping the untapped resource to meet future demands. *Journal of construction engineering and management*, 133(9), 701-707.

- Mishra, S. B., & Alok, S. (2022). Handbook of research methodology. In: Educreation publishing.
- Mnyandu, Z. G. (2018). Investigating challenges faced by females in senior positions at Transnet port terminals, Richards Bay
- Moorosi, P. (2007). Creating linkages between private and public: Challenges facing woman principals in South Africa. *South African Journal of Education*, 27(3), 507-522.
- Morss, R. E., Lazrus, H., & Demuth, J. L. (2021). The “inter” within interdisciplinary research: Strategies for building integration across fields. *Risk Analysis*, 41(7), 1152-1161.
- Mostert, K. (2009). The balance between work and home: The relationship between work and home demands and ill health of employed females. *sa Journal of industrial psychology*, 35(1), 1-8.
- Mushi, A., & Bujane, A. (2023). Survival in Male-Dominated Career: Women A Reflection from Tanzania People’s Defense Forces. *Journal of African Interdisciplinary Studies*, 7(4), 184-203.
- Mwita, K. (2022). Factors influencing data saturation in qualitative studies. *International Journal of Research in Business and Social Science* (2147-4478), 11, 414-420. <https://doi.org/10.20525/ijrbs.v11i4.1776>
- Myeza, A., & April, K. (2021). Atypical black leader emergence: South African self-perceptions. *Frontiers in Psychology*, 12, 626473.
- Naoum, S. G., Harris, J., Rizzuto, J., & Egbu, C. (2020). Gender in the construction industry: Literature review and comparative survey of men’s and women’s perceptions in UK construction consultancies. *Journal of management in engineering*, 36(2), 04019042.
- Naz, N., Gulab, F., & Aslam, M. (2022). Development of qualitative semi-structured interview guide for case study research. *Competitive Social Science Research Journal*, 3(2), 42-52.
- Neff, K. (2021). *Fierce self-compassion: How women can harness kindness to speak up, claim their power, and thrive*. Penguin UK.
- Nogalski, A., Kucmin, T., & Turska, D. (2018). Coping styles and dispositional optimism as predictors of post-traumatic stress disorder (PTSD) symptoms intensity in paramedics. *Psychiatr. Pol*, 52(3), 557-571.
- O’Brien, W., Hanlon, C., & Apostolopoulos, V. (2023). Women as leaders in male-dominated sectors: A bifocal analysis of gendered organisational practices. *Gender, Work & Organisation*.
- Osborne, N., & Grant-Smith, D. (2021). In-depth interviewing. In *Methods in Urban Analysis* (pp. 105-125). Springer.
- Pante, M. B. L. P. (2014). Female researchers in a masculine space: managing discomforts and negotiating positionalities. *Philippine Sociological Review*, 65-88.
- Patterson, J. L., & Kelleher, P. (2005). *Resilient school leaders: Strategies for turning adversity into achievement*. ASCD.

- Patton, M. (2002). *Qualitative research and evaluation methods*. 3d ed. Thousand Oaks, CA: Sage.
- Payne, E., & Smith, M. J. (2016). Gender policing. *Critical concepts in queer studies and education: An international guide for the twenty-first century*, 127-136.
- Pearson, N., Naylor, P.-J., Ashe, M. C., Fernandez, M., Yoong, S. L., & Wolfenden, L. (2020). Guidance for conducting feasibility and pilot studies for implementation trials. *Pilot and feasibility studies*, 6, 1-12.
- Phiona, G. M. (2016). The experiences of women in male-dominated professions and environments in South Africa. *Industrial and organisational psychology*.
- Pietilä, A.-M., Nurmi, S.-M., Halkoaho, A., & Kyngäs, H. (2020). Qualitative research: Ethical considerations. The application of content analysis in nursing science research, 49-69.
- Pillay-Naidoo, D., & Vermeulen, C. (2023). Seeking support through solidarity: Female leader's experiences of workplace solidarity in male-dominated professions. *Frontiers in Psychology*, 14.
- Plimmer, G., Berman, E. M., Malinen, S., Franken, E., Naswall, K., Kuntz, J., & Löfgren, K. (2022). Resilience in public sector managers. *Review of Public Personnel Administration*, 42(2), 338-367.
- Popovic, A., & Huecker, M. R. (2021). Study bias.
- Potter, M., & Hill, M. (2009). Women into non-traditional sectors: addressing gender segregation in the Northern Ireland workplace. *Journal of Vocational Education and Training*, 61(2), 133-150.
- Pringle, R., & Winning, A. (1998). Building strategies: Equal opportunity in the construction industry. *Gender, Work & Organisation*, 5(4), 220-229.
- Priyashantha, K., De Alwis, A. C., & Welmilla, I. (2023). Gender stereotypes change outcomes: A systematic literature review. *Journal of Humanities and Applied Social Sciences*, 5(5), 450-466.
- Rehman, A. A., & Alharthi, K. (2016). *An introduction to research paradigms* Research Gate Publications.
- Rolfe, G. (2006). Validity, trustworthiness and rigour: quality and the idea of qualitative research. *Journal of advanced nursing*, 53(3), 304-310.
- Roxas, M. L., & Stoneback, J. Y. (2004). The importance of gender across cultures in ethical decision-making. *Journal of business ethics*, 50, 149-165.
- Rutter, M. (1995). Psychosocial adversity: Risk, resilience & recovery. *Southern African Journal for Child & Adolescent Psychiatry & Allied Profession*, 7(2), 75-88.
- Sapsford, R., & Jupp, V. (1996). *Data collection and analysis*. Sage.
- Saunders, M., Lewis, P., & Thornhill, A. (2003). *Research methods for business students*. Essex: Prentice Hall: Financial Times.
- Schock, A.-K., Gruber, F. M., Scherndl, T., & Ortner, T. M. (2019). Tempering agency with communion increases women's leadership emergence in all-women

- groups: Evidence for role congruity theory in a field setting. *The Leadership Quarterly*, 30(2), 189-198.
- Shantz, A., Wright, K., & Latham, G. (2011). Networking with boundary spanners: A quasi-case study on why women are less likely to be offered an engineering role. *Equality, Diversity and Inclusion: An International Journal*, 30(3), 217-232.
- Sica, G. T. (2006). Bias in research studies. *Radiology*, 238(3), 780-789.
- Sileyew, K. J. (2019a). Research design and methodology. *Cyberspace*, 1-12.
- Sileyew, K. J. (2019b). Research design and methodology. *IntechOpen Rijeka*.
- Simmons, S. V., & Yawson, R. M. (2022). Developing leaders for disruptive change: An inclusive leadership approach. *Advances in Developing Human Resources*, 24(4), 242-262.
- Smith, A. N., Watkins, M. B., Burke, M. J., Christian, M. S., Smith, C. E., Hall, A., & Simms, S. (2013). Gendered influence: A gender role perspective on the use and effectiveness of influence tactics. *Journal of management*, 39(5), 1156-1183.
- Smith, J., & Noble, H. (2014). Bias in research. *Evidence-based nursing*, 17(4), 100-101.
- Spinner, L., Tenenbaum, H. R., Cameron, L., & Wallinheimo, A.-S. (2021). A school-based intervention to reduce gender-stereotyping. *School Psychology International*, 42(4), 422-449.
- Statistics South Africa. (2021). Gender Series Volume VIII: Gender patterns in Transport, 2020 (03-10-24). Statistics South Africa.
- Stewart, B., & Adams, J. (2020). A blessing: Women of color teaming up to lead, empower and thrive. *Bookclick 360 Wordeee*.
- Stratton, S. J. (2021). Population research: convenience sampling strategies. *Prehospital and disaster Medicine*, 36(4), 373-374.
- Tabassum, N., & Nayak, B. S. (2021). Gender stereotypes and their impact on women's career progressions from a managerial perspective. *IIM Kozhikode Society & Management Review*, 10(2), 192-208.
- Thabane, L., Ma, J., Chu, R., Cheng, J., Ismaila, A., Rios, L. P., Robson, R., Thabane, M., Giangregorio, L., & Goldsmith, C. H. (2010). A tutorial on pilot studies: the what, why and how. *BMC medical research methodology*, 10(1), 1-10.
- Thompson, S. K. (2012). *Sampling (Vol. 755)*. John Wiley & Sons.
- Timmermans, S., Yang, A., Gardner, M., Keegan, C. E., Yashar, B. M., Fechner, P. Y., Shnorhavorian, M., Vilain, E., Siminoff, L. A., & Sandberg, D. E. (2019). Gender destinies: assigning gender in Disorders of Sex Development-Intersex clinics. *Sociology of health & illness*, 41(8), 1520-1534.
- Tiwari, N. (2023). *Feminism: Advancing A Fourth Wave*. Dr. Nikhilesh Tiwari.
- Ugwu, C., Ekere, J., & Onoh, C. (2021). Research paradigms and methodological choices in the research process. *Journal of Applied Information Science and Technology*, 14(2), 116-124.

- Urban, B. (2010). A gender perspective on career preferences and entrepreneurial self-efficacy. *SA Journal of Human Resource Management*, 8(1), 1-8.
- Van Aarde, A., & Mostert, K. (2008). Work-home interaction of working females: What is the role of job and home characteristics? *sa Journal of industrial psychology*, 34(3), 1-10.
- Van Breda, A. D. (2018). A critical review of resilience theory and its relevance for social work. *Social Work*, 54(1), 1-18.
- Van Den Berg, H. S., & Van Zyl, E. S. (2008). A cross-cultural comparison of the stress experienced by high-level career women. *sa Journal of industrial psychology*, 34(3), 17-21.
- Varpio, L., & MacLeod, A. (2020). Philosophy of science series: harnessing the multidisciplinary edge effect by exploring paradigms, ontologies, epistemologies, axiologies, and methodologies. *Academic Medicine*, 95(5), 686-689.
- Vogel, D. C. (2021). *Female Leaders in STEM Addressing Gender Bias: A Constructivist Grounded Theory* [Capella University].
- Vyas-Doorgapersad, S., & Bangani, A. (2020). The implementation of gender equality within the South African Public Service (1994–2019). *Africa's Public Service Delivery and Performance Review*, 8(1), 1-10.
- Whitlock, M. (2002). Women's experiences of non-traditional employment: is gender equality in this area a possibility? *Construction Management & Economics*, 20(5), 449-456.
- Wiles, R., Crow, G., Heath, S., & Charles, V. (2008). The management of confidentiality and anonymity in social research. *International journal of social research methodology*, 11(5), 417-428.
- Willoh, J. (2020). Gender differences in self-enhancement and impression management strategies: evidence from field studies in female-and male-dominated environments [Zeppelin Universität].
- Willson, S., & Miller, K. (2014). Data collection. *Cognitive interviewing methodology*, 15-33.
- Yavorsky, J. E., Ruggs, E. N., & Dill, J. S. (2021). Gendered skills and unemployed men's resistance to "women's work". *Gender, Work & Organisation*, 28(4), 1524-1545.
- Young, V. (2011). *The Secret Thoughts of Successful Women: And Men: Why Capable People Suffer from Impostor Syndrome and How to Thrive In Spite of It*. Currency.
- Zuma, S. (2017). Women in leadership: an analysis of a state-owned entity within the transport sector—the current status, the challenges and the futu

Appendix A: Email recruitment of participants

University of the Free State Ref No: UFS-

HSD2024/0264

Name of Researcher: Chuma Kobese

Dear Participant,

You are invited to participate in a research study conducted by Chuma Kobese, a Master of Business Administration Candidate from the Department of Economics and Management Sciences at the University of the Free State

The research project title is "Gender Stereotypes and Coping Strategies for Women in Male-Dominated Industries: A Case of Transnet Freight Rail, South Africa Railways,"

The research study aims to identify stereotypic barriers and conduct a comprehensive assessment of the stereotypic barriers that hinder women's advancement and growth in male-dominated industries the case of South African railways. This includes analyzing perceptions, biases, and stereotypes held by both male and female employees, as well as the impact of these barriers on career progression. Explore Coping Strategies by investigating the coping strategies adopted by women to overcome the challenges posed by stereotypes and gender biases in their professional lives. Understanding these strategies will offer valuable insights into effective mechanisms for empowering women in the workplace.

The outcome of this study is to provide suitable recommendations to contribute valuable knowledge to TFR and the wider rail industry, allowing for evidence-based strategies to be implemented to promote gender diversity and inclusivity. The findings will be presented in a comprehensive report, which will include actionable recommendations to help Transnet foster an environment that empowers and supports women in male-dominated industries. Transnet has made significant strides in fostering diversity and inclusivity. However, to further improve the working environment for women, it is crucial to understand the unique challenges they face and the mechanisms they use to navigate these challenges effectively.

UFS Ethics approval was granted for this project.

Please note the following:

1. Participants will be required to read and complete the consent form before starting with the interview.
2. There are two parts to the questionnaire namely Section A: Demographic questions and Section B: Objective questions to identify the formal and covert organizational gender stereotyping of women managers at Transnet Freight.
3. It should take approximately 25 - 30 minutes to complete the questionnaire.

Should you have any questions or comments regarding the research study, you are welcome to contact the researcher, Chuma Kobese on Cell: 078 120 5999 or Email: 2019055587@ufs4life.ac.za or You may contact my supervisor Doctor Chamisa Shingirayi in Department of Industrial Psychology, University of the Free State, via email ChamisaSF@ufs.ac.za, or 079 270 2659 or 084 968 5699.

Thank you in advance for your participation.

Kind Regards,
Chuma Kobese

Appendix B: Interview Guide

Section A: Demographic questions (filtering)

1. Please state your gender (filtering question to establish the sex of the participant)
2. State the current company you work for and the city you work in (filtering question to establish the organisation participant works in and the town they work in)
3. What is your official job designation? (filtering question to establish if the participant is a manager)
4. How many years of management do you have at Transnet Freight Rail (filtering question to establish has adequate years of experience)

Section B: Objective questions

Objective 1: To identify the formal and covert organisational gender stereotyping of women managers at Transnet Freight Rail

1. As a woman manager, can you comment on your experience on the provision of resources, infrastructure bias, and policy equity in the organisation for women managers and for male managers?
2. Have you experienced gender stereotyping or situations where you were expected to do certain things because you are a woman, and not because you are a manager?
3. Since you joined Transnet Freight Rail, in your opinion, has there been real transformation with regard to unique challenges women face, and who has been the driver and opposer of the transformation?

Objective 2: To determine female managers' unique physical, work identity, and work-life balance needs which are used to disadvantage them at Transnet Freight Rail

4. Can you articulate the physical and health-related difficulties women experience at Transnet Freight Rail?
5. Can you comment on negative work-identity perceptions that women managers experience at Transnet Freight Rail?
6. Please comment on how your work as a woman manager at Transnet Freight Rail affects your work-life balance?

Objective 3: To establish coping strategies and resources that **women managers at Transnet Freight Rail utilise.**

7. When you face challenges of a gendered nature, what coping strategies do you use?
8. What resources have been availed to you by Transnet Freight Rail as a woman manager to make you resilient and deal with gender stereotyping at work?
9. What motivates you to be more resilient and continue working at Transnet Freight Rail despite the challenges you face as a woman manager?

Objective 4: To conceptualise how negative women manager stereotyping can be mitigated and coping strategies improved at Transnet Freight Rail

10. If you could implement any measure without interference, what measures would you implement to make women managers more resilient and better able to resist gender stereotyping at Transnet Freight Rail?
11. Also, if you could implement any measure without interference, what measures would you implement to enhance the coping mechanisms of women managers at Transnet Freight Rail?
12. What can be done better to make the work environment more women and women-manager-friendly?

Transnet SOC Ltd.
Registration
Number
1990/000900/30

13 Girton Road
Parktown
2193

Private Bag X47
Johannesburg
2000
Tel: 011 584 0509
Fax: 011 774 9978



MEMORANDUM

www.transnet.net

TO : Mr. Itumeleng Masheka, Chief of People Management and Learning

FROM : Sizakele Mzimela, Chief Executive, Transnet Freight Rail

DATE : 15 August 2023

**SUBJECT : REQUEST FOR PERMISSION TO PERFORM RESEARCH WITHIN
TRANSNET FREIGHT RAIL BY INTERVIEWING COLLEAGUES**

PURPOSE

1. The purpose of this submission is to request permission for Chuma Kobese (0124825) to conduct research within Transnet Freight Rail. Her research is intended to fulfill an academic requirement of the Master of Business Administration (MBA) degree program at the University of Free State (UFS). With this study, she aims to delve into specific aspects related to Transnet Freight Rail to gain valuable insight and contribute to the field of business administration.
2. This memorandum is an essential component of her submission for the Ethical Clearance Committee's evaluation phase due on the 6th of September 2023.

BACKGROUND

- 2.1 Miss. Kobese is currently employed at Transnet Freight Rail (TFR), Rail Network Design office.
- 2.2 She is pursuing an MBA degree at UFS on a part-time basis, self-funded. She is currently in the last phase of her academic work, engaged in minor research.

DISCUSSION

- 3.1 The research topic is "Stereotype barriers and coping strategies for women in a male-dominated industry. A case of Transnet Freight Rail, South Africa Railways"
- 3.2 Her research aims to identify stereotypic barriers and conduct a comprehensive assessment of the stereotypic barriers that hinder women's advancement and growth in male-dominated industries the case of South African railways. This includes

analyzing perceptions, biases, and stereotypes held by both male and female employees, as well as the impact of these barriers on career progression.

- 3.3 Explore Coping Strategies: Investigate the coping strategies adopted by women to overcome the challenges posed by stereotypes and gender biases in their professional lives. Understanding these strategies will offer valuable insights into effective mechanisms for empowering women in the workplace.
- 3.4 Miss. Kobese, based on the research findings, will propose evidence-based recommendations and strategies that Transnet can implement to foster a more inclusive and equitable work environment, allowing women to fully realize their potential in the organization.
- 3.5 The data collected for this study will be used exclusively for academic research and for no other purpose. The data will be retained in a secure online database and deleted once the research has been completed. She will take every precaution to ensure that no confidential company information is disclosed and that no one is coerced into participating in this study. The investigation will be conducted in accordance with Transnet's and the University of Free State's respective codes of ethics.
- 3.6 Data will be collected by means of interviews which will be scheduled with Transnet employees.
- 3.7 The company will have the option to request the study results and use the information to enhance its operations if desired.
- 3.8 The research will be conducted under a research supervisor:
 - Dr. Shingirayi Chamisa, email: Chamisasf@ufs.ac.za

MOTIVATION

- 4.1 This research aims to contribute valuable knowledge to TFR and the wider rail industry, allowing for evidence-based strategies to be implemented to promote gender diversity and inclusivity. The findings will be presented in a comprehensive report, which will include actionable recommendations to help Transnet foster an environment that empowers and supports women in male-dominated industries.
- 4.2 Transnet has made significant strides in fostering diversity and inclusivity. However, to further improve the working environment for women, it is crucial to understand the unique challenges they face and the mechanisms they use to navigate these challenges effectively.

FINANCIAL IMPLICATIONS

5. None

BUDGET IMPLICATIONS

6. None

RECOMMENDATION

- 7.1 It is recommended that the Chief of People Management and Learning approves Chuma Kobese's (employee number: 0124825) application to conduct research at Transnet to partially fulfill the requirement for a master's degree in Business Administration. The application will not violate Transnet policies or endanger Transnet.
- 7.2 Approves the response letter to Ms. Chuma Kobese with respect to her studies.


Compiled by:


Ms. Chuma Kobese
Chief Engineering Technician
Transnet Freight Rail
Date: 15/08/2023

Supported by/Not Supported:


Ms. Noxolo Sipunzi
Acting Chief Engineer- Technical
Transnet Freight Rail
Date: 16/8/2023

Recommended/Not Recommended:


Mr. Gregory Botha
Act. Chief People Officer
Transnet Freight Rail
Date: 2023/08/18

Recommended/Not Recommended:


Ms. Sizakele Mzimela
Chief Executive
Transnet Freight Rail
Date: 06/09/2023

Recommended/Not Recommended:


Mr. James Madihlaba
Senior Specialist: Skills Planning & Reporting
Transnet Academy
Date: 08/09/2023

Recommended/Not Recommended:


Ms. Puleng Maseko
Head: Learning Enablement & Compliance
Transnet Academy
Date: 08/09/2023

Approved/Not Approved:


Mr. Itumeleng Matsheka
Chief of People Management and Learning
Transnet SOC LTD
8 September 2023

Date: _____

UNIVERSITY OF THE
FREE STATE
UNIVERSITEIT VAN DIE
VRYSTAAT
YUNIVESITHI YA
FREISTATA



GENERAL/HUMAN RESEARCH ETHICS COMMITTEE (GHREC)

16-May-2024

Dear Mrs Chuma Kobese

Application Approved

Research Project Title:

Gender Stereotypes and Coping Strategies for women in male-dominated industries. A case of Transnet Freight Rail, South Africa railways.

Ethical Clearance number:

UFS-HSD2024/0264

We are pleased to inform you that your application for ethical clearance has been approved. Your ethical clearance is valid for twelve (12) months from the date of issue. We request that any changes that may take place during the course of your study/research project be submitted via an Amendment on RIMS to the ethics office to ensure ethical transparency. Furthermore, you are requested to submit a Final Report on RIMS for your study/research project to the ethics office once the project has concluded. Should you require more time than the allotted 12 months to complete this research, please apply for an extension by submitting a Continuation/Report on RIMS. Thank you for submitting your proposal for ethical clearance. We wish you success with your research.

Yours sincerely,

Dr Adri Du Plessis

Chairperson: General/Human Research Ethics Committee

205 Nelson Mandela P.O. Box 339
Drive Bloemfontein 9300
Park West Tel: +27 (0)51 401
Bloemfontein 9301 9337
South Africa duplessisA@ufs.ac.za
www.ufs.ac.za



EDITING CONFIRMATION LETTER

Douglasdale 2055
081 537 7677
suko@wordlabs.co.za

23 September 2024

TO WHOM IT MAY CONCERN

Please let this letter serve as confirmation that I, Sukoluhle Mlambo, provided technical editing services for **Chuma Kobese** for her minor dissertation titled, “**Gender Stereotypes and Coping Strategies for women in male-dominated industries. A case of Transnet Freight Rail, South Africa Railways**”. I uphold the following editing standards:

- proofreading for mechanical errors such as spelling, punctuation, grammar
- copy-editing that includes commenting on, but not correcting, structure, organisation and logical flow of content, basic formatting (headings, page numbers), eliminating unnecessary repetition
- checking citation style is correct, punctuating as needed
- returning the document with track changes for the author to accept

I confirm that I have met the above standards of editing and professional ethical practice.

The content of the work edited remains that of the student.

Sincerely,

A handwritten signature in black ink that reads "S. Mlambo". The signature is written in a cursive style with a circular flourish at the beginning.

S. Mlambo, PhD



Digital Receipt

This receipt acknowledges that Turnitin received your paper. Below you will find the receipt information regarding your submission.

The first page of your submissions is displayed below.

Submission author: Chuma Kobese
Assignment title: DRAFT ONLY FOR STUDENTS
Submission title: Chuma Kobese Research Chaper 1 to 5 with out Table of con...
File name: Chuma_Kobese_Research_Chaper_1_to_5_with_out_Table_of_...
File size: 153.05K
Page count: 78
Word count: 26,152
Character count: 146,583
Submission date: 04-Sep-2024 02:47PM (UTC+0200)
Submission ID: 2425744062

