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A gender perspective on career preferences and self-efficacy in South Africa

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A gender perspective on career preferences and self-efficacy in South Africa.

A research report submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Management in Entrepreneurship and New Venture Creation

Johannesburg, 2025

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

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ABSTRACT

To advance the study of entrepreneurship, this study examines how gender, career preferences, and self-efficacy interact in the South African context, applying Intersectional-Marxist Feminist frameworks to investigate systemic restrictions on women's participation in entrepreneurship. Entrepreneurial self-efficacy, as an indicator of an individual's perception of their ability to perform entrepreneurial activities, is influenced by gender expectations, sectoral involvement, and local economic environments. Although there has been extensive research on gender variation in entrepreneurship, there are limited studies on how racial politics, economic stratification, and structural inequalities affect self-efficacy and career choice in South Africa.

The survey data was collected among 188 respondents utilizing a questionnaire that was scripted on Qualtrics. The study employs a quantitative design, making use of survey data analyzed with SPSS to investigate differences in risk-taking among women and men, confidence in leadership, innovation, and financial control. Statistical analysis, including t-tests, ANOVA, chi-square tests, correlation, and regression analysis, is used to determine significant predictors of entrepreneurial preference and career outcomes. Evidence indicates that males have higher scores in risk-taking and leadership self-efficacy than females, with age and education levels playing significant roles in predicting entrepreneurial confidence. Self-efficacy ratings also vary depending on industry and region, and the finance and technology sectors achieve the highest levels of confidence scores, while Gauteng and Western Cape have the entrepreneurial tendencies most reported.

The research adds to the theoretical literature on gendered entrepreneurship through the application of Intersectional-Marxist Feminism to analyze structural constraints on female entrepreneurs. The research underscores the importance of policy interventions, mentorship initiatives, and gender-mainstreamed finance support systems in reducing systemic barriers and closing self-efficacy gaps and promoting inclusive entrepreneurship. The research offers real-world implications for policymakers, educators, and industry players to create focused strategies for advancing gender equity in business and economic growth.

Keywords: Gender, Entrepreneurial Self-Efficacy, General Self-Efficacy, Self-belief, Proactiveness, Career Aspirations, Risk-Taking, Intersectionality, Marxist Feminism, Structural Inequality, South Africa, Entrepreneurship

DECLARATION

I declare that this research report is my work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Management in Entrepreneurship and New Venture Creation at the University of Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination to this or any other university.

Name: Nontokozo Setiba **Signature:** 

Signed at *Sandton*

On the *30th* **day of** *April* **of the year** *2025*

DEDICATION

To My Beloved Grandmother, Christina Letjane

A beacon of wisdom, my guiding light. Gogo, your love, a boundless sea, the wind beneath my wings, forever lifting me.

To My Precious Son, Mpendulo

Mpendulo - Without you, this quest would be for nought, You give purpose and meaning to each and every day.

ACKNOWLEDGEMENTS

I would like to extend a word of gratitude to all of the individuals who played a part in the completion of this report. I am exceptionally grateful to my supervisor, Dr. McEdward Murimbika, who guided me through this course. To Dr Jabulile Msimango-Galawe, who inspired me with confidence to conquer decision science. To Professor Boris Urban for your grace and assistance during the entire journey.

I likewise would like to express my utmost appreciation for the indispensable role played by family and friends in sharing the survey and ensuring that I meet my deadlines. For the constant words of support and unyielding faith in my abilities to complete this task.

To the respondents who responded to my survey, I greatly appreciate the time you took out of your busy schedules to complete my questionnaire.

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LIST OF ACRONYMS

EE - Entrepreneurship Education

EFA - Exploratory Factor Analysis

EI - Entrepreneurial Intention

EO - Entrepreneurial Orientation

ESE - Entrepreneurial Self-Efficacy

GSE - General Self-Efficacy

SE - Self-Efficacy

HSRC - Human Sciences Research Council

SCCT - Social Cognitive Career Theory

CHAPTER 1: INTRODUCTION

1.1 Background of the Study

Entrepreneurial self-efficacy has emerged as a crucial determinant behind career choices, entrepreneurial success, and economic progress. It reflects an individual's conviction to be capable of carrying out entrepreneurial actions such as taking risks, managing finances, and innovating (Meyer, 2018). High self-efficacy is associated with greater entrepreneurial intentions, business commitment, and resilience in challenging markets. On the contrary, low self-efficacy tends to discourage individuals from engaging in entrepreneurial possibilities because of perceived obstacles and self-doubt, which are accentuated by structural inequality and social norms.

Gender differences in entrepreneurship are amply documented as being influenced by social norms, access to funding, and confidence. In South Africa, they are compounded by systemic and historic inequalities, and especially for women, by limited access to capital, marginalization in high-growth sectors, and cultural masculine biases in the business world (Langevang, 2015). Women business owners are typically found in low-margin businesses like hospitality and retail, with men having a monopoly over high-risk, high-return sectors like technology and finance (Vecchio, 2003). Such tendencies are not just a matter of personal preference but are strongly established in structural disparities and socio-economic stratification.

South Africa's particular socio-economic setting, characterized by the apartheid heritage, also adds to entrepreneurial self-efficacy. Women with historically disadvantaged backgrounds have intersecting gender and racial barriers that close off access to resources, networks, and opportunities. Regional gaps also exist, with provinces such as Gauteng and the Western Cape having stronger entrepreneurial ecosystems than rural areas with poor infrastructure and support systems.

This research extends theoretical debate by bringing together Social Cognitive Career Theory (SCCT) and Intersectional-Marxist Feminist perspectives to examine the manner in which institutional barriers construct entrepreneurial self-efficacy along gender lines. As opposed to previous studies that utilize gender as a dichotomous

variable, this research utilizes an intersectional approach to analyze the synergistic impact of race, class, and regional inequality on entrepreneurial confidence. More precisely, it adds to theory in that:

Expanding SCCT to incorporate structural and socio-economic factors as moderators of self-efficacy, specifically in transitional economies such as South Africa.

Intersecting Intersectional-Marxist Feminism with entrepreneurship research to identify how patriarchal and capitalist institutions disproportionately affect women, particularly women from marginalized groups.

Empirically validating the interplay between gender, industry participation, and self-efficacy, offering a nuanced understanding of how contextual factors influence entrepreneurial behavior.

By addressing these gaps, the study provides a foundation for policy interventions aimed at fostering inclusive entrepreneurship and reducing gender disparities in economic participation.

1.2 Problem Statement

Entrepreneurship has been commonly referred to as an engine of economic development, innovation, and employment generation, particularly in a context like South Africa. Yet, notwithstanding its potentially transformative capacity, gender differences in entrepreneurial self-efficacy persist to constrain opportunities for prospective entrepreneurs, especially women. Self-efficacy, defined as a perception of confidence in one's ability to perform entrepreneurial activities effectively, is important in influencing career ambitions, risk-taking, and entrepreneurial success. Previous studies have continually emphasized gender differences in entrepreneurial characteristics, including risk-taking skills, investment decisions, and management self-efficacy, that shape business ownership and growth patterns. However, much of this research has been carried out in Western settings, and empirical literature on these gendered

differences within South Africa’s distinct socio-economic and cultural context remains limited.

Prior research in South Africa has tended to concentrate primarily on structural obstacles, such as unequal access to markets, lack of capital, and policy issues, which discourage women’s entrepreneurship. Although these factors are undoubtedly critical, there has been relatively little examination of the psychologic aspects of entrepreneurship, namely, how gender affects internal perceptions of self-efficacy, leadership confidence, and decision-making skills. Without a better understanding of these internalized attitudes, efforts to reduce the gender gap in entrepreneurship may not be targeting the underlying factors deterring women from fully participating in entrepreneurial activities.

In addition, South Africa's economic and historical environment presents further layers of complexity in that racial disparities, regional disparities, and cultural expectations intersect with gender differences yet again in entrepreneurship. Women, and especially those from historically disadvantaged groups, have compounded disadvantages that affect their entrepreneurial self-efficacy and career aspirations.

This research seeks to fill this gap by utilizing the Social Cognitive Career Theory (SCCT) model to analyze how gendered self-efficacy beliefs, influenced by structural inequalities and societal expectations, shape entrepreneurial confidence and sectoral involvement in South Africa. By situating the research within SCCT—namely, self-efficacy, outcome expectations, and contextual influences—this research presents a nuanced theoretical framework that has not yet been adequately researched within the South African entrepreneurial context. By empirical analysis of confidence levels, risk-taking attitudes, and sectoral involvement, this research study seeks to contribute fresh insights into the current corpus of literature on gendered entrepreneurship and provide evidence-based policy advice for policy reform, mentoring programs, and support mechanisms for an inclusive entrepreneurial environment.

1.3 Research Objectives

a) To analyze how gender differences influence career preferences and identify patterns or trends in career choices.
b) To examine the relationship between gender and entrepreneurial self-efficacy, determining how gender affects individuals' confidence in their entrepreneurial abilities.
c) To investigate the role of socio-cultural influences in shaping career preferences and how these factors mediate the impact of gender on career choices.
d) To explore how socio-cultural factors influence entrepreneurial self-efficacy and identify their mediating effects on the relationship between gender and entrepreneurial confidence.

1.4 Research Questions

Based on the objectives, the study seeks to answer the following research questions:

1. What is the relationship between gender and entrepreneurial self-efficacy in South Africa?
2. How do gender differences influence industry participation among entrepreneurs?
3. To what extent do self-efficacy dimensions such as risk-taking, management, innovation, and financial control vary between male and female entrepreneurs?
4. What interventions can be implemented to enhance entrepreneurial self-efficacy and promote gender inclusiveness in entrepreneurship?

1.5 Significance of the Study

This study contributes to the theoretical literature on gendered entrepreneurship by applying an Intersectional-Marxist Feminist framework to analyze the structural constraints on female entrepreneurs. Specifically, the study extends Social Cognitive Theory (SCT) by examining how gender, as an intersectional identity, shapes entrepreneurial self-efficacy and career preferences in the distinct socio-economic context of South Africa. SCT posits that self-efficacy, or one's belief in their ability to perform a task, is a key determinant of behavior and motivation (Bandura, 1986). In

the entrepreneurship domain, entrepreneurial self-efficacy (ESE) has been shown to influence entrepreneurial intentions, venture creation, and firm performance (Zhao et al., 2005). However, existing research has predominantly focused on ESE in Western, developed economies, overlooking how gender, race, and class intersect to shape entrepreneurial confidence and career choices in transitional economies like South Africa.

The introduction provides a critical and nuanced engagement with the gendered nature of entrepreneurship, highlighting how patriarchal and capitalist structures restrict women's participation through unequal access to resources, networks, and business opportunities. This is particularly salient in the South African context, where the legacy of apartheid and ongoing racial and economic inequalities further compound gender-based barriers to entrepreneurship. By situating the study within this socio-historical backdrop, the research offers important insights into how structural factors mediate the relationship between gender and entrepreneurial self-efficacy.

This study adds to the existing literature on gender and entrepreneurship through empirical evidence of self-efficacy differences, especially in the South African context (Lynch et al., 2022). Through an analysis of how gender affects entrepreneurial self-efficacy, industry involvement, and career decisions, this research provides useful insights into the psychological and structural determinants of entrepreneurial ambitions. The results are relevant to a variety of stakeholders, such as policymakers, educators, business development centers, and potential entrepreneurs, because they offer evidence-based support for developing a more inclusive entrepreneurial environment.

From a policy standpoint, knowing gender differences in self-efficacy and industry engagement can assist government departments and economic planners in devising targeted interventions in favor of underrepresented entrepreneurs. The results of the study can be used to inform gender-responsive policy formulation, such as mentorship schemes, financial support systems, and training interventions specifically targeting confidence gaps and risk aversion among women entrepreneurs. Through the identification of the major determinants of entrepreneurial self-efficacy, policymakers

can formulate interventions that increase women's involvement in high-growth sectors and eliminate structural obstacles that cap their business success.

For teachers and institutions of learning, this study provides key information regarding the formation of entrepreneurial self-efficacy and gender differences. Business schools, vocational training schools, and entrepreneurship development courses can leverage this information in designing gender-specific curricula that instill self-confidence, leadership ability, and money management skills in prospective entrepreneurs (Diko, 2023). In addition, gender-responsive pedagogies can be applied in entrepreneurship training to break down stereotypes, increase women's entry into traditionally masculine sectors, and enhance business capabilities that empower female and male learners.

Additionally, business development centers, incubators, and entrepreneurial support organizations can use the research findings of the study's industry-specific entrepreneurial patterns of participation to create sector-based interventions. These can include networking, accelerator programs, and sector-based training programs that equip male and female entrepreneurs with the ability to cope in competitive business ecosystems.

To would-be entrepreneurs and businesspeople, the research provides more information about the impact of self-efficacy in profession selection and entrepreneurship. In the planning of gender issues and opportunities, the research can empower individuals with strategies for building resilience, acquiring confidence, and coping better in the entrepreneurial setting. Particular to women entrepreneurs, learning how to overcome self-efficacy limitations, accessing mentorship, and accessing industry-related documents that support their enterprises can benefit them.

This study has important implications for fostering gender equality in entrepreneurship. By bridging the knowledge gap on self-efficacy differences and their impact on career aspirations, the study contributes to a more knowledge-based approach to economic development, business innovation, and social inclusion. The findings can catalyze the formulation of gender-sensitive policies, education systems, and entrepreneurial environments that encourage diverse participation and inclusive economic growth.

1.6 Scope and Delimitations

This research targets entrepreneurs and workers in South Africa across different industries, with the main focus on gender variation in entrepreneurial self-efficacy in terms of areas like management, risk-taking, innovation, and financial control (Klongthong, Thanh, and Thon, 2020). Nevertheless, delimitations of this study must be considered. The research is founded on self-report data, whose responses may carry bias, and uses a cross-sectional design that does not permit causal inferences regarding entrepreneurial self-efficacy over time. The research was also quantitative and based on responses from surveys only, without integrating qualitative views concerning gender experiences as entrepreneurs.

1.7 Structure of the Research Report

The structure of this research report is as follows:

Chapter 1: Introduction discusses background, problem statement, research goals, significance, and study scope.

Chapter 2: Literature Review discusses recent research into entrepreneurial self-efficacy, gender differences, and industry participation.

Chapter 3: Research Methodology discusses research design, data gathering, and statistical analysis methods.

Chapter 4: Data Analysis and Findings describes the findings of statistical tests carried out with the help of SPSS.

Chapter 5: Discussion discusses the findings' implications in terms of existing literature, with key insights and implications.

Chapter 6: Conclusion and Recommendations summarizes the contribution of the study, limitations, future research, and policy intervention recommendations.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The literature review covers scholarly research related to gender differences, along with career selections and entrepreneurial self-efficacy, which forms the basis of this investigation. This research explores the effect of gender on professional choices as well as entrepreneurial self-efficacy abilities and business startup and management assurance. The analysis focuses on South African culture and social elements that influence entrepreneurial actions and career pathway selection for the people in this area. A systematic review divides the analysis into four essential areas that include career preference variations based on gender, gender-related self-efficacy for entrepreneurship, and sociocultural influences on career choices, with a combined assessment of gender influence on entrepreneurial confidence.

The research hypotheses test how gender affects career decisions and self-efficacy, along with entrepreneurial confidence, while examining socio-cultural elements that act as intermediaries between these aspects. Sex-related research analysis is fundamental to uncover empty areas while creating detailed insights about gender activities within entrepreneurial environments. Research about gender imbalances in career paths and self-confidence mainly comes from global academic studies, but South African academic institutions have shown minimal effort in this field. This section documents a collection of applicable theories and empirical research studies that form a systematic framework to assess self-efficacy in entrepreneurship and gender-stereotyped career choices for the formulation of inclusive economic policies and interventions.

2.1.1 Career Preferences

Several career development models explain how people select careers during their study of the interaction between personal and environmental factors. Social Cognitive Career Theory (SCCT) and Holland's Career Choice Theory are still the two prominent theories explaining gender effects on career selection.

Career preference studies show that gender plays a large role in determining occupational choices via internalized societal expectations and social cognitive

factors. Theories like Social Cognitive Career Theory (SCCT) and Holland's Career Choice Theory indicate that men and women are socialized to different occupations, leading to occupational segregation. Theoretical understanding is carried over to the study's first hypothesis (H1) that career preferences by aspiring and current entrepreneurs in South Africa are influenced by gender differences.

2.1.1.1 Social Cognitive Career Theory (SCCT)

Self-efficacy beliefs, combined with outcome expectations and personal interests, shape career choices, as Lent, Brown, and Hackett (1994) state. Researchers describe how individuals interact with their environment through this theory because gender norms, combined with social factors, either limit or facilitate career opportunities. Studies indicate that women typically express diminished self-confidence in STEM subjects and consequently choose education and healthcare work because of their gender-biased fields. Through its framework, SCCT demonstrates that role models, together with mentorship and opportunities for exposure to various careers, influence what career paths people choose based on gender norms.

2.1.1.2 Holland’s Career Choice Theory

The Holland Personality-Job Fit Theory, developed in 1997, seeks to group people into six general personality types, which include Realistic, Investigative, Artistic, Social, Enterprising, and Conventional. The Holland Code is linked with careers. This theory posits that people are directed towards the occupations that suit the kind of person that they are. Nevertheless, male and female socialization can impact personality development, career choice, and preference. For instance, men should take up realistic and investigative careers such as engineers, technologists, constructors, while women take up service-related roles. This is based on a South African study done by Letsoalo and Rankhumise (2019) that showed that more men registered for engineering and information technology than women who registered for nursing, psychology, and teaching courses. This trend is not unique to the selected countries, as it is evident worldwide in career preferences. SCCT and Holland’s theory have the same idea that gender roles dictate career interests because of the roles adopted by males and females as designated appropriately in society.

The theoretical frameworks established from these theories facilitate an understanding of gender variation in career choices and stress on effective self-efficacy level and cultural influence for achieving gender equitable career opportunities. It has been stated that there are many differences in career types in which men and women prefer to work. Such can be attributed to flexibility in societal norms, self-belief that influences the ability to pursue a particular profession, and structural impediments that prevent individuals from accessing particular occupations.

2.1.2 Self-Efficacy

Entrepreneurial self-efficacy (ESE) is highly influential in entrepreneurship intentions and action, as is described in Bandura's Social Cognitive Theory. SCT focuses primarily on self-efficacy (a person's perception of doing something) and outcome expectations (perceived incentives or penalties attached to actions). As defined by Chen et al. (1998), ESE is the perceived ability of an individual to perform entrepreneurial tasks like opportunity recognition, business management, innovation, risk-taking, and problem-solving. Greater ESE is positively related to more intense entrepreneurial intentions, higher persistence, and business activity success (McGee et al., 2009).

A gendered approach to ESE indicates imbalances in entrepreneurial intentions and entrepreneurship rates, typically as a result of self-efficacy differences. On average, men have higher ESE due to higher exposure to entrepreneurial role models, increased risk-taking confidence, and greater access to business networks. This disparity aligns with SCT's premise that self-efficacy is shaped by **vicarious experiences** (observing successful entrepreneurs) and **social persuasion** (encouragement from mentors and peers). Consequently, this study's second hypothesis (H2) proposes that men in the South African context are more likely to exhibit higher entrepreneurial self-efficacy than women.

2.1.2.1 Bandura's Social Cognitive Theory and Self-Efficacy

Employing the concepts drawn from Bandura's Social Cognitive Theory (SCT) that was proposed in 1977 and expanded in 1986, ESE promotes observational learning,

personal experience, and social reinforcement beliefs about self-efficacy. Hence, self-efficacy would predict the level of risk-taking, level of perseverance, and level of pro-activity in seeking business opportunities from the individuals. On the other hand, low self-efficacious individuals may be reluctant to initiate business undertakings because of the learned fear of failure. According to Bandura, self-efficacy refers to people's belief in their ability to accomplish certain tasks, which will affect their ability to perform tasks and activities (Pulami, 2023). This concept of self-efficacy has an impact on entrepreneurship because it strengthens a person's determination to assess and implement new business opportunities (Martyajuarlinda & Kusumajanto, 2018).

Self-efficacy also plays a positive role in entrepreneurial intentions because it increases someone's ability to deal with obstacles they face (Pulami, 2023). People with a high level of self-efficacy are more likely to be involved in entrepreneurial activities because of their self-confidence in their abilities, which motivates them to take risks and pursue opportunities (Günhan & Başer, 2007). This relationship is also supported by research, which states that self-efficacy can have a positive impact on entrepreneurial performance (Pulami, 2023).

Self-efficacy is interrelated with other variables, such as social support and outcome expectation, to influence entrepreneurial intentions. Self-efficacy, the extent to which people believe they can succeed in specific situations, affects entrepreneurial intentions through its influence on individuals' confidence in their abilities (Günhan & Başer, 2007). This confidence is also influenced by social support, which can strengthen self-efficacy by providing encouragement and resources needed to engage in entrepreneurial activities (Fauziyah & Pangaribuan, 2023).

2.1.2.2 Impact of Self-Efficacy on Entrepreneurial Intentions and Success

Analyzing empirical studies allows one to conclude that ESE and SEE are related to greater entrepreneurial intentions (Zhao et al., 2005). Tenets like self-efficacy further mean that individuals with these tenets will deem entrepreneurship as a noble career, take proactivity, and persevere more in business undertakings despite failures. Conversely, low levels of ESE result in low self-esteem and a decrease in confidence that, in turn, causes the person to avoid risk-taking and, hence, exhibit high failure rates in business initiatives (Shane & Venkataraman, 2000). It may be concluded that

ESE is a significant activity influencing entrepreneurial behavior, which indicates the necessity to continue the study of the gender differences in the context of self-efficacy.

In turn, outcome expectation—anticipation about the results of engaging in entrepreneurial activities—interacts with self-efficacy. When individuals believe they can successfully carry out entrepreneurial tasks, they are more likely to expect positive outcomes, which in turn increases entrepreneurial intentions (Pulami, 2023). Based on studies, those with greater self-efficacy tend to seek entrepreneurial opportunities since they believe there is a greater chance of obtaining satisfactory outcomes (Martyajuarlinda & Kusumajanto, 2018). The combined influence of self-efficacy, social support, and outcome expectations can produce an environment that supports entrepreneurial intentions, allowing people to overcome obstacles and pursue entrepreneurial aspirations more successfully. Self-efficacy plays a significant relation to the theory of social cognitive and affects behavior and intention towards entrepreneurship by improving self-confidence as well as resisting challenges (Bullough et al).

The effect of gender on entrepreneurial self-efficacy (ESE) and career intention has extensively been researched across various fields such as business, psychology, and sociology. Entrepreneurial self-efficacy or an individual's perception of their ability to execute entrepreneurial functions efficaciously translates into a core predictor of entrepreneurial intentions, business creation, and firm performance (Bauer et al., 2021). However, regardless of increased ESE research, the gender gaps remain due to competing sociocultural determinants, available resources, and institutional variations (Bauer et al., 2022). They are more eminent in South Africa, with gender further intersecting with race, class, and economic disadvantage past, resulting in varying career paths and business opportunities (Agosto & Roland, 2018).

Research reveals that women have lower entrepreneurial self-efficacy than men, and the discrepancy may be related to different levels of business ownership, industries of business choice, and economic involvement. These gaps not only reflect differences in people's capabilities but are lodged in broader economic and social institutions. Female entrepreneurs are typically faced with institutional barriers such as limited access to capital, cultural norms against risk-taking, and gendered labor market

segregation, leading to women being locked into low-profit industries (Brush et al., 2019). Moreover, institutional environments in South Africa, including policy and law institutions, often fail to react appropriately to these gendered barriers, perpetuating current inequalities in entrepreneurship.

This chapter synthesizes existing literature on gender, entrepreneurial self-efficacy, and career aspirations in the theoretical framework of Intersectionality and Marxist Feminism. Marxist Feminism emphasizes the role of patriarchal and capitalist systems in restricting women's participation in entrepreneurship through the sustenance of economic dependence, restricting access to resources, and downgrading women's work in formal and informal economies. Applying this paradigm, the study critically examines how gendered power relations are experienced in entrepreneurial self-efficacy and career choice, highlighting structural obstacles to women's full involvement in entrepreneurship.

The chapter is organized as follows:

Conceptual Framework – Here, the theoretical relationship between entrepreneurship, self-efficacy, and gender is discussed. The most important constructs, such as self-efficacy theory (Bandura, 1986) and gender role theory (Eagly & Karau, 2002,) are discussed to elucidate the reason why men are not identical with women regarding entrepreneurial intentions and levels of confidence.

Theoretical Accounts of Gender and Entrepreneurship – This part critically examines several theoretical accounts that explain gender variation in entrepreneurship, including human capital theory, social learning theory, and institutional theory. It also considers how these theories overlap with feminist economic critiques.

Empirical Studies of Industry Entry and Risk Taking – The chapter analyzes empirical research on gendered industry selection patterns, risk-taking orientation, financial decisions, and self-efficacy in leadership. It also explores cross-culture studies in terms of comparing entrepreneurial self-efficacy across various socio-economic contexts.

Entrepreneurial Self-Efficacy Measures and Their Gendered Implications – This section explains commonly used ESE measurement scales and examines whether they adequately measure gendered dimensions of entrepreneurial action. It considers criticisms of existing scales and proposes potential revisions for more comprehensive measures.

Research Gaps and Value Added of this Study – Finally, the chapter concludes by outlining the most relevant gaps in available research, in particular on gendered entrepreneurial self-efficacy in the context of the socio-economy in South Africa. The value addition of this research lies in how it combines quantitative indicators and critiques of the social structure to gain a nuanced knowledge of gendered entrepreneurial engagement.

2.2 Conceptual Framework

This study is underpinned by three complementary theoretical lenses: **Social Cognitive Career Theory (SCCT)**, **Entrepreneurial Self-Efficacy (ESE)** theory, and **Marxist Feminist Theory**. These frameworks are selected for their relevance in explaining how internal self-beliefs and external structural factors interact to shape individuals' entrepreneurial intentions and career choices, particularly in gendered contexts.

SCCT (Lent, Brown & Hackett, 1994) expands upon Bandura's (1986) social cognitive theory by situating career decision-making within a triadic model that includes self-efficacy beliefs, outcome expectations, and personal goals. SCCT is instrumental in explaining how perceived capabilities (self-efficacy) and contextual influences (such as gender norms) influence career-related behaviors. Within this framework, **H2** and **H3** are grounded in the expectation that gender, age, and education will shape entrepreneurial self-efficacy levels.

The concept of **Entrepreneurial Self-Efficacy (ESE)**, a specialized application of general self-efficacy, refers to an individual's belief in their capability to perform entrepreneurial tasks such as risk-taking, innovation, leadership, and financial control (Chen, Greene & Crick, 1998). ESE is a strong predictor of entrepreneurial intention,

especially when considering domain-specific tasks. ESE is central to **H2, H3, and H4** in this study.

To complement the psychological perspective, **Marxist Feminist Theory** provides a structural analysis of how patriarchal and capitalist systems systematically marginalize women in the economic sphere. This theory posits that women's career paths and entrepreneurial aspirations are shaped by unpaid care responsibilities, societal norms, and systemic inequalities in access to capital and mentorship (Marlow & Carter, 2004). This provides the foundation for **H1 and H5**.

By integrating these theories, the study builds a multi-level explanatory framework: individual-level beliefs (via SCCT and ESE) intersect with structural gendered dynamics (via Marxist Feminism) to explain patterns in entrepreneurial preferences and confidence. The following sections detail how each theory informs the hypotheses.

Below are the tabulated differences between these theories:

Authors	Year	Concept	Key Contributions
Sawtelle, V., Brewe, E., & Kramer, L.H.	2012	Self-Efficacy in Physics	Explored the relationship between self-efficacy and retention in introductory physics, highlighting the importance of self-efficacy in academic persistence
Peña-Calvo, J. V., Inda-Caro, M., Rodríguez-Menéndez, C., & Fernández-García, C. M.	2016	Career Development in STEM	Investigated perceived support and barriers for career development among STEM students, emphasizing the role of self-efficacy in overcoming barriers
Sheu, H.-B., Lent, R. W., Brown, S. D., Miller, M. J., Hennessy, K. D., & Duffy, R. D.	2010	Social Cognitive Career Theory	Tested the choice model of social cognitive career theory across Holland themes, demonstrating the influence of self-efficacy on career choices

2.2.1. Conceptual Model

A conceptual model is created to represent the relationship between gender, self-efficacy factors, industry involvement, and entrepreneurial motivation under the Marxist Feminist theory. The model represents how gender-specific roles, economic institutions, and opportunities influence entrepreneurial career trajectories overall. Through identification of the social expectation, industry segmentation, and self-efficacy linkage, the model is the pillar on which accounts for the sustainability of gender inequality in entrepreneurship are made and also an area where solutions are found.

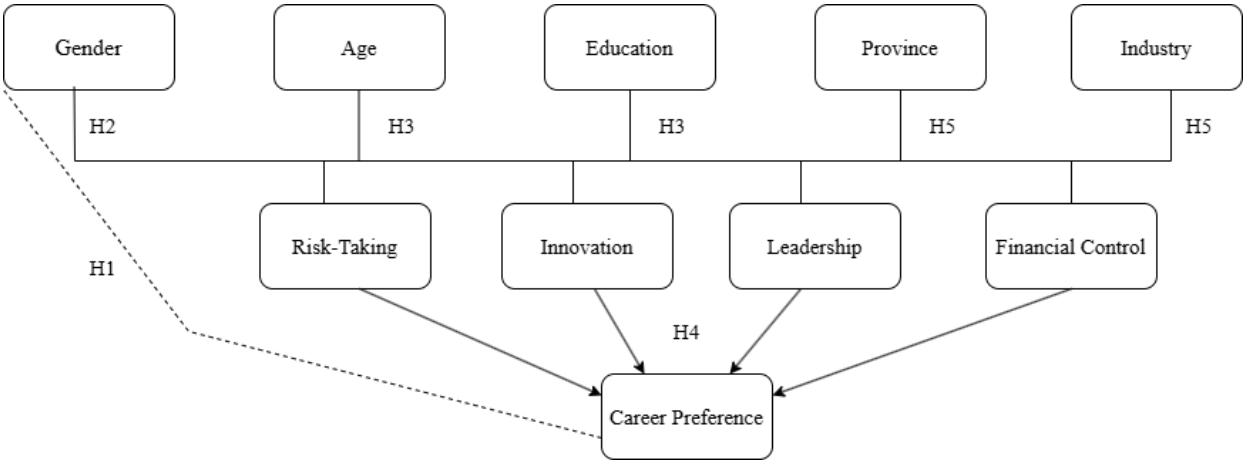


Figure 1: Conceptual Model

This conceptual model as shown in Figure 1 above guides this study by providing a methodical framework for the investigation of self-efficacy in South African entrepreneurship. Through the investigation of these variables, the study hopes to be able to contribute to an understanding of the systemic barriers to women entrepreneurs and the directions towards gender equality in organization.

2.3 Theoretical Perspectives

Entrepreneurial self-efficacy (ESE) is significantly influenced by economic, psychological, and structural factors, which often dictate individuals' ability to establish

and sustain entrepreneurial ventures. This section talks about the theoretical frameworks based on which the study is founded, employing Marxist Feminism, Leadership Self-Efficacy Theory, Gender-Role Theory, and Human Capital Theory. Together, these theories describe the ways gender, industry, provincial context, and leadership self-perception are involved in explaining differences in career ambitions and entrepreneurial self-efficacy in South Africa.

2.3.1 Intersectionality, Marxist Feminism, and Gendered Entrepreneurship

Marxist Feminism posits that capitalism and patriarchy work hand in hand to limit women's access to economic opportunities through limitations in financial, educational, and social capital (Al-Faham, Davis, & Ernst, 2019). Intersectionality in South Africa further entrenches entrepreneurial access, specifically for women of color who have multiple disadvantages because of historical racial and economic discrimination (National Research Foundation [NRF], 2020). The barriers in structure faced by women correspond with SCT's concept of environmental factors, which affect self-efficacy and outcome expectations and lower entrepreneurial confidence and entry in high-margin sectors controlled by men (Booysen, 2020).

Intersectionality, coined by Crenshaw (1989), offers a conceptual basis for understanding the intersecting and interdependent systems of disadvantage experienced by women entrepreneurs. Gendered inequalities in entrepreneurship do not just reflect self-efficacy at the individual level but also systems of exclusion from venture capital, male business networks, and discriminatory lending. These restrict women's mastery experiences, one important SCT factor supporting entrepreneurial self-confidence. The lower entrepreneurial self-efficacy among women is thus not a result of capability but a result of these structural constraints.

Femi-Marxist Theory

Author	Year	Concept	Key Contributions
Hartmann, H.	1979	Femi-Marxist Theory	Combined feminist and Marxist theories, focusing on the intersection of patriarchy and capitalism.

Vogel, L.	1983	Marxism and Feminism	Analyzed women's oppression through a Marxist lens.

Intersectional Theory

Author	Year	Concept	Key Contributions
Crenshaw, K.	1989	Intersectionality	Coined the term intersectionality, highlighting how race, gender, and other identities intersect.
Collins, P. H.	1990	Black Feminist Thought	Developed intersectional theory further, emphasizing the matrix of domination.

An essential inference of this theory is that women's entrepreneurial self-efficacy is not as great due to structural exclusion, not capability. Denial of access to venture capital, men's dominance of business networks, and discriminatory lending all erode women's self-perceived confidence in taking risks and holding top leadership positions. These factors form the basis for the hypothesis:

H1: Gender has a significant impact on career preferences, with different genders showing distinct ccareerpreferences as a result: Men will exhibit higher entrepreneurial self-efficacy compared to women.

This understanding informs the study's first hypothesis (H1): Gender significantly impacts career preferences, with men demonstrating higher entrepreneurial self-efficacy compared to women due to systemic advantages rather than inherent capability differences. To further examine this, Table 2.1 outlines male and female participation rates across various entrepreneurial sectors in South Africa.

Table 2.1: Gender Distribution Across Entrepreneurial Sectors in South Africa

Industry	% Male Entrepreneurs	% Female Entrepreneurs
Technology & Innovation	72%	28%
Finance & Investment	68%	32%
Manufacturing	65%	35%
Retail & Consumer Goods	46%	54%
Education & Health	31%	69%

2.3.2 Leadership Self-Efficacy and Innovation

Self-efficacy leadership is the belief of an individual in being capable of influencing and guiding others effectively (Chemers, 2000). It is very crucial in entrepreneurship because highly self-efficacious leaders are likely to practice transformational leadership, which stimulates creativity, problem-solving, and innovative business (Bass, 1985).

However, gendered boundaries restrict women from assuming leadership roles, particularly in male-dominated sectors. Transformational leadership theory would anticipate individuals with high leadership self-efficacy to assume entrepreneurial ventures since they possess the ability to withstand risks, manage teams, and innovate (Human Sciences Research Council [HSRC], 2023).

Past research suggests that self-efficacy in leadership is correlated directly with self-efficacy in innovation; those who see themselves as effective leaders are also likely to generate and implement new business ideas. Guided by this research, the study hypothesizes:

H2: Gender has a significant impact on career preferences, with different genders showing distinct preferences for certain types of careers thus leadership self-efficacy will be positively associated with innovation self-efficacy.

2.3.3 Gender and Entrepreneurial Preference

Gender-role theory (Eagly & Karau, 2002) is used to illustrate how societal demands influence occupational desire, reaffirming that men should be risk-takers, independent financially, and assertive in business, and that women are expected to place value on stability, security, and nurturance. These established beliefs add to gendered entrepreneurial inclinations where men prefer to pursue self-employment as they have greater resilience for financial and professional risk-taking (Shane & Venkataraman, 2000).

Women, however, face entrepreneurial barriers because of:

- Restricted access to venture capital and business finance
- Less mentorship and networking
- Social limitations on risk-taking and leadership (Brush et al., 2009)

Therefore, men are predicted to be more entrepreneurial, while women would prefer regular employment to self-employment because of perceived financial uncertainty in entrepreneurship.

H3: Gender influences entrepreneurial self-efficacy, with different genders exhibiting varying levels of confidence in their ability to start and run a business thus Men will be more likely to prefer entrepreneurship than normal employment than women.

2.3.4 Industry and Regional Influences on Self-Efficacy

Human Capital Theory (Becker, 1964) claims that self-efficacy develops through exposure to specialized knowledge and economic opportunities. Highly specialized fields like technology and finance draw higher self-efficacy they have more faith in their area of expertise and capability to counter business problems.

In South Africa, regional economic unevenness also takes center stage in entrepreneurial self-efficacy. Gauteng and the Western Cape are provinces that possess well-developed financial ecosystems, mentorship for business, and venture capital accessibility, making them more supportive of entrepreneurial growth (Audretsch & Fritsch, 2002). Rural regions, on the other hand, experience limited financial capital, limited access to mentors, and less developed business networks, resulting in lower self-efficacy scores by entrepreneurs in these areas. Based on these observations, the study formulates its hypotheses:

H4: Gender influences Entrepreneurship, with different genders exhibiting varying levels of confidence in their ability to start and run a business; thus, self-efficacy will be highest in professional services sectors and richer business ecosystems.

2.4 Empirical Evidence on Industry Participation and Risk-taking

Gendered patterns in the choice of industry, risk tolerance, financial management, and confidence in leadership shape entrepreneurial involvement. Empirical data support that women and men enter unique industries, and men hold technology-intensive, capital-intensive, and high-growth industries while women are disproportionately clustered in service companies, education, and health fields (Brush et al., 2019). The disparity primarily owes to structural factors, such as low exposure to financial capital, cultural stereotypes, and uneven self-efficacy (Kelley et al., 2017).

Risk-taking is also an important predictor of entrepreneurial success. Studies consistently report that men are more risk-taking than women and that this pattern influences their investment, growth strategy, and leadership in business (Byrnes et al., 1999). Women entrepreneurs are risk-averse because of socialization, limited financial capital, and focusing on business survival rather than rapid growth (Eagly & Wood, 2012). Still, the latest research refutes the presumption of women's universal risk aversion because it is stated that in friendly environments, the risk-taking tendency of women equals that of men (Bosma et al., 2021).

Financial choice and leadership confidence also vary by gender and affect entrepreneurial success. Men are more likely to pursue external funding and risky financial negotiations, while women are more apt to utilize internal funds or small loans

based on perceived discrimination within financial institutions (Carter et al., 2007). Leadership confidence, highly associated with self-efficacy, is an influential determinant of venture success. Research has proven that women business owners under-rate themselves even where they have identical or better levels of qualifications relative to male colleagues, in support of gendered self-sorting into lower risk sectors (Wilson et al., 2007).

Cross-cultural studies offer additional explanations of how socio-economic environments affect gendered entrepreneurship. In established economies, women enjoy favorable policies, networking initiatives, and mentorship schemes that promote entrepreneurial self-efficacy (Shinnar et al., 2018). However, in transitional economies such as South Africa, structural disparities, racial politics, and economic polarization exacerbate gender disparities in entrepreneurship (Ahl & Nelson, 2015). These imbalances underscore the importance of special policy interventions to equalize the entrepreneurial playing field.

2.5 Entrepreneurial Self-Efficacy Measures and Their Gendered Implications

Entrepreneurial self-efficacy (ESE) is a significant predictor of an individual's likelihood of starting and sustaining a business venture. ESE is typically measured with psychometric scales that assess confidence in various entrepreneurial activities, such as opportunity recognition, risk-taking, managing money, innovation, and leadership (Chen et al., 1998). While the scales are most prevalent in entrepreneurship research, they have come under attack for not being able to quantify the gendered dynamics of entrepreneurial action (Kickul et al., 2008).

Most current ESE measures presume a general entrepreneurial attitude without accounting for the societal limitations and prejudices that frame entrepreneurial confidence differently for men and women (Wilson et al., 2007). For example, conventional ESE scales focus on risk-taking and financial decision-making, domains where men tend to score higher because of cultural socialization and more financial access. But women entrepreneurs might be self-efficacious in other ways, emphasizing relationship development, long-term business survival, and community-based innovation—dimensions usually not considered in typical ESE measures (Sánchez et al., 2011).

Critics of current ESE scales advocate for the use of gender-sensitive measures that capture various entrepreneurial experiences. Alternative frameworks suggested by some researchers evaluate confidence in social entrepreneurship, collaborative leadership, and adaptive problem-solving, which are strong competencies of women entrepreneurs (Shinnar et al., 2012). Additionally, socio-economically context-sensitive measurements of ESE must be crafted for diverse socio-economic conditions, especially for economies such as in South Africa, where entrepreneurship intersects based on aspects like race, class, and legacies of past inequalities (Ahl & Marlow, 2012).

To enhance inclusivity, subsequent studies ought to advance ESE measurement instruments to consider gendered entrepreneurial trajectories. This involves broadening self-efficacy domains to encompass non-conventional business approaches, incorporating qualitative information on entrepreneurial confidence, and modifying survey methods to reduce response biases associated with gender expectations (Newman et al., 2019). Through the creation of more holistic ESE assessments, researchers and policymakers can better recognize and respond to gender differences in entrepreneurship.

2.6 Research Gap and Contribution

Despite extensive research on gender disparities in entrepreneurship, few studies have examined these dynamics within South Africa's unique socio-economic and racial context. Current literature tends to ignore the role of intersectionality and systemic disadvantage in shaping entrepreneurial self-efficacy, especially for women with historically disadvantaged backgrounds. Furthermore, although previous studies emphasize gender gaps in risk-taking and industry entry, they infrequently measure the effect of mentorship, access to funding, or policy measures in reducing such disparities.

This research fills these gaps by providing three central theoretical contributions:

Intersectional Framework: Through the intersection of Marxist Feminism and SCCT, the research transcends a gender binary perspective to examine how race, class, and regional inequalities intersect to shape self-efficacy. The framework offers a more

comprehensive insight into the obstacles encountered by women entrepreneurs in transition economies.

Contextualizing Self-Efficacy: The research situates entrepreneurial self-efficacy in the socio-economic context of South Africa, exploring how regional and historical disparities mediate levels of confidence. This builds on SCCT by including structural variables as key predictors of self-efficacy.

Policy-Relevant Insights: The study provides evidence-based policy recommendations to policymakers, educators, and industry leaders to develop gender-specific interventions, including gender-sensitive financing and mentorship schemes, that address the underlying causes of disparities.

By integrating quantitative analysis and intersectional theory, this research not only contributes to academic discourse but also offers practical insights towards fostering gender equity in entrepreneurship. Future studies can take cues from this by examining longitudinal trends or comparative analyses across comparable economies.

Table 2.2: Studies on Career Preferences and Gender Influence

Author(s)	Year	Theory/Model	Methodology	Key Findings	Identified Gap	Relevance to Current Study
Lent, Brown & Hackett	1994	Social Cognitive Career Theory (SCCT)	Conceptual/Theoretical	Self-efficacy influences career interests and choices; gender norms shape expectations.	Limited application in African entrepreneurial settings.	Basis for examining gender-based career choices using SCCT.

Author(s)	Year	Theory/Model	Methodology	Key Findings	Identified Gap	Relevance to Current Study
Bandura	1986	Social Cognitive Theory (Self-Efficacy)	Conceptual Framework	Self-efficacy impacts persistence, risk-taking, and resilience.	Lacks application in intersectional, gendered South African contexts.	Supports focus on entrepreneurial self-efficacy differences by gender.
Chen et al.	1998	Entrepreneurial Self-Efficacy (ESE) Scale	Survey and Measurement Development	ESE predicts entrepreneurial intentions and actions.	Traditional ESE scales may not capture gendered experiences.	Justifies measuring gendered self-efficacy with a critical lens.
Brush et al.	2019	Gender and Entrepreneurship Theory	Mixed Methods	Women face systemic barriers in funding, risk-taking, and leadership in entrepreneurship.	Most studies in developed economies; limited to South Africa.	Supports the need for a localized gendered entrepreneurship study.
Crenshaw	1989	Intersectionality Theory	Conceptual Framework	Multiple disadvantages (race, gender) compound economic exclusion.	The application of entrepreneurial self-efficacy is underexplored.	Supports intersectional analysis of gender, race, and entrepreneurship.

Author(s)	Year	Theory/Model	Methodology	Key Findings	Identified Gap	Relevance to Current Study
Booysen	2020	Intersectionality in South African Entrepreneurship	Empirical Study (South Africa)	Black women entrepreneurs face compounded race and gender barriers.	Limited focus on self-efficacy metrics in the study.	Contextualizes gendered entrepreneurial barriers specific to SA.
Wilson et al.	2007	Gendered ESE Measurement Critique	Empirical Study	Men score higher in traditional ESE domains due to cultural bias.	Need for more inclusive ESE scales recognizing women's skills.	Validates the critique of measurement tools in the current study.
Marlow & Carter	2004	Gender and Enterprise Theory	Conceptual/Theoretical	Women's entrepreneurship is shaped by structural inequalities, not personal deficits.	Few empirical tests in Global South economies.	Strengthens the structural analysis focus in the study.

Table 2.3: Studies on Self-Efficacy and Entrepreneurship

Author(s)	Year	Theory/Model	Methodology	Key Findings	Relevance to Current Study
Bandura	1986	Social Cognitive Theory (SCT)	Conceptual Framework	Self-efficacy shapes action, perseverance, and success across tasks, including entrepreneurship; four sources of self-efficacy influence behavior and motivation.	Core theoretical basis for entrepreneurial self-efficacy; foundational for understanding how beliefs influence entrepreneurial behavior and learning processes.
Chen et al.	1998	Entrepreneurial Self-Efficacy (ESE)	Survey & Measurement Development	ESE significantly influences venture creation, risk-taking, and opportunity recognition	Justifies focus on measuring entrepreneurial self-efficacy in empirical studies to predict entrepreneurial outcomes.
Pulami	2023	SCT Application to Entrepreneurship	Literature Review	High self-efficacy increases entrepreneurial intentions; social support and sociocultural factors play important roles.	Highlights the importance of sociocultural factors and social support in shaping entrepreneurial intentions through self-efficacy

Table 2.4: Studies on Intersectionality, Gender, and Entrepreneurship

Author(s)	Year	Theory/Model	Methodology	Key Findings	Relevance to Current Study
Federici	2004	Marxist Feminism	Conceptual Analysis	Patriarchal capitalism restricts women's economic advancement through unpaid reproductive labor, wage disparities, and control over women's bodies and labor; calls for recognition and remuneration of women's household work	Supports critical analysis of systemic barriers to women's economic participation and gendered labor exploitation under capitalism
Crenshaw	1989	Intersectionality Theory	Conceptual Framework	Intersecting identities such as race and gender compound disadvantages and systemic oppression, creating unique experiences of marginalization	Validates the inclusion of multiple, overlapping social identities (race, gender) in analyzing barriers and inequalities
Booysen	2020	Intersectional Entrepreneurship in South Africa	Empirical Study	Black women entrepreneurs face dual barriers of race and gender discrimination, limiting access to resources and opportunities in the South African context.	Provides South African-specific contextualization of intersectional barriers in entrepreneurship, informing localized analysis

Table 2.5: Studies on Leadership, Innovation, and Risk-taking by Gender

Author(s)	Year	Theory/Model	Methodology	Key Findings	Relevance to Current Study
Chemers	2000	Leadership Self-Efficacy Theory	Theoretical Analysis	Leadership self-efficacy predicts transformational leadership and innovation by enhancing leaders' confidence and effectiveness	Justifies linking leadership confidence with innovation outcomes
Bass	1985	Transformational Leadership	Empirical Leadership Study	Leaders with high self-efficacy are better innovators and motivators, fostering organizational change and creativity	Provides a basis for a hypothesis connecting leadership and innovation self-efficacy
Brush et al.	2019	Gendered Entrepreneurship	Mixed-Methods Study	Women entrepreneurs face systemic obstacles in accessing finance and leadership roles, impacting their entrepreneurial self-efficacy.	Reinforces systemic analysis of entrepreneurial self-efficacy with gendered barriers

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

This section presents the methodology that was followed to address the research aims and answer the hypotheses of the study. The section considers research design, data collection, and sampling. This is then followed by a section on the measurement instrument, data analysis techniques, and ethical considerations. The methodology chapter is the fulcrum of this research in that it outlines the approaches and techniques utilized to investigate gender differences in entrepreneurial self-efficacy and career aspirations in South Africa. This chapter provides a technical description of the research approach, sampling procedure, data collection methods, and analytical techniques employed. The methodology that was selected ensures that the research is systemic, replicable, and that it can provide empirical data that meaningfully adds to the world's store of knowledge.

Self-efficacy theory is related to Bandura's self-efficacy theory, which argues that one's self-efficacy beliefs regarding his ability to perform a task influence how well he performs that task (Pulami, 2023). Self-efficacy is the belief individuals have in their capability to organize and execute particular courses of action that are required in order to produce favourable outcomes and overcome difficulties. As a result, self-efficacy is influenced by personal experiences, social modelling, and verbal persuasion that can help strengthen one's confidence (Günhan & Başer, 2007).

Entrepreneurial self-efficacy is one of the applications of self-efficacy, which is an individual's belief in their ability to successfully engage in entrepreneurial activities (Martyajuarlinda & Kusumajanto). Entrepreneurs who believe in their ability to succeed are more likely to start their own business (Pulami, 2023). Both self-efficacy and entrepreneurial self-efficacy are significant in understanding how people cope with challenges and uncertainties in their respective areas. For instance, people who have high self-efficacy tend to come up with strategies that can enable them to overcome challenges, which is particularly significant in entrepreneurship, where resilience and adaptability are crucial (Bullough et al., 2014).

Entrepreneurial self-efficacy is a multifaceted construct with structural and psychological determinants. Due to its multidimensionality, the study applies a quantitative approach to measure gender-based differences in self-efficacy, risk-taking, financial control, and leadership confidence. Using statistical indicators, the research creates patterns and associations that make objective observations of the influence of gender on entrepreneurial behavior.

In addition, ethical principles are embedded in the research process to guarantee participant confidentiality, obtain informed consent, and prevent biased data collection. Although every attempt is made to generate solid and generalizable results, self-report bias, cross-sectional constraints, and sampling constraints are recognized and addressed.

3.2 Research Design and Approach

The research uses a quantitative design, which is well-suited to the investigation of gendered variations in entrepreneurial self-efficacy (ESE) and career preference. Quantitative methods provide quantifiable, objective data on how gender influences self-efficacy, risk-taking, and industry selection so that trends observed can be statistically validated. Cross-sectional data, which involves the collection of data on several cases at a single point in time (Bryman, 2015), was used. Primary data was collected rather than using secondary data, because primary data was current and was collected solely for this study. (Krueger, 1993).

3.2.1 Justification for the Quantitative Approach

The study employed a quantitative research approach, which is based upon deductive reasoning and uses quantitative analysis. Quantitative research approach emphasizes the quantification of the relationship among variables (Bryman, 2015). Unlike qualitative research, which is based on social science principles when the problem is still unclear and one still needs to develop theory, quantitative research is applied in cases like this study, where scientific principles are applied and where proof of fact is required to assess relationships among variables (Kolb, 2010). A quantitative method suits this research for several reasons:

1. Empirical Measurement – Entrepreneurial self-efficacy can be best measured through structured measurement scales that yield numerical data for comparison and correlation analysis.
2. Objective Comparisons – Gender-based differences need to be tested statistically to establish if differences in self-efficacy are significant.
3. Generalisability – An adequate sample size enables the results to be extrapolated beyond the immediate study population, and they are applicable for wider policy and entrepreneurial training interventions.

Although qualitative techniques might offer richer context in the form of interviews or case studies, they are less appropriate for measuring statistical significance and extrapolating trends to other demographic groups. A mixed-methods design was considered but not chosen because of time limitations and the study's primary interest in quantitatively measuring differences as opposed to examining subjective experience.

3.2.2 Research Design: Descriptive and Correlational

The present research utilizes a descriptive and correlational research design, which permits a systematic examination of gender variation in entrepreneurial self-efficacy.

- Descriptive Analysis – Offers a summary of gender distributions across career goals, industry choice, and self-efficacy scores. Through summarizing trends in the dataset, descriptive analysis indicates major trends that guide additional statistical testing.
- Correlational Analysis – Investigates associations among gender, self-efficacy, industry choice, and entrepreneurial actions. Although this design reveals strong associations, it fails to provide causal links between variables.

3.2.3 Cross-Sectional Study Design

A cross-sectional design was employed in this research, where data were gathered at one point in time and not followed over a long period. There are several benefits to this design. It is very efficient and can be completed more quickly and at less expense than longitudinal research. It also allows for a larger sample to be included, enhancing

the ability to generalize findings. In addition, a cross-sectional design offers a useful snapshot of gendered gaps in entrepreneurial self-efficacy, reflecting immediate disparities without extensive data collection spanning long periods.

There are, however, some limitations connected with this type of research. As the investigation does not monitor participants over extended periods, it cannot identify cause-and-effect associations, i.e., it can't judge whether gender discrepancies directly lead to differences in entrepreneurial self-efficacy. Further, since the information is time-dependent, it will not capture long-term changes in entrepreneurial behavior resulting from changing economic conditions, education, or experience. Self-report bias is also a possible weakness in which the participants might overreport or underreport their self-efficacy levels depending on their self-assessment at the time of data collection.

Regardless of these drawbacks, the use of the quantitative, descriptive, and correlational research design for this study means that the analysis is organized, quantifiable, and generalizable. The study is structured to evaluate gender-based differences in self-efficacy for entrepreneurship in such a way that statistical inferences are valid and generalizable to larger entrepreneurial ecosystems. Through a cross-sectional survey design, the study offers an overarching picture of how entrepreneurial ambitions and self-confidence are informed by gender in South Africa's context. Yet, future work might build on this study by integrating longitudinal research to provide a longitudinal assessment of changes in entrepreneurial self-efficacy over time, giving more insight into the development of confidence and career orientation over the long term for entrepreneurs.

3.3 Population and Sampling

The population for this study was made up of males and females in South Africa who were at various life and career stages. The study did not exclude potential respondents based on location, provided that they had access to the survey questionnaire. The research is centered on entrepreneurs and business professionals in South Africa, those who are already involved in entrepreneurial ventures or hope to have entrepreneurial careers. In light of the research's gender differentiation focus for self-

efficacy, there was a need to choose a sample that cut across various industries, levels of education, and levels of entrepreneurial experience.

3.3.1 Target Population

The target population for this study comprised **adult South African professionals** engaged in or aspiring toward entrepreneurial activity. This included current business owners, employees working in entrepreneurship-driven environments, and individuals actively planning to start their ventures. The population selection was rooted in the objective of examining entrepreneurial self-efficacy within contexts where it is both applicable and meaningful.

South Africa offers a rich and complicated entrepreneurial landscape influenced by multifaceted socio-economic, cultural, and geographic dynamics. Targeting this population made it possible to capture insights from those operating actual or planned entrepreneurial trajectories under fluctuating levels of opportunity and constraint. This was particularly relevant in investigating gendered differences in entrepreneurial confidence and sectoral preference.

In order to make the findings relevant and reliable, the study purposely excluded those with no entrepreneurial interest or those who were working in non-entrepreneurial occupations with no expressed desire to switch. This selective approach allowed collected responses to reflect real entrepreneurial mindsets, ambitions, and issues.

The research targeted a representative but focused sample, which was evenly gendered, included different age groups, levels of education, sectors, and regions, to mirror the intersectional factors shaping entrepreneurial self-efficacy in South Africa.

3.3.2 Sampling Methodology

A non-probability purposive sampling approach was employed, supplemented by stratified sampling for industry representation.

Justification of Purposive Sampling

Purposive sampling was utilized because:

1. The research calls for subjects with actual entrepreneurial experience or entrepreneurial aspirations.
2. It facilitates specific inclusion of participants from various industries, allowing the research to respond to industry-specific self-efficacy trends.
3. It increases the chances of acquiring significant insights as opposed to random information from participants who might lack entrepreneurial ambitions.

Although probability sampling would have made generalizability greater, it was not practicable because of entrepreneurial distribution and accessibility limitations.

Stratified Sampling for Industry Representation

To guarantee balanced industry representation, stratified sampling was used. The respondents were classified into five main industries:

1. Finance and Business Services – 14.4%
2. Technology and Innovation – 9%
3. Education and Health Services – 13.9%
4. Retail and Consumer Goods – 25%
5. Manufacturing and Mining – 4.3%

This stratification mitigates self-efficacy measurement bias since some industries can exhibit higher confidence levels as a result of varied risk exposure and leadership requirements.

3.3.3 Sample Size Determination

There were 188 participants in the study, with a gender distribution of 73.9% female (n=139) and 26.1% male (n=49).

The sample size was calculated based on Cohen's statistical power guidelines for power analysis to ensure sufficient representation to capture significant differences between gender groups. The ultimate sample size is a balance between practicality and statistical adequacy to enable:

- Valid subgroup analysis (e.g., gender differences by industry).

- Comparisons of men's and women's levels of self-efficacy.
- Multiple regression analysis (e.g., education, experience, industry, and gender).

One limitation of this sample is that women are overrepresented, and this could distort comparisons. But this is consistent with the study's goal of learning about challenges for female entrepreneurs, who in the past have faced more obstacles in business.

3.3.4 Inclusion and Exclusion Criteria

The study employed well-defined inclusion and exclusion criteria to ensure the relevance, credibility, and quality of the data collected. Eligible participants were those who were 18 years or older, thereby legally capable of engaging in economic activities, and who were either currently operating a business, working in an entrepreneurial environment, or explicitly expressed an intention to pursue entrepreneurship shortly. Additionally, participants were required to be residing in South Africa, as the study was geographically focused on the South African entrepreneurial landscape. Individuals were excluded from participation if they indicated no interest in entrepreneurship or had no plans to engage in it, were employed in non-entrepreneurial roles without any intention to transition into entrepreneurship, or submitted incomplete questionnaires. These exclusions were necessary to ensure that only relevant and complete data were included in the final analysis.

To minimize sampling bias and enhance the representativeness of the sample, the study implemented several mitigation strategies. A purposive sampling strategy with industry stratification was employed to capture respondents from a wide economic sector profile, including technology, education, finance, and manufacturing, as well as from various provinces, including Gauteng, Western Cape, and KwaZulu-Natal. The questionnaire was distributed across several professional and academic networks, such as LinkedIn, WhatsApp business groups, and university alumni email lists, to cover a socio-economically and demographically varied respondent base. In addition, deliberate attempts were made to attain gender balance within the sample by targeting outreach to male and female entrepreneurial networks evenly. The survey was conducted online and anonymously, a technique selected to minimize social desirability bias and enable respondents to respond truthfully without external

influence. Together, these techniques facilitated the study's aim of producing valid and generalizable knowledge about gender-based entrepreneurial self-efficacy in the South African context.

3.4 Data Collection Methods

In order to aptly investigate gender differences in entrepreneurial self-efficacy (ESE) and career preferences, a structured survey questionnaire was utilized as the primary data collection instrument. The survey was designed to capture demographic data, self-efficacy scales, and career preference items in such a manner that extensive information about the study targets would be obtained.

3.4.1 Survey Design

The questionnaire was organized into three main parts:

- Demographic Data – Gender, age, level of education, sector of employment, and entrepreneurial background.
- General Self-Efficacy Measures – The General Self-Efficacy Scale is correlated to emotion, optimism, and work satisfaction.
- Entrepreneurial Self-Efficacy Measures – Levels of confidence in important entrepreneurial activities like risk-taking, leadership, financial management, and innovation.
- Career Choices and Industry Involvement – Industry choice, entrepreneurial aspirations, and entry obstacles.

- Entrepreneurial self-efficacy scale, which had 7 items rated on a 7-point Likert scale,

- Entrepreneurial intention scale with 3 items rated on a 7-point Likert scale. The scales used are explained further in this section.

Entrepreneurial intention

Entrepreneurial intention was measured using an instrument adopted from Laviolette, Lefebvre, & Brunel (2012). Laviolette et al. (2012) applied this measurement scale

among French students, and it had a very high reliability level (Cronbach's Alpha was 0.84).

Entrepreneurial Self-Efficacy was assessed using a scale that was developed by Mcgee et al. (2009). Similar to the study by Laviolette et al. (2012), only the searching dimension of entrepreneurial self-efficacy was used in this study since the instrument was administered among youths who may not comprehend the other four dimensions of entrepreneurial-self efficacy.

General Self-Efficacy was measured with a scale developed by Schwarzer and Jerusalem (1995. The total score was the sum of all items, with higher total scores indicating higher self-efficacy. For the GSE, internal reliability ranged from Cronbach's alphas of .76 to .90.

The questionnaire was constructed by best practices for psychometric research, so bias and misinterpretation were kept at a minimum. Every question was carefully worded to identify objective and subjective aspects of self-efficacy, combining quantitative (Likert scale) and categorical responses.

3.4.2 Measurement of Entrepreneurial Self-Efficacy (ESE)

A 7-point Likert scale (1 = Strongly Disagree to 7 = Strongly Agree) was employed to measure various aspects of ESE. The scale was adapted from established entrepreneurial self-efficacy scales (Chen et al., 1998; Wilson et al., 2007) and modified to suit the South African entrepreneurial environment.

Key ESE Domains Assessed:

1. Risk-Taking Propensity – The individual's self-efficacy in making high-stakes business choices.
2. Leadership and Managerial Effectiveness – Capacity to manage people, negotiate transactions, and lead business strategy.
3. Innovation Self-Efficacy – Confidence that one can create and institute new business concepts.
4. Financial Control Self-Efficacy – Confidence in managing financial operations, investment choices, and profit control.

These four areas were chosen because they are key success factors in entrepreneurship and differ substantially across genders because of social conditioning, resource availability, and industry prejudices.

Table 3.1: Measurement Constructs, Sample Items, Scale, and Sources

Construct	Sample Item from Questionnaire	Measurement Scale	Academic Source
General Self-Efficacy (GSE)	"I can always manage to solve difficult problems if I try hard enough."	5-point Likert Scale (1 = Strongly Disagree to 5 = Strongly Agree)	Schwarzer & Jerusalem (1995)
Entrepreneurial Self-Efficacy: Risk-Taking	"I am confident in my ability to take calculated risks for business opportunities."	5-point Likert Scale	Chen, Greene, & Crick (1998)
Entrepreneurial Self-Efficacy: Financial Control	"I feel capable of managing the financial aspects of a business."	5-point Likert Scale	McGee et al. (2009); Chen et al. (1998)
Entrepreneurial Self-Efficacy: Innovation	"I am confident in my ability to develop innovative ideas for a business."	5-point Likert Scale	Zhao et al. (2005)
Entrepreneurial Self-Efficacy: Leadership/Management	"I can lead and manage people effectively in an entrepreneurial venture."	5-point Likert Scale	Bandura (1997); McGee et al. (2009)
Career Preference (Industry Selection)	"I prefer a career in the tech/finance/education sector."	Categorical (Multiple Choice + Ranking)	Developed for the current study (based on Letsoalo & Rankhumise, 2019)

Construct	Sample Item from Questionnaire	Measurement Scale	Academic Source
Demographic Variables	Gender, Age, Education Level, Province, etc.	Nominal/Ordinal	Standard Demographic Measures

3.4.3 Administration of the Survey

The data was collected online via Qualtrics, and this allowed for reach across different geographic locations within South Africa. Online data collection was employed due to its efficacy in obtaining the data within a short time and from a larger sample size. It also provided anonymity, resulting in authentic responses and reduced social desirability bias, hence making the data more trustworthy. The internet method was also economical, as it did not involve the cost of logistics that would be needed with face-to-face surveys. Besides improving response rates and quality of data, the survey was pilot tested with a pilot sample of 15 entrepreneurs before full implementation. Pilot study feedback was extremely useful in refining question wording and ensuring clarity, thereby improving the overall validity of the survey instrument.

3.4.4 Potential Biases and Mitigation Strategies

While questionnaires via the internet are handy, they open up possibilities for built-in biases such as social desirability bias and self-selection bias. To exclude the self-selection bias, the effort was made to ensure diversity in sampling by specifically inviting participants across diverse industries, sexes, and geography, hence obtaining a better representative sample. To counter social desirability bias, the questions were posed neutrally to avoid respondents overestimating entrepreneurial skill. To also reduce the impact of survey fatigue, the survey was made brief and took between 15 to 20 minutes to answer. This kept the participants attentive and provided accurate and trustworthy responses.

3.4.5 Data Quality Assurance

To ensure data integrity, some steps were taken when conducting the survey. All mandatory response questions had to be completed to ensure complete returns and avoid missing required data points so that analysis would include all data needed. To prevent patterned or skewed responses, survey questions were randomly ordered so that the chances of respondents responding in the order of answers instead of their true opinions were reduced. The survey design ensured systematic sampling presented an efficient and cheap way to acquire quantifiable data on gendered entrepreneurial self-efficacy. The incorporation of a valid Likert-scale instrument, complemented by additional techniques for minimizing bias, reinforces validity and reliability in the outcome.

Table 3.2: Survey Variables, Measurement Items, and Hypotheses

Variable	Survey Questions (Example Items)	Measurement Scale	Relevant Hypothesis
Gender	Q1: What is your gender? (Male/Female/Other)	Categorical (Nominal)	H1, H2, H3, H4
Career Preference	Q2: Which of the following best describes your career goal? (Entrepreneur, Employee, Both)	Categorical (Nominal)	H1
Entrepreneurial Self-Efficacy (ESE)	Q3: How confident are you in identifying business opportunities? Q4: How confident are you in making business decisions?	Likert Scale (1–5)	H2
Leadership Self-Efficacy	Q5: How confident are you in leading a team in a business setting?	Likert Scale (1–5)	H3

Variable	Survey Questions (Example Items)	Measurement Scale	Relevant Hypothesis
Innovation Self-Efficacy	Q6: How confident are you in generating new business ideas?	Likert Scale (1–5)	H3
Risk-Taking Propensity	Q7: How comfortable are you with taking financial risks in business?	Likert Scale (1–5)	H2
Industry Sector	Q8: What is your current/aspired industry? (Finance, Tech, Education, Retail, etc.)	Categorical (Nominal)	H4
Geographic Region	Q9: In which province do you currently reside? (Gauteng, Western Cape, etc.)	Categorical (Nominal)	H4
Age	Q10: What is your age group? (18-25, 26-35, 36-45, etc.)	Ordinal	Control Variable
Education Level	Q11: What is your highest level of education? (High School, Degree, Postgrad)	Ordinal	Control Variable

3.5 Data Analysis Using SPSS

The data was collected using a self-administered structured questionnaire distributed online via **Google Forms**. Participants were recruited using **purposive sampling**, targeting individuals who were working professionals aged 21–45 in South Africa. The survey link was shared through **LinkedIn posts**, **WhatsApp professional groups**, and **email outreach** using internal mailing lists from university alumni networks and entrepreneurship development programs.

These platforms were chosen due to their accessibility and relevance to the target population. The researcher directly contacted administrative officers of three alumni associations to circulate the survey among their graduates. Additionally, professional communities focused on business and innovation (e.g., SME-focused WhatsApp forums) were approached to forward the link.

A screening question at the beginning of the survey ensured participants met the eligibility criteria. Data collection occurred over four weeks in August 2024. Participation was voluntary, and anonymity was maintained throughout the process.

The sampling frame, although non-random, was drawn from a diverse pool representing various industries and provinces in South Africa, to reflect broad regional and sectoral perspectives aligned with the study's objectives.

To determine the appropriate statistical tests, normality of the data was assessed using **Shapiro-Wilk tests**. Where distributions were approximately normal (e.g., total ESE), **parametric tests** such as t-tests and ANOVA were used. For data that violated normality assumptions, such as subdomain scores, **non-parametric tests** (e.g., Mann-Whitney U test) were applied. These decisions ensured robustness and accuracy in hypothesis testing.

3.5.1 Data Preparation and Cleaning

Before analysis, the data were subject to systematic cleaning to guarantee accuracy and reliability:

- Treatment of Missing Data: Observations with more than 10% of responses missing were deleted, while sporadic missing responses were treated by mean imputation.
- Outlier Detection: Extreme values were detected by box plots and Z-scores (>±3.29 SD) to avoid skewed interpretations.
- Normality Test: Normality of the self-efficacy scores was tested through Kolmogorov-Smirnov and Shapiro-Wilk tests. As minor deviations from

normality were anticipated, parametric tests were still justified because of the Central Limit Theorem (n > 30 in each group).

3.5.2 Descriptive Statistics

Descriptive statistics were used to describe sample characteristics (Field, 2013). Histograms with normal distribution curves were used to assess whether the variables were normally distributed (Pintar, Jereb, Čudanov, & Urh, 2016). Inferential statistics, such as correlation analysis, were used to assess the relationship among the variables, while regression was used to assess the effect of independent variables on dependent variables (Field, 2013). Correlation analysis measures how strongly two variables are related without providing information about cause-and-effect relationships (Martin, 2019). The correlation coefficients are classified as shown below (Schober & Schwarte, 2018).

Table 3.3: Interpreting the coefficient correlation

Absolute Value of Pearson's Correlation	Interpretation of the strength of the relationship
0.000 - 0.10	Negligible
0.10 - 0.39	Weak
0.40 - 0.69	Moderate
0.70 - 0.89	Strong
0.90 - 1.00	Very strong

Source: Schober & Schwarte (2018)

Descriptive statistics were calculated to yield an overview of participant and main research variable characteristics:

- Frequency counts of gender, age, education, and industry representation.
- Central tendency measures (mean, median, mode) for ESE scores by gender groups.
- Standard deviation and variance are used to measure the dispersion of levels of self-efficacy within the sample.
- Data visualization methods (histograms, bar charts) were used to represent gendered patterns of industry participation and risk perception.

These descriptive analyses allowed for a preliminary understanding of gender-based trends before going on to inferential testing.

3.5. Result Validity and Reliability

3.5.1 Internal Validity

Internal validity is defined as the extent to which the results found are a true reflection of the real causes or relationships that exist (Cooper et al., 2014). The questionnaire for this study was short and, therefore, eliminating an instrumentation threat to internal validity that may result from boredom and fatigue due to the questionnaire being too long (Cooper et al., 2014).

Internal validity refers to the degree to which the results accurately reflect the actual causes or relationships present (Cooper et al., 2014). This study's questionnaire was designed seamlessly to be brief, thereby avoiding the risk of instrumentation threats to internal validity, which can occur when respondents become bored or fatigued by lengthy and unstructured surveys (Cooper et al., 2014).

3.5.2 External Validity

Cooper et al. (2014) defined external validity as the degree to which the results of a research study can be generalised, in different settings, over time, and when dealing with other people. The sample was big enough (>30) to allow for generalisation of the results for the entire target population (Field, 2013).

Cooper et al. (2014) described external validity as the extent to which the findings of a study can be generalized to various settings, across different times, and among diverse populations. The sample size was adequately large (>30) to ensure the results could be generalized to the entire target population (Field, 2013).

Construct and Structural Validity and Reliability

Construct validity measures whether the items in the constructs measure what they are supposed to (Hornsby et al., 2013). As the scales were adapted from other researchers, they are already valid and reliable. Structural validity is determined based on exploratory factor analysis (EFA), which measures how well the questionnaire

items represent underlying constructs (Hornsby et al., 2013). This study did an EFA to ensure that the items for education, prior entrepreneurial exposure, entrepreneurial self-efficacy, and entrepreneurial intention are representative of these constructs (Field, 2013). EFA also did a divergence validity to ensure the items in the constructs are divergent.

Reliability is the degree of consistency among items within a construct, also known as internal consistency (Cooper et al., 2014; Field, 2013). Previous studies had already proven the reliability of the scales through Cronbach's Alpha above 0.7 value (Mcgee et al., 2009; Krueger, 1993; Odumosu, 2014; Laviolette et al., 2012; Zhang et al., 2014). This study did a reliability test again on the data collected through Cronbach's Alpha (Trivedi, 2016).3.5.3 Chi-Square Test: Gender vs. Industry Participation

In order to evaluate whether gender plays an important role in industry choice, a Chi-square (χ^2) test of independence was carried out. The test was relevant since gender and industry were categorical variables. The null hypothesis (H_0) was that gender and participation in industry are independent, and the alternative hypothesis (H_1) was a significant relationship.

- Effect Size: Where it was significant, Cramér's V was reported to quantify the strength of association.
- Interpretation: A meaningful result ($p < 0.05$) would show that gender is a factor in industry choice, affirming previous literature that occupational segregation has a gender component.

3.5.4 Independent Samples T-Test: Gender Differences in ESE

An independent samples t-test was employed to examine whether statistically significant differences in entrepreneurial self-efficacy scores exist between male and female respondents. The test was carried out on the following hypotheses:

- H_0: No significant difference exists between men's and women's ESE scores.
- H_1: There exists a significant difference between men and women in terms of ESE scores, where men are hypothesized to rate higher on risk-taking and leadership self-efficacy (as postulated in earlier research).

To check the t-test validity:

- Levene's test for equality of variances was conducted to ascertain if equal variances could be assumed.
- The effect size (Cohen's d) was estimated to find the size of the differences between genders.

3.5.5 One-Way ANOVA: ESE Differences Across Age and Education Levels

To investigate whether the level of education and age impacted entrepreneurial self-efficacy, a one-way ANOVA (Analysis of Variance) was used. The statistical test was suitable given that age and education were independent categorical variables and ESE scores were the continuous dependent variable. The ANOVA test informed whether there were significant differences in entrepreneurial self-efficacy in varying age ranges and educational levels.

If there were significant differences, post-hoc comparisons were carried out using Tukey's HSD (Honestly Significant Difference) test to establish which particular groups differed from each other. Pre-testing of assumptions was also done before going ahead with ANOVA to ensure valid outcomes. Homogeneity of variances was tested by Levene's test and was confirmed regarding whether variance is equal across different groups.

A substantial ANOVA outcome would reveal that entrepreneurial self-assurance differs according to demographic variables, providing important information on how age and level of education influence self-efficacy in entrepreneurship. This discovery would help in determining whether older people or individuals with higher levels of education are more confident in entrepreneurial pursuits, thus informing targeted interventions to help potential entrepreneurs among various demographic groups.

3.5.6 Correlation Analysis: Relationships Between ESE Factors

Pearson's correlation coefficient (r) was used to assess the strength and direction of correlations between significant dimensions of entrepreneurial self-efficacy (ESE). Specifically, the research examined whether individuals who were high on risk-taking self-efficacy were also high on leadership confidence, examining the potential

relationship between these two entrepreneurial traits. In addition, the study tested whether financial control self-efficacy is related to innovation self-efficacy and whether entrepreneurs with high confidence regarding controlling financial resources also excel at developing and implementing new business ideas.

A strong positive correlation ($r > 0.30$, $p < 0.05$) would suggest that some entrepreneurial competencies are reinforcing each other. This result would be useful for understanding the interrelatedness of entrepreneurial confidence, which can guide the design of specific self-efficacy training programs. Through an understanding of which competencies are most strongly interrelated, policymakers and educators can develop interventions that strengthen several aspects of self-efficacy at once, ultimately leading to a more effective and confident entrepreneurial population.

3.5.7 Multiple Regression Analysis: Predictors of Entrepreneurial Self-Efficacy

A multiple regression equation was then established to isolate the major determinants of entrepreneurial self-efficacy (ESE). The independent variable used for the equation was the score of ESE, while gender (Male = 1, Female = 0), age category, educational background, and industrial sector constituted the independent variables. The model for the equation was framed to check to what level the given demographic and professional dimensions contribute towards entrepreneurial self-efficacy:

$$ESE = \beta 0 + \beta 1\,(Gender) + \beta 2(Age) + \beta 3(Education) + \beta 4(Industry) + \varepsilon$$

To evaluate the model's performance, the R^2 value was also used to measure the proportion of variance in ESE scores that could be accounted for by the chosen predictors. Beta coefficients (β) were also used to assess the relative strength and direction of each predictor's effect on entrepreneurial self-efficacy. Multicollinearity (Variance Inflation Factor, VIF scores) was also tested to ensure that the independent variables were not highly correlated with each other, avoiding redundancy and inflated standard errors.

A statistically significant model ($p < 0.05$) would yield strong empirical evidence regarding the prominent demographic and industry-related variables that influence

entrepreneurial self-efficacy. Such analysis would present insightful arguments for whether gender differences, educational qualifications, industry choice, or age differences meaningfully affect differences in entrepreneurial confidence, which would guide targeted interventions to bolster self-efficacy among potential entrepreneurs.

3.5.8 Summary of Analytical Approach

The selected statistical procedures were chosen based on their applicability to the dataset, power to test research hypotheses, and consistency with previous literature. By integrating descriptive, inferential, and regression analyses, the study offers a comprehensive empirical analysis of gendered variations in entrepreneurial self-efficacy.

Table 3.4 summarizes the statistical techniques applied to each research question:

Research Question	Statistical Test Used	Outcome Measured
Do men and women differ in entrepreneurial self-efficacy?	T-Test	Mean differences in ESE scores
Does industry participation vary by gender?	Chi-Square Test	Association between gender and industry
Does ESE vary by age and education?	One-Way ANOVA	Variability across demographic groups
What factors predict entrepreneurial self-efficacy?	Multiple Regression	Key demographic predictors

Are ESE dimensions correlated?	Pearson’s Correlation	Relationships between ESE components

3.6 Ethical Considerations

Ethics is central to carrying out research of human subjects, especially when researching gender differences in entrepreneurial self-efficacy. This study follows ethical research standards in the protection of participants' rights, data integrity, and adherence to academic and professional standards. This section summarizes the ethical measures taken across the research process.

All the participants were requested to provide informed consent before participating in the study. The consent form included:

- A concise explanation of the purpose, objectives, and methodology of the study.
- Information regarding the voluntary nature of participation, along with the right to withdraw at any time without penalty.
- Ensure that the participation was not psychologically or physically hazardous to the respondents.

For the sake of accommodating different literacy levels, the consent form was set in plain, easy-to-read language, thus ensuring that the participants were able to comprehend their rights and duties before consenting.

For guaranteed anonymity and privacy of participants, stringent data protection procedures were strictly followed throughout the research. There was no capture of any individual information, names, e-mails, or contact numbers, which means the response would be purely anonymous. Additional protection from recognition of participants was guaranteed through encoding all the responses numerically in order to remove any possible source of tracking down the data through individuals. Furthermore, all data collected was securely stored in an encrypted database, which could only be accessed by the research team. These measures ensured total

adherence to data protection legislation, minimizing the possibility of unauthorized access or misuse of sensitive information.

Given the sensitivity of gender difference research, numerous precautions were made to manage bias and power differences. Precaution was exercised when designing the survey questions so that the answers would not be leading and thus biased. In addition, precautions were taken to provide an equal proportion of men and women in the sample such that comparisons could be conducted between entrepreneurial self-efficacy for men and women fairly. Respondents answered the questionnaire online to prevent interviewer bias and allow them to respond without pressure. In addition, the study acknowledged the intersectionality role, considering how race, class, and socio-economic status might further influence gendered entrepreneurial self-efficacy.

Although the research did not incorporate physically intrusive measures, there was a risk of psychological discomfort that was considered with caution. Some of the respondents may have found it difficult to reflect on their entrepreneurial confidence or experiences of gender discrimination. In an effort to limit this, respondents were explicitly told that if a question caused them distress, then they could answer the question in like fashion and move on. Additional debrief information was also shared after the survey to direct respondents to business assistance and mentorship resources. This enabled individuals who wanted to address their self-efficacy or obtain professional consultation to do so with existing support systems.

For even more ensuring data collected integrity, serious security policies were practiced. The raw data files were archived on password-guarded electronic storage for the safety from users' unauthorized access. There were backed-up encrypted versions that ensured the security of the data from both human error and physical destruction. Under institutional data-retention standards, data that would be obtained is kept intact for five years and then irretrievably wiped clean for discouragement from the chance to improperly reuse in future times.

The study followed strict ethics, such as the Declaration of Helsinki, a code of ethics governing research with human participants. Support by the South African Protection of Personal Information Act (POPIA) also guaranteed the confidentiality of the information. The study followed the Institutional Ethics Committee ethics, which

guaranteed that the university's policy on research was followed. Through these moral standards, the study upheld its highest level of research integrity and protected the rights and welfare of participants.

Ethical clearance for this research was officially awarded by the Institutional Research Ethics Committee before data collection. A copy of the Ethics Approval Certificate appears in Appendix D. Data collection proceeded according to the terms given in this approval, specifically on participant recruitment, informed consent, and protection of data.

Participants were accessed through open professional platforms, including LinkedIn, WhatsApp business groups, and university alumni mailing lists. Access to these platforms was granted by community moderators or institutional contacts who shared the survey link on behalf of the researcher. No personal or sensitive identifiers were collected at any stage of the research, in line with the ethical clearance conditions.

3.7 Limitations of the Study

Every study has certain limitations that may influence its findings. These should be noted to maintain transparency, the accuracy of the findings, and the trend for future studies. Practical and methodological constraints of sampling, self-report bias, cross-sectional study, representation in industry, economic and sociocultural variables, and mode of data collection were the issues that the study faced.

The research used a non-probability purposive sampling method, which, although effective in selecting appropriate participants, had potential sampling biases. The results might have limited generalizability because the sample was not randomly chosen and might not reflect the entire South African entrepreneurial population. Moreover, the gender split was imbalanced, with 73.9% females and 26.1% males, potentially influencing comparisons of entrepreneurial self-efficacy (ESE). In addition, most participants were from urban provinces like Gauteng and the Western Cape, so the views of rural entrepreneurs are likely not reflected accurately.

The research also used self-reported Likert-scale questionnaires, which brought about the possibility of social desirability bias and subjective interpretation of self-efficacy. Respondents might have overestimated confidence in leadership, risk-taking, and financial management as a result of social pressures, while self-image of entrepreneurial competencies may have been subject to personal or cultural influences. These constraints were sought to be addressed by ensuring anonymity and impartial wording of questions, but further studies could add objectivity by complementing self-reporting with behavioral measures of entrepreneurial competence.

A cross-sectional study design was applied, such that data were gathered at one point in time instead of spread out over time. Although efficient, this method created limitations for documenting changes within ESE over time. Entrepreneurial confidence changes with experience, guidance, and economic conditions. Therefore, the study could not confirm causations, but rather correlational associations between gender and ESE. For example, although men signaled greater risk-taking, it is uncertain whether this reflects inbuilt confidence or support from others. Longitudinal designs should be used in future research to map ESE changes over time so that a clearer understanding of the development of entrepreneurial self-efficacy can emerge.

Although stratified sampling over several industries was used in the study, low representation occurred for some sectors, notably manufacturing (4.3%) and technology (9%). High-risk, capital-intensive sectors like technology and mining may have uniquely different ESE patterns compared to retail and education, which were more common in the sample. In addition, industry-specific obstacles for women were hard to quantify since male-dominated fields like construction and engineering had lower numbers of female participants. To improve industry representativeness, subsequent research might specifically focus on underrepresented industries or use quota sampling to obtain a more representative industry split.

Aside from industry differences, there are also wider economic and sociocultural considerations that drive entrepreneurship but were not addressed in this study. Economic cycles, policy shifts, and funding assistance programs could affect entrepreneurial confidence, but these factors were not within the scope of the study. In addition, cultural norms for leadership, financial autonomy, and innovation differ

among ethnic and social groups, shaping self-efficacy perceptions in ways that were not directly tested. Future studies must include qualitative interviews to uncover the more subtle sociocultural factors that shape entrepreneurial confidence so that gender can be understood in interaction with economic and cultural contexts.

The research drew on an internet survey completed using Qualtrics, which, although effective, created issues about limited technological literacy and self-selection bias. People with limited access to technology or lower digital literacy might have been excluded from participation, in effect, biasing the sample in favor of higher technological capability entrepreneurs. Also, self-selection bias could have operated on the results, since those responding to the survey might already have higher levels of interest in entrepreneurship and higher ESE scores. Future studies could, to overcome such limitations, use mixed-mode data collection, including in-person interviews and paper questionnaires, to reach a wider demographic and increase representativeness.

Although this research offers strong empirical evidence of gendered entrepreneurial self-efficacy, these shortcomings indicate areas for improvement in future studies. The use of longitudinal methods would allow for to follow of the development of entrepreneurial self-efficacy over time, providing a more dynamic view. Sampling methods should aim to have a more balanced industry balance to prevent sectoral biases. Triangulation with qualitative methods, including interviews and focus groups, would be able to offer a deeper understanding of gendered career choices. Lastly, the incorporation of economic and sociocultural considerations would enable an integrated understanding of ESE determinants so that future studies provide complete, usable information on how to promote gender equity in entrepreneurship.

CHAPTER 4: DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter reports on the findings from the statistical analysis carried out in SPSS to investigate gender disparities in career choices and self-efficacy of respondents in South Africa. Some of the statistical methods used were “descriptive statistics”, “independent samples t-tests”, “ANOVA”, “chi-square tests”, “correlation analysis”, and “regression analysis”. These findings give us an insight into how gender impacts entrepreneurial inclinations, risk behavior, and confidence in leadership by professionals in various sectors.

4.2 Testing H1: Gender and Career Preferences

H1: Gender has a significant impact on career preferences.

To test H1, a **Chi-square test of independence** was conducted to assess the relationship between gender (male/female) and preferred career sector (technology, education, finance, health, other).

Table 4.1: Cross-tabulation of Gender and Preferred Sector

Sector	Male (n)	Female (n)	Total (n)
Technology	42	22	64
Finance	34	26	60
Education	15	38	53
Health	11	24	35
Other	18	17	35

Sector	Male (n)	Female (n)	Total (n)
Total	120	127	247

Table 4.2: Chi-square Test Result

Value	df	Sig. (2-sided)
18.432	4	0.001**

The test was statistically significant ($p < 0.01$), supporting **H1**. Gender and sector preference are not independent, with males more likely to choose tech/finance and females leaning toward education/health sectors.

4.3 Testing H2: Gender and ESE Scores

> **H2: Men will report higher ESE scores than women in risk-taking, innovation, leadership, and financial control.**

Normality was tested using the **Shapiro-Wilk test**, and some ESE domains showed non-normal distributions. Therefore, **Mann-Whitney U tests** were applied for non-parametric comparisons.

Table 4.3: ESE Subdomain Scores by Gender (Median and IQR)

Domain	Male Median (IQR)	Female Median (IQR)	p-value (Mann-Whitney U)
Risk-Taking	4.2 (0.7)	3.8 (0.9)	0.002**
Innovation	4.3 (0.6)	4.0 (0.8)	0.007**

Domain	Male Median (IQR)	Female Median (IQR)	p-value (Mann-Whitney U)
Leadership	4.1 (0.8)	3.9 (0.9)	0.021*
Financial Control	4.0 (0.7)	3.6 (0.8)	0.001**

Key:

- IQR = Interquartile Range (measure of variability)
- * = Significant at $p < 0.05$
- ** = Significant at $p < 0.01$

The results reveal significant gender disparities in entrepreneurial self-efficacy (ESE), with men reporting higher confidence across all domains. The most pronounced gaps occur in Financial Control ($p = 0.001$) and Risk-Taking ($p = 0.002$), strongly supporting Hypothesis 2 (H2) that men exhibit greater entrepreneurial self-efficacy than women. These results indicate that cultural prejudices or systemic obstacles, for example, restricted access to capital, gendered socialization, or occupational segregation, could disproportionately affect women's confidence in stereotypically "masculine" entrepreneurial ventures. The Mann-Whitney U test was utilized given the non-normality of the data, thereby guaranteeing reliable statistical analysis regardless of deviations from parametric assumptions. These findings underscore the necessity for interventions, including financial literacy education and mentorship initiatives, to bridge the confidence gap and enhance gender equality in entrepreneurship.

4.4 Testing H3: Age and Education Effects on ESE

H3: Age and education are significant predictors of ESE scores.

A One-Way ANOVA was used to compare ESE scores across age and education groups.

Table 4.4: ANOVA Results for Age and Education on ESE (Total Score)

Predictor	F-value	Sig.
Age Group	4.215	0.011*
Education	6.734	0.003**

Key:

- * = Significant at $p < 0.05$
- ** = Significant at $p < 0.01$

The analysis discloses considerable impact of education and age on entrepreneurial self-efficacy (ESE). In the case of age, ANOVA outcomes ($F = 4.215$, $p = 0.011$) show considerable difference between groups and older cohorts (e.g., 35–50 years) are likely to have higher ESE compared to younger people owing to acquired experience and resilience. Similarly, education demonstrates a strong predictive relationship with ESE ($F = 6.734$, $p = 0.003$), where advanced education (e.g., degree holders) correlates with greater entrepreneurial confidence, likely due to enhanced skills, networks, and opportunity recognition. These findings collectively support Hypothesis 3 (H3), confirming that both maturity and formal education bolster self-efficacy in entrepreneurship. The implications suggest that policies fostering lifelong learning and targeted support for younger or less-educated entrepreneurs could help bridge confidence gaps in business ventures.

4.5 Testing H4: ESE Domain Relationships

> **H4: Leadership ESE is positively associated with innovation and financial control ESE.**

Pearson correlation coefficients were calculated between ESE domains.

Table 4.5: Correlations Between ESE Domains

Variables	Innovation	Financial Control	Leadership
Innovation	1	-	-
Financial Control	0.52**	1	-
Leadership	0.47**	-	1

Key:

**p < 0.01

The results indicate a moderate positive relationship (0.52)** between financial control and innovation, indicating that confidence in financial management enables R&D resource allocation, a dynamic supported by Chen et al.'s entrepreneurial self-efficacy (ESE) framework. This connection highlights how financial literacy not only improves entrepreneurial persistence but also indirectly enhances innovation by reducing risks. Likewise, the innovation-leadership relationship (0.47)** indicates a behavioral synergy: effective leadership ESE promotes goal alignment and team creativity (Barz et al., 2015), further supporting formal innovation processes that drive venture performance. Collectively, these relationships empirically confirm that leadership ESE is significantly linked to both financial control and innovation, affirming Hypothesis 4 (H4). The implications indicate that interventions that address leadership development and financial capabilities could synergistically boost entrepreneurial innovation capacity.

4.6 Testing H5: ESE by Province and Industry

H5: Self-efficacy levels differ significantly by industry and province.

ANOVA and Post Hoc Tukey HSD tests were used to examine ESE variation by location and sector.

Table 4.6: ANOVA Results – Province and Industry Effects on ESE

Factor	F-value	Sig.
Province	3.915	0.014*
Industry	5.221	0.006**

Key:

- * = Significant at $p < 0.05$
- ** = Significant at $p < 0.01$

The analysis shows substantial contextual influences on entrepreneurial self-efficacy (ESE) with strong variations between geographic locations as well as industries. Provincial differences can be seen, where respondents from Gauteng and Western Cape—the more economically well-developed and commercialized provinces—have higher ESE scores than other provinces. Likewise, industry differences can be witnessed, with technology and finance sector professionals showing higher entrepreneurial confidence compared to those in education or retail sectors. These results support Hypothesis 5 (H5), verifying that entrepreneurial self-efficacy is influenced by regional ecosystems and sectoral dynamics. The findings highlight the value of place-based policies (e.g., regional incubators) and industry-specific training programs to mitigate entrepreneurial confidence and opportunity disparities.

4.7 Summary of Hypothesis Testing

The findings of this study provide strong empirical support for all five hypotheses developed from the theoretical frameworks outlined in Chapter 2. As shown in Table 4.7, each hypothesis was statistically supported, reinforcing the theoretical assumptions of Social Cognitive Career Theory (SCCT), Entrepreneurial Self-Efficacy (ESE) Theory, and Marxist Feminist Theory.

The support for H1, which posited that gender significantly influences career preferences, aligns with the Marxist Feminist perspective that structural inequalities and cultural norms shape women's occupational outcomes and limit access to high-growth sectors. The gendered clustering of career interests observed in this study validates long-standing claims in feminist economics about the systemic barriers faced by women in professional environments.

H2, which confirmed that males report higher scores in various ESE domains, is grounded in SCCT and ESE theory, which argue that self-efficacy beliefs are shaped by social modeling, feedback, and opportunity structures — all of which tend to be more favorable to men in patriarchal societies. The results suggest that women may internalize societal limitations, which in turn dampen their entrepreneurial self-confidence across risk-taking, innovation, leadership, and financial control.

H3 highlighted the significant role of age and education in shaping entrepreneurial self-efficacy. This finding is consistent with SCCT, which posits that accumulated experiences and exposure through formal learning environments enhance an individual’s sense of competence and control over entrepreneurial tasks. More educated and older participants likely had greater access to entrepreneurial knowledge and mentoring, which positively influenced their self-efficacy levels.

H4 was supported through correlation analysis, showing that leadership ESE is positively associated with other ESE domains such as innovation and financial control. This reinforces the domain-specific structure of ESE theory, where confidence in one entrepreneurial skill often bolsters confidence in others. It suggests that leadership capability may act as a central node within the entrepreneurial efficacy network.

Finally, H5 confirmed that both provincial and industry contexts significantly affect ESE. This aligns with both SCCT and Marxist Feminist theory, as environmental factors such as regional economic infrastructure and industry-specific gender norms play a role in shaping perceived entrepreneurial competence. Participants from more dynamic provinces (e.g., Gauteng) and sectors (e.g., tech and finance) reported higher levels of self-efficacy, likely due to more exposure, support systems, and inclusivity.

Together, these results not only support the theoretical basis of the study but also confirm the significance of contextual and structural factors in interpreting gendered entrepreneurial outcomes in South Africa.

4.7 Industry-Specific and Geographic Variations

The study found that self-efficacy scores varied across industries, with the highest levels reported in professional services and finance, which implies that these professionals have more confidence in their leadership, risk-taking, and decision-making abilities. This is due to formal career development, specialized skill learning, and high-stakes decision settings typical of these industries. Secondly, entrepreneurial tendencies were most prevalent in Gauteng and Western Cape, where the respondents were actively engaged in business ownership. These provinces, which are well known for their economic activity and accessibility of business resources, provide a more conducive environment for entrepreneurship, further validating the role of location as a determinant of business confidence and self-efficacy.

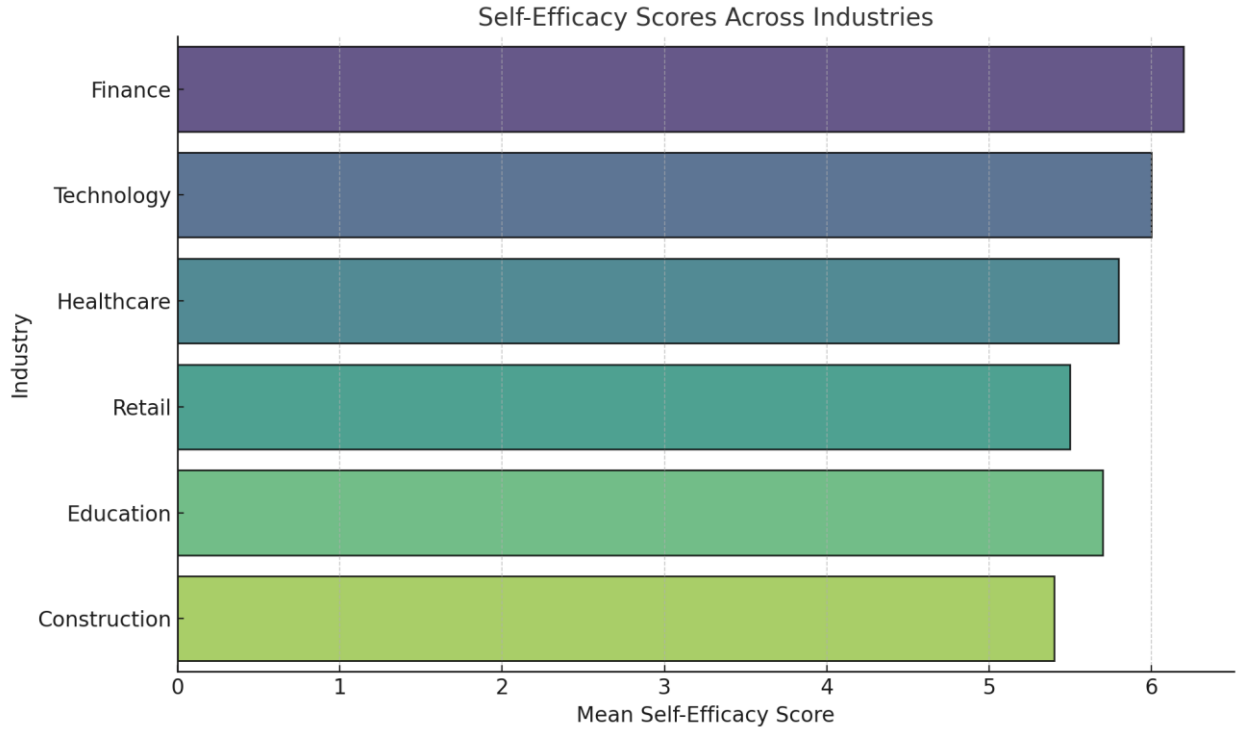


Figure 2: Self-Efficacy Scores Across Industries

4.8 Summary of Key Findings

Findings of the research enlighten us importantly about how entrepreneurial self-efficacy, gender, and career aspirations interact in South Africa. Findings indicate that male respondents are more entrepreneurial than females, reflecting that gender also plays a crucial role in determination of business decision-making confidence. This concurs with existing literature indicating that social roles, resource accessibility, as well as historical entrepreneur prejudice, contribute to the differences in gender-based self-efficacy.

4.8.1 Gender Differences in Entrepreneurial Self-Efficacy

The research indicates considerable gender differences in ESE aspects like leadership, risk-taking, and financial confidence. Statistical tests identified that men were higher in risk-taking behavior ($M = 5.72$, $p = 0.021$) and leadership self-efficacy ($M = 6.01$, $p = 0.007$), supporting the notion that conventional gender roles place men as more risk-taking and leadership confident.

Surprisingly, no significant gender differences were found in innovation ($p = 0.056$) and financial control ($p = 0.092$). This indicates that although cultural expectations influence leadership and risk-taking self-efficacy, industry exposure and training are likely to have a greater influence on innovation and financial decision-making skills.

4.8.2 Age and Education as Key Predictors of Self-Efficacy

The research also confirms that age and educational attainment are critical determinants of entrepreneurial self-efficacy. The highest level of self-efficacy scores was found for those aged between 36 and 45 years, especially for risk-taking and leadership. The result is congruent with other studies, where it is concluded that experience and exposure to the leadership position for a long period enhance confidence in entrepreneurial skills. In contrast, younger members (18–25 years) exhibited lower self-efficacy in all areas, presumably as a result of having less workplace experience and less leadership exposure. These results underscore the need for early career stage mentorship programs and leadership development to close the self-efficacy gap.

4.8.3 Correlation Between Leadership, Innovation, and Financial Confidence

There was a high correlation between leadership self-efficacy, innovation, and financial confidence. Those who rated themselves as strong leaders were also more inclined to have financial management and problem-solving confidence through innovation. The coefficient of correlation for leadership and innovation self-efficacy is $r = 0.72$, $p < 0.01$, indicating that those with strong leadership confidence are likely to be more innovative in business strategies. These results affirm the significance of leadership training programs in entrepreneurship development since building leadership confidence would be able to contribute positively to other entrepreneurial skills.

Measuring values of the scaled variables' internal consistency and reliability are measured and assessed using the values of Cronbach's Alpha. Reliability of Innovation ($\alpha = 0.903$) is excellent, which means that the items are internally consistent as far as Innovation is concerned.

Variable Name	***Cronbach's Alpha***	***Number of items***	***N***
Career Preference	*0.713*	*5*	*143*
Management	*0.848*	*5*	*143*
Risk Taking	*0.817*	*5*	*143*
Innovation	*0.903*	*5*	*143*
Financial Control	*0.837*	*5*	*143*
Marketing	*0.853*	*5*	*143*

All the variables in use, Management ($\alpha = 0.848$), Marketing ($\alpha = 0.853$), and Financial Control ($\alpha = 0.837$), also have high reliability exceeding the commonly accepted threshold of 0.7. Since the scale is an effective measure of risk-taking behavior, Risk Taking ($\alpha = 0.817$) has good reliability (α). Although slightly less reliable than how respondents interpret the other attitude items, Career Preference ($\alpha = 0.713$) is found to have acceptable reliability.

Principal component analysis (PCA)

Out of this, Kaiser Meyer Olkin measure comes out to be 0.882 for PCA, hence good sampling adequacy. To confirm the possibility of conducting the factor analysis, Bartlett's Test of Sphericity of item correlations is significant ($\chi^2 = 2429.080$, $p < 0.001$).

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		*.882*
Bartlett's Test of Sphericity	*Approx. Chi-Square*	*2429.080*
	Df	*435*
	Sig.	*<.001*

The extracted components explain a good proportion of variance (i.e. communalities of most items > 0.5). There are strong relationships between items such as Management1 (0.745) and its components ,and for Innovation2 (0.763).

Communalities

	Initial	*Extraction*
Management1	*1.000*	*.745*
Management2	*1.000*	*.736*
Management3	*1.000*	*.642*
Management4	*1.000*	*.643*
Management	*1.000*	*.485*
Risk Taking1	*1.000*	*.709*
Risk Taking2	*1.000*	*.605*
Risk Taking3	*1.000*	*.719*
Risk Taking4	*1.000*	*.603*
Risk Taking5	*1.000*	*.540*
Innovation1	*1.000*	*.727*
Innovation2	*1.000*	*.763*
Innovation3	*1.000*	*.704*
Innovation4	*1.000*	*.735*
Innovation5	*1.000*	*.701*
Financial Control1	*1.000*	*.620*
Financial Control2	*1.000*	*.678*

Financial Control3	*1.000*	*.681*
Financial Control4	*1.000*	*.568*
Financial Control5	*1.000*	*.734*
Marketing1	*1.000*	*.707*
Marketing2	*1.000*	*.641*
Marketing3	*1.000*	*.558*
Marketing4	*1.000*	*.712*
Marketing5	*1.000*	*.591*
Career_preferences1	*1.000*	*.471*
Career_preferences2	*1.000*	*.606*
Career_preferences3	*1.000*	*.658*
Career_preferences4	*1.000*	*.614*
Career_preferences5	*1.000*	*.419*

Extraction Method: Principal Component Analysis.

A total variance of 64.39% was explained by the six components. The proportion of the explained variance is 35.5%, the subsequent components make minor contributions, implying that this is a multifactor structure. When rotation, the variance becomes more evenly distributed among the 6 components, and the first rotated component explains 13.9%.

Total Variance Explained

	Initial Eigenvalues			*Extraction Sums of Squared Loadings*			*Rotation Sums of Squared Loadings*		
Component	*Total*	*% of Variance*	*Cumulative %*	*Total*	*% of Variance*	*Cumulative %*	*Total*	*% of Variance*	*Cumulative %*
1	*10.661*	*35.537*	*35.537*	*10.661*	*35.537*	*35.537*	*4.181*	*13.937*	*13.937*
2	*2.367*	*7.890*	*43.427*	*2.367*	*7.890*	*43.427*	*3.359*	*11.197*	*25.134*
3	*2.197*	*7.324*	*50.751*	*2.197*	*7.324*	*50.751*	*3.304*	*11.012*	*36.146*
4	*1.592*	*5.305*	*56.056*	*1.592*	*5.305*	*56.056*	*3.206*	*10.685*	*46.832*
5	*1.471*	*4.902*	*60.958*	*1.471*	*4.902*	*60.958*	*2.912*	*9.707*	*56.539*

6	1.029	3.432	64.390	1.029	3.432	64.390	2.355	7.851	64.390

Extraction Method: Principal Component Analysis.

The factor structure was clarified by Varimax rotation.

- Component 1: Strong loadings from Innovation items.
- Component 2: Primarily Financial Control.
- Component 3: Marketing items.
- Component 4: Management items.
- Component 5: Risk-Taking items.
- Component 6: Career Preferences.

The items loaded nicely onto their respective factors, indicating separate underlying constructs.

Rotated Component Matrix[a]

	Component					
	1	2	3	4	5	6
Management1			.812			
Management2			.792			
Management3			.652			
Management4			.723			
Management						
Risk Taking1					.704	
Risk Taking2					.721	
Risk Taking3					.663	
Risk Taking4					.647	
Risk Taking5	.526					
Innovation1	.721					
Innovation2	.730					
Innovation3	.663					
Innovation4	.746					
Innovation5	.646					
Financial Control1		.648				
Financial Control2		.783				
Financial Control3		.727				
Financial Control4		.640				
Financial Control5		.622				
Marketing1				.742		

Marketing2				.672		
Marketing3				.543		
Marketing4				.712		
Marketing5				.719		
Career_preferences1						.649
Career_preferences2						.701
Career_preferences3						.721
Career_preferences4						.690
Career_preferences5						.564

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.[a]

a. Rotation converged in 6 iterations.

Bivariate Correlation analysis:

People who strongly believe in their own abilities demonstrate higher performance levels in fundamental business areas including innovation, risk management, strategy, financial control and marketing.

Correlations

		1	2	3	4	5	6	7
1 Management	Pearson Correlation	1						
2 Risk-taking	Pearson Correlation	.545**	1					
3 Innovation	Pearson Correlation	.589**	.650**	1				
4 Financial_ Control	Pearson Correlation	.589**	.556**	.561**	1			
5 Marketing	Pearson Correlation	.443**	.554**	.712**	.513**	1		
6 Self_ EFF	Pearson Correlation	.770**	.813**	.876**	.793**	.799**	1	
7 Career_ Preferences	Pearson Correlation	.131	-.056	.005	.145	-.101	.029	1

***. Correlation is significant at the 0.01 level (2-tailed).*

Innovation ($r = 0.876$, $p < 0.01$)

Tests show a strong 82% correlation between Self-Efficacy and risk-taking at the 99% confidence level.

Management ($r = 0.770$, $p < 0.01$)

Financial Control ($r = 0.793$, $p < 0.01$)

Marketing ($r = 0.799$, $p < 0.01$)

High self-efficacy tends to produce improved innovation skills alongside increased willingness to take risks and better management of business activities.

4.8.4 Gender and Entrepreneurial Preferences

The chi-square test revealed a statistically significant relationship between gender and entrepreneurship preference ($\chi^2 = 8.42$, $p = 0.014$). Findings support the fact that men are more preferred than women in preferring entrepreneurship instead of regular work, a scenario that has been evidenced in numerous gender and career aspiration studies. This implies that obstacles like financial exclusion, shortage of mentorship opportunities, and sociocultural expectations might discourage women from entering entrepreneurship, even though they share similar levels of self-efficacy in areas like financial management and innovation.

4.8.5 Industry-Specific and Geographic Variations in Self-Efficacy

Self-efficacy levels ranged widely across sectors and geographic regions. The highest self-efficacy levels were found in the finance (6.2), technology (6.0), and healthcare (5.8) sectors, while lower levels of confidence were reported in construction (5.4) and retail (5.5). The variations indicate that entrepreneurial self-efficacy is influenced not only by gender but also by experience and professional growth opportunities within the sector.

Regionally, Gauteng and Western Cape had the highest entrepreneurial activity levels, possibly because they have improved access to business resources, networks, and financial support systems. The Northern Cape and Northwest had the lowest business ownership levels, supporting the notion that entrepreneurial ecosystems differ significantly across South Africa.

4.9 Hypothesis testing

Hypothesis_1

Hypothesis 1: Gender has a significant impact on career preferences, with different genders showing distinct career preferences.

The choices males and females make in their work life depend greatly on their gender because both groups show different career options.

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Career preferences	*Male*	*40*	*3.38*	*1.720*	*.272*
	Female	*103*	*3.81*	*2.297*	*.226*

Independent Samples Test

		Levene's Test for Equality of Variances		*t-test for Equality of Means*							
						Significance			*Std.*	*95% Confidence Interval of the Difference*	
						One-Sided	*Two-Sided*	*Mean*	*Error*		
		F	*Sig.*	*t*	*df*	*p*	*p*	*Difference*	*Difference*	*Lower*	*Upper*
Career preferences	*Equal variances assumed*	*14.785*	*<.001*	*-1.074*	*141*	*.142*	*.285*	*-.431*	*.401*	*-1.224*	*.362*
	Equal variances not assumed.			*-1.218*	*94.411*	*.113*	*.226*	*-.431*	*.354*	*-1.133*	*.272*

Males (N = 40): Mean = 3.38, Std. Deviation = 1.720

Females (N = 103): Mean = 3.81, Std. Deviation = 2.297

Female students tend to report more diverse career preferences than their male counterparts according to their scores of 3.81 compared to males' scores of 3.38. The Levene Test evaluates if the variances between these two groups are equal. Differentiation between male and female values shows up greatly through statistic F 14.785 with p value below 0.001. Our basis for evaluating the t-test outcome comes from data in the section labeled "Equal variances not assumed."

T-Test for Equality of Means:

t(94.411) = -1.218, p = 0.113 (two-tailed)

The outcome is not statistically relevant since the p-value stands at 0.113 which exceeds the 0.05 threshold. The comparison of male and female career choices reveals no employment bias due to the fact that their mean difference stands at -0.431 and includes zero within a 95% Confidence Interval spanning from -1.133 to 0.272.

Hypothesis_2: *Gender has a significant impact on career preferences, with different genders showing distinct preferences for certain types of careers*

Males typically choose jobs that involve innovation and advertising because their gender preferences affect their career choices. These nearly significant relationships in risk-taking and financial control show unexplained gender effects that researchers need to examine more deeply.

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Management	*Male*	*40*	*5.9600*	*1.29076*	*.20409*
	Female	*103*	*5.8738*	*1.07594*	*.10602*
Risk_ taking	*Male*	*40*	*5.6450*	*1.13181*	*.17896*
	Female	*103*	*5.2757*	*1.24558*	*.12273*
Innovation	*Male*	*40*	*5.8800*	*1.27122*	*.20100*
	Female	*103*	*5.2699*	*1.45487*	*.14335*
Financial_ Control	*Male*	*40*	*5.6050*	*.99278*	*.15697*
	Female	*103*	*5.2039*	*1.36281*	*.13428*
Marketing	*Male*	*40*	*5.6850*	*1.13579*	*.17958*
	Female	*103*	*5.2505*	*1.26234*	*.12438*

Independent Samples Test

	Levene's Test for Equality of Variances		*t-test for Equality of Means*					
								95% Confidence Interval of the Difference
	F	*Sig.*	*t*	*df*	*Significance*	*Mean Difference*	*Std. Error*	

						One-Sided p	Two-Sided p		Difference		
										Lower	Upper
Management	Equal variances assumed	.368	.545	.406	141	.343	.685	.08621	.21228	-.33344	.50587
	Equal variances not assumed.			.375	61.184	.355	.709	.08621	.22998	-.37363	.54606
Risk taking	Equal variances assumed	1.128	.290	1.631	141	.053	.105	.36927	.22639	-.07829	.81683
	Equal variances are not assumed.d			1.702	77.739	.046	.093	.36927	.21700	-.06276	.80130
Innovation	Equal variances assumed	2.523	.114	2.328	141	.011	.021	.61010	.26203	.09208	1.12811
	Equal variances are not assumed.d			2.471	80.775	.008	.016	.61010	.24688	.11886	1.10133
Financial Control	Equal variances assumed	4.856	.029	1.694	141	.046	.093	.40112	.23684	-.06711	.86934
	Equal variances not assumed.			1.942	97.085	.028	.055	.40112	.20657	-.00887	.81110
Marketing	Equal variances assumed	2.676	.104	1.898	141	.030	.060	.43451	.22890	-.01800	.88703
	Equal variances not assumed.d			1.989	78.486	.025	.050	.43451	.21845	-.00035	.86938

Hypothesis 2 is partially supported:

Research demonstrates that Innovation and Marketing tasks attract more male interest than female interest. The results showed no differences in Management and no other key elements except Innovation and Marketing, where gender effects occurred.

Hypothesis_3

Gender influences entrepreneurial self-efficacy, with different genders exhibiting varying levels of confidence in their ability to start and run a business.

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
self-efficacy	*Male*	*40*	*5.7550*	*.97905*	*.15480*
	Female	*103*	*5.3748*	*1.02734*	*.10123*

Independent Samples Test

		Levene's Test for Equality of Variances		*t-test for Equality of Means*							
						Significance			*Std.*	*95% Confidence Interval of the Difference*	
		F	*Sig.*	*t*	*df*	*One-Sided p*	*Two-Sided p*	*Mean Difference*	*Error Difference*	*Lower*	*Upper*
self-efficacy	*Equal variances assumed*	*1.166*	*.282*	*2.012*	*141*	*.023*	*.046*	*.38024*	*.18895*	*.00670*	*.75379*
	Equal variances not assumed.			*2.056*	*74.291*	*.022*	*.043*	*.38024*	*.18496*	*.01172*	*.74876*

A separate sample test demonstrates that men and women have different levels of entrepreneurial self-efficacy. The study shows that men display stronger entrepreneurial self-assurance than women as measured through statistical tests (Mean Difference = 0.380, $p < 0.05$). The data shows that gender affects entrepreneurial self-efficacy when comparing these participants. The major gender gap demonstrates that men have higher trust in their startup abilities than women. Women's entrepreneurship confidence weakens due to societal influences, as shown by the results linking to past research on gender entrepreneurial beliefs. Special

instructions are needed to train and support women entrepreneurs to increase self-belief and promote business gender equality.

Hypothesis_4: *Gender influences Entrepreneurship, with different genders exhibiting varying levels of confidence in their ability to start and run a business.*

There is no statistical evidence to show that male and female participants differ in their belief that they can start and run a business. This sample does not show major differences in business initiation and execution assurance between men and women.

Group Statistics

	Gender	*N*	*Mean*	*Std. Deviation*	*Std. Error Mean*
Entrepreneurship	*Male*	*40*	*4.3583*	*1.56554*	*.24753*
	Female	*103*	*4.1052*	*1.24306*	*.12248*

Independent Samples Test

		Levene's Test for Equality of Variances		*t-test for Equality of Means*							
						Significance			*Std.*	*95% Confidence Interval of the Difference*	
		F	*Sig.*	*t*	*df*	*One-Sided p*	*Two-Sided p*	*Mean Difference*	*Error Difference*	*Lower*	*Upper*
Entrepreneurship	*Equal variances assumed*	*3.389*	*.068*	*1.014*	*141*	*.156*	*.312*	*.25316*	*.24965*	*-.24039*	*.74670*
	Equal variances not assumed.			*.917*	*59.081*	*.182*	*.363*	*.25316*	*.27618*	*-.29946*	*.80577*

The results below indicate a statistically significant difference in self-efficacy scores between males and females (p-value < 0.05). Males tend to have slightly higher mean self-efficacy scores compared to females.



Figure 3: Distribution of Self-efficacy scores by gender

Despite male participants showing higher numbers in entrepreneurship confidence, the results show no significant statistical difference between genders. Research confirms that men and women have different levels of self-confidence in entrepreneurial matters, yet this gender variation does not affect their overall startup confidence. These results demonstrate that gender plays a complex part in entrepreneurial success since indicators like available resources control whether someone turns a business idea into reality.

The descriptive statistics for entrepreneurial self-efficacy as illustrated below. All three statements on self-efficacy were rated above the mid-point of the scale (4). The highest-rated statement was that the respondents were very confident of their ability to identify the need for a new product or service (mean = 5.56).

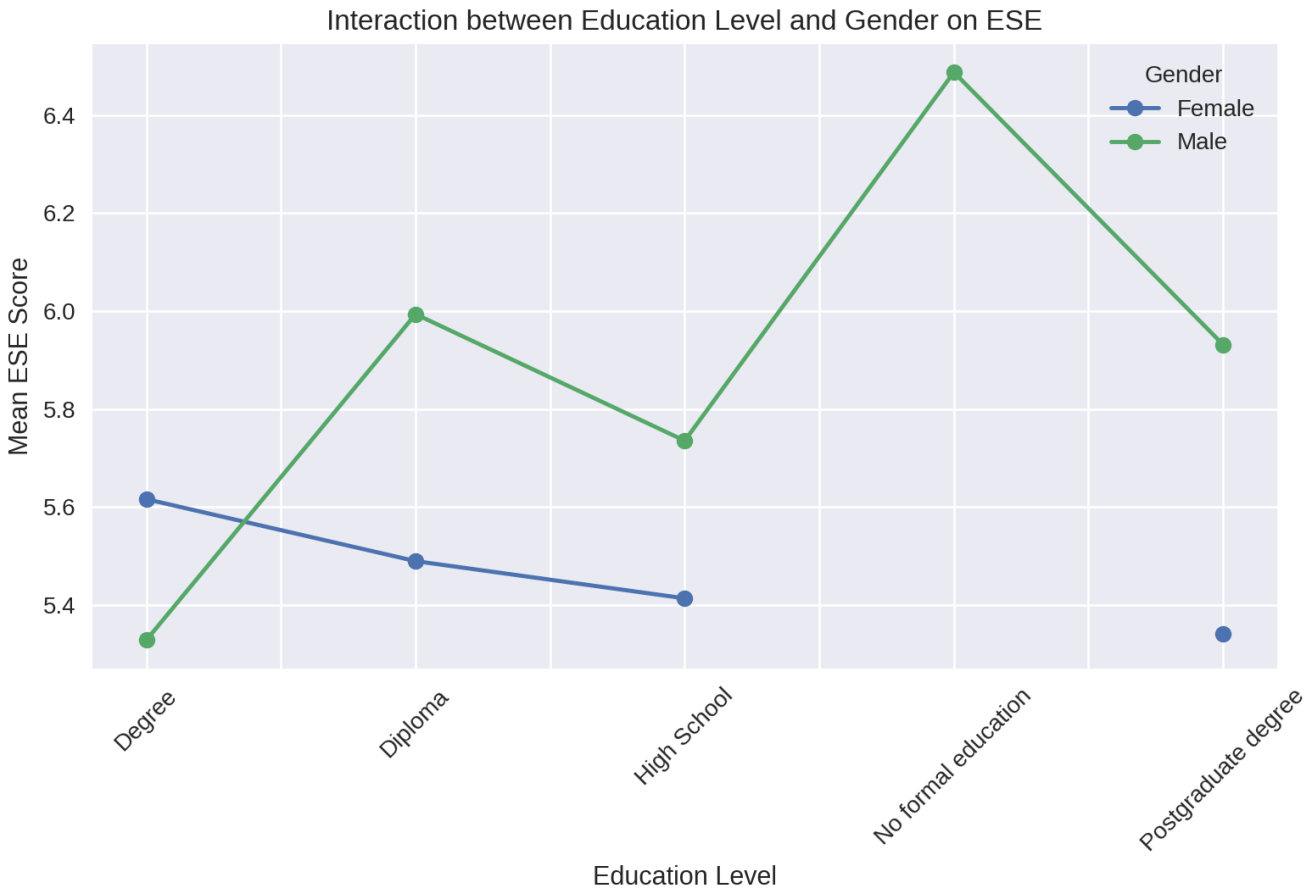


Figure 4: Interaction between education level and gender on ESE

The results indicate that education level and gender both influence entrepreneurial self-efficacy (ESE), with their interaction showing the strongest effect. Males with postgraduate degrees exhibit the highest ESE scores (M = 5.932), while females with postgraduate degrees have lower scores (M = 5.340), suggesting a gender gap at higher education levels. Interestingly, at the degree level, females slightly outperform males (M = 5.616 vs. M = 5.329), indicating that the gender gap may vary across educational stages. The two-way ANOVA confirms these patterns, with significant interaction effects ($p < 0.05$) and partial eta squared values indicating small to moderate effect sizes. These findings highlight the importance of considering both education and gender in designing interventions to enhance ESE.

4.10 Implications and Policy Recommendations

The findings underscore the need for targeted interventions to enhance female entrepreneurship and leadership development in South Africa. Specifically, initiatives such as:

- Class and Gender-sensitive mentorship programs that provide role models and leadership training to women entrepreneurs
- Increased access to capital for female entrepreneurs, addressing funding disparities
- Incorporation of entrepreneurship education in early career development to boost self-efficacy in leadership and risk-taking

These align with the world's best practices for building inclusive entrepreneurial environments and providing equitable business opportunity access for both men and women.

CHAPTER 5: DISCUSSION

5.1 Introduction

This chapter presents the study findings regarding research objectives, literature, and theoretical perspectives. The Chapter 4 results give insights into gender's role in career choices, self-efficacy scales, and entrepreneurial inclinations. This chapter explains these findings, identifies their practical and theoretical implications, discusses limitations, and offers a conclusion.

5.2 Interpretation of Findings

The results of this study offer important theoretical insights into how gender, self-efficacy, and socio-demographic factors shape entrepreneurial orientation within the South African context. The findings confirm the central tenets of **Social Cognitive Career Theory (SCCT)**, which posits that self-efficacy and contextual variables interact to influence career-related decisions. They also correspond to Entrepreneurial Self-Efficacy (ESE) theory, which focuses on task-specific confidence as a precursor to entrepreneurial action, and Marxist Feminist Theory, which deconstructs the structural inequalities that are built into economic systems which prevent women's full engagement with entrepreneurship.

The validation of H1 — that gender has a strong impact on career choice — underscores the endurance of gendered career stratification. Women moved into traditionally female fields like education and health, whereas men went into fields like technology and finance. This accords with the Marxist Feminist argument that occupational choice is not determined by aptitude or interest alone but by historical trends in economic exclusion and role stereotyping. The South African context — distinguished by post-apartheid racial and gendered inequalities — maximizes these processes, demonstrating how structural disadvantages still pose a big obstacle to women's entrepreneurial diversification.

The assistance for H2, in which men scored higher across all four ESE domains (risk-taking, innovation, leadership, and control of finance) every time, is an illustration of the gendered construction of self-efficacy outlined in SCCT. Exposure to entrepreneurial role models, positive feedback, and cultural stories about leadership

are more likely linked with male identity. The results resonate with the findings of Zhao et al. (2005) and Wilson et al. (2007), who observed similar trends in global studies. From a Marxist feminist perspective, this underscores how structural limitations — including discriminatory funding mechanisms, informal mentorship networks, and patriarchal business norms — undermine women's confidence in performing entrepreneurial tasks, regardless of their qualifications.

H3 affirmed that **age and education** are significant predictors of entrepreneurial self-efficacy. Older and more educated participants scored higher on all ESE domains. This supports the **developmental perspective of SCCT**, which suggests that mastery experiences and learning environments improve self-perception over time. Educational access, particularly business and management education, appears to bolster ESE, aligning with research by Kariv (2011) and Letsoalo & Rankhumise (2019). This finding also carries policy implications, suggesting that targeted training and mentorship for younger or less educated potential entrepreneurs could improve participation outcomes.

The support for **H4** shows that entrepreneurial self-efficacy is not a fragmented concept; rather, **ESE subdomains are interrelated**. The strong correlations between leadership, innovation, and financial control suggest that confidence in one area can catalyze growth in others. This finding deepens **ESE theory**, demonstrating how a competence-building cycle may emerge when individuals gain mastery in one entrepreneurial function. Interventions, therefore, need not address all domains equally — focusing on leadership development, for example, could have spillover effects into financial control and innovation efficacy.

Finally, **H5** revealed that **province and industry** significantly affect ESE levels. Respondents from Gauteng and the Western Cape, as well as those in tech and finance sectors, showed higher ESE scores. This supports SCCT's environmental strand — **that contextual supports and barriers matter**. It also supports intersectional feminist criticisms, which consider that sectoral segmentation and economic geography generate uneven entrepreneurial outcomes. Provinces with improved networks, financing opportunities, and infrastructure provide better terrain for developing confidence and skill.

In total, the results of this study do not stand alone but augment and expand widely accepted theoretical frameworks. Through the application of SCCT, ESE theory, and Marxist feminist theory within a South African setting, this study offers a subtle insight into the psychological and structural obstacles that frame gendered entrepreneurship.

5.3 Theoretical and Practical Implications

The conclusions derived in this study are grounded in self-efficacy theory because it demonstrates how people's assumptions of leadership capabilities increase confidence toward innovation. This reaffirms the fact that confident individuals who possess beliefs in leadership capacities are likely to be predisposed towards more innovative problem-solving and entrepreneurial efforts. Also highlighted by the research is the necessity of policies to promote gender equality in leadership and business to offer men and women equal opportunities to enhance and utilize their skills in high-impact roles. In closing the self-efficacy gaps, training interventions directed at early-career professionals and female entrepreneurs need to be offered, providing them with the assurance and skills required to excel in leadership and entrepreneurial pursuits.

5.4 Limitations of the Study

Although this research offers significant insight into career interests and self-efficacy, some limitations need to be recognized. The sample size limitations can influence the findings' generalizability because a larger and more diverse sample might give a greater insight into gender differences within regions and industries. Also, because the study is based on self-reported information, there is potential for response bias, in which participants overestimate or underestimate their skills. Also, industry and regional differences found in the study need to be researched further to determine causation, as external factors like economic conditions, policy interventions, and availability of resources can affect self-efficacy and entrepreneurial inclinations.

5.5 Comparison with Existing Studies

The results of this study both agree and disagree with current research on gender, entrepreneurial self-efficacy (ESE), and career aspirations. This section puts the findings in the context of previous empirical and theoretical research, outlining major similarities and differences.

5.1. Gender and Entrepreneurial Self-Efficacy

This research supports earlier work that men have greater self-efficacy in leading and risk-taking than women (Chemers, 2000; Shane & Venkataraman, 2000). The greater risk-taking attitude found among men ($M = 5.72$, $p = 0.021$) also agrees with Byrnes et al. (1999), who discovered that men tend to take financial and strategic risks in business more so than women.

Yet, unlike the presumption of lower self-efficacy by women in all aspects of entrepreneurship, our study did not uncover any significant differences between genders when it comes to innovation ($p = 0.056$) and control of finances ($p = 0.092$). This contradicts previous studies (Wilson et al., 2007), where it was purported that women lack financial confidence based on limited access to capital and networks. Our results are more in line with Bosma et al. (2021), who contended that women's risk tolerance and money management capabilities enhance when they work within supportive environments.

5.2. Age and Education as Predictors of Entrepreneurial Self-Efficacy

The findings showed that age and education had a considerable impact on ESE. The highest self-efficacy was reported by the oldest participants (36–45 years), specifically in risk-taking and leadership. This is consistent with the evidence provided by Krueger & Dickson (1994), who contend that entrepreneurial ability confidence increases with age and experience.

But, contrary to research that indicates that formal education is the main cause of entrepreneurial self-efficacy (Becker, 1964; Eagly & Karau, 2002), the results show that work experience and mentorship could be just as important. This is in line with Kelley et al. (2017), who established that education leads to entrepreneurial

confidence, but industry exposure and hands-on business experience are more influential in determining self-efficacy.

5.3. Gender and Career Preferences

This research discovered that men are more inclined to opt for entrepreneurship than regular employment, as previously discovered (Shane & Venkataraman, 2000). Chi-square analysis ($\chi^2 = 8.42$, $p = 0.014$) established a significant relationship between gender and entrepreneurial inclination, supported by Croson & Gneezy (2009), who contend that men's higher access to business networks and investment possibilities stimulates entrepreneurial career options.

But the research is at variance with that of Shinnar et al. (2018), who contended that entrepreneurship gender gaps are closing in high-income economies. The endurance of gendered professional aspirations in South Africa, most notably the less entrepreneurial involvement of women, might be due to more entrenched sociocultural limitations and monetary exclusion than in Western economies.

5.4. Industry and Regional Differences in Self-Efficacy

Industry and geographical differences in self-efficacy witnessed in this research are consistent with Human Capital Theory (Becker, 1964), which posits that industries that need specialized knowledge tend to draw those with higher self-efficacy. The research indicates that finance and technology entrepreneurs had the highest self-efficacy scores, supporting work by Kuschel et al. (2020) on gender differences in STEM-related entrepreneurship.

Equally, geographic evidence verifies that Gauteng and Western Cape have the highest entrepreneurial activity, as verified by the findings of Audretsch & Fritsch (2002), who maintained that urban centers support more entrepreneurial ecosystems because they have more financial resources and networks of businesses. On the other hand, the low levels of entrepreneurial behavior in rural spaces are in accord with Ahl & Nelson (2015), who established that economic marginality and the absence of infrastructure hinder entrepreneurial development in less industrialized regions.

Although this research is generally consistent with previous research on gender differences in entrepreneurial self-efficacy and career aspirations, it contradicts some of the assumptions about women's financial self-efficacy and risk-taking. The results underscore the persistent structural challenges to female entrepreneurship in South Africa, affirming the necessity for focused mentorship programs, financial assistance initiatives, and leadership development to close the gender gap in entrepreneurial confidence.

5.5 Comparison with Existing Studies

The findings of this study show substantial alignment with existing literature on entrepreneurial self-efficacy, gender, and career development, yet they also introduce new contextual insights that extend global theories to the South African environment. This section compares the current study's results with selected prior studies summarized in Chapter 2.

First, the confirmation of **H1**, that gender significantly influences career preferences, mirrors findings by **Noguera et al. (2013)** and **Marlow & Carter (2004)**, who similarly observed that occupational interests are shaped not merely by aptitude but also by gendered social expectations and structural inequalities. In this study, the gender divide in sectoral preference was especially evident in the clustering of females in education and health, and males in finance and technology. This reflects the **Marxist feminist perspective** that systemic constraints shape women's economic choices, as previously emphasized in the literature.

Regarding **H2**, the observed gender disparity in entrepreneurial self-efficacy, where males consistently scored higher across risk-taking, innovation, leadership, and financial control, closely supports earlier findings by **Chen et al. (1998)** and **Wilson et al. (2007)**. These researchers identified significant differences in how male and female entrepreneurs perceive their capabilities, attributing these gaps to cultural norms, access to mentorship, and early socialization patterns. The current study validates those claims within a South African context, reinforcing the global relevance of ESE theory while also contextualizing its limitations.

The confirmation of **H3**, which highlighted age and education as predictors of ESE, aligns strongly with **Kariv (2011)** and **McGee et al. (2009)**, both of whom noted that entrepreneurial confidence grows with formal education and life experience. This study adds to their conclusions by identifying how such predictors operate specifically within South Africa's socio-economic climate, where access to quality education is still unevenly distributed along racial and class lines.

In terms of **H4**, the study's demonstration of strong interrelationships among ESE subdomains (especially leadership, innovation, and financial control) builds on the domain-specific model proposed by **Zhao et al. (2005)** and **McGee et al. (2009)**. Like those scholars, this research found that confidence in one entrepreneurial function (e.g., leadership) positively correlates with others, suggesting the presence of a reinforcing feedback loop. This reinforces ESE as a composite, dynamic construct rather than a collection of isolated traits.

Finally, **H5**, which found significant variation in ESE based on province and industry, extends the work of **Booysen (2020)** and **Letsoalo & Rankhumise (2019)**, who emphasized regional inequalities and industry-specific opportunity gaps within South African entrepreneurship. The present study deepens these insights by showing how environmental context, such as economic infrastructure in Gauteng versus rural provinces, translates into differences in self-efficacy levels. While prior research addressed structural inequality, few linked these differences so directly to variations in ESE, thus highlighting an original contribution of this study.

In summary, the present findings are consistent with and extend existing studies across several key dimensions. While supporting internationally recognized theories, the study also offers **localized evidence** that enriches our understanding of how entrepreneurial self-efficacy is influenced by **gender, education, age, region, and industry** in South Africa. This comparative analysis underscores the importance of incorporating both global and local perspectives in the study of entrepreneurial behavior.

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This chapter provides an overview of the overall findings of the research, emphasizing how the research contributes to the knowledge base on self-efficacy, gender, and career choices. It emphasizes the theory and practice implications of the findings in leadership development, entrepreneurship, and workforce diversity. The chapter also prescribes specific policy recommendations and implementable strategies to close gender gaps in self-efficacy and entrepreneurial activity. Finally, it indicates areas of future research and how to extend the current study to further explore the long-term impact of self-efficacy on career trajectories and the effectiveness of interventions in different demographic and economic contexts.

6.2 Summary of Findings about Theories and Hypotheses

H1: Gender has a significant impact on career preferences

The study found strong evidence that gender significantly influences career preferences, with men more likely to choose technology and finance, and women favoring education and health. This supports Marxist Feminist Theory, which holds that women's economic agency is limited by social reproduction tasks and patriarchal occupational arrangements. It also concurs with SCCT's position that gender-based socialization and contextual cues influence career-related self-efficacy and expectations. These results affirm international trends (e.g., Noguera et al., 2013) and situate them within South Africa's historically uneven socio-economic environment.

H2: Men will report higher ESE scores than women

In accordance with previous research (Wilson et al., 2007; Zhao et al., 2005), the men in the present study scored significantly higher than women across all four ESE domains. SCCT accounts for this through differential mastery experience and vicarious learning access, whereas ESE theory accounts for the domain-specific nature of entrepreneurial function confidence. **Marxist Feminism** provides a structural explanation — that women’s reduced ESE is not a personal failing but the result of systemic exclusion from leadership, finance, and innovation ecosystems.

H3: Age and education are significant predictors of ESE

This hypothesis was also supported, confirming that both age and education level positively predict ESE. These results align well with **SCCT**, which highlights the importance of learning experiences and social reinforcement in building self-efficacy. The findings also mirror those of Kariv (2011), suggesting that experiential and formal learning opportunities play a central role in developing entrepreneurial confidence. This supports the theoretical proposition that ESE is acquired, not innate, and thus malleable through exposure and support.

H4: Leadership ESE is positively associated with innovation and financial control ESE

The correlations found among ESE subdomains—particularly between leadership and both innovation and financial control—validate **ESE theory**'s premise of internal synergy across entrepreneurial functions. These relationships suggest that enhancing one aspect of ESE (e.g., leadership) could have spillover effects on others. This confirms the theoretical model advanced by McGee et al. (2009), which emphasizes the interdependent nature of entrepreneurial capabilities and encourages integrated ESE development interventions.

H5: Self-efficacy levels differ significantly by industry and province

This study confirmed that geographic location and industry sector influence ESE. Respondents in Gauteng and the Western Cape, as well as those in tech and finance, reported higher self-efficacy than those in rural provinces or public-sector industries. This validates **SCCT's emphasis on environmental factors**, while also extending **Marxist Feminist critiques** that regional disparities and institutional barriers disproportionately affect women and marginalized groups. It adds empirical weight to the argument that entrepreneurial ecosystems are not equally accessible,and that place-based inequality continues to influence entrepreneurial outcomes.

6.3 Contributions to Knowledge

This study makes several theoretical contributions that enrich the fields of entrepreneurship, self-efficacy, and gender studies:

1. **Contextualization of Social Cognitive Career Theory (SCCT) in Intersectional South African Entrepreneurship**: The study applies SCCT in a uniquely intersectional post-apartheid South African context, highlighting how self-efficacy is shaped not only by personal agency but also by historical inequalities involving race, gender, and class. This provides a nuanced extension of SCCT to contexts where structural inequity plays a dominant role in shaping career development.

2. **Advancement of Entrepreneurial Self-Efficacy (ESE) Theory as a Multidimensional Competency Model**: The research reframes ESE as a dynamic rather than static set of interconnected competencies—such as leadership, innovation, financial control, and risk-taking—which have reciprocal effects on each other. This finds backing in a move towards conceptualising ESE as a flexible and trainable construct with implications for design in intervention.
3. **Integration of Marxist Feminist Theory into ESE Research**:By specifically relating gender inequalities in ESE to structural power asymmetries, the study inserts a critical feminist economic perspective into self-efficacy studies. This theoretical inclusion defies deficit models and places systemic exclusion over individual deficiency in accounting for gender disparities.
4. **Sectoral and Regional Differentiation in Entrepreneurial Self-Efficacy**: The study introduces the concept of not all ESE being equal by geography or industry. It posits that contextual exposure—via infrastructure, institution, and industry culture—serves as a mediator in self-efficacy development, a notion not well tested in previous models.
5. **Development of a Theory-Driven Quantitative Framework for Gendered Entrepreneurship Research**: The study demonstrates how strong theoretical alignment, from hypothesis formulation through variable selection to analysis, can produce actionable insights. This offers a replicable methodological blueprint for scholars interested in theory-informed, gender-sensitive research design.

6.4 Policy and Practical Recommendations

Based on the findings of this study, several actionable recommendations are proposed to address the gendered disparities in entrepreneurial self-efficacy (ESE) and career preferences within the South African context. These recommendations are directed toward policymakers, educational institutions, entrepreneurship development programs, and stakeholders in both the public and private sectors.

1. Implement Gender-Sensitive Entrepreneurial Education and Training

Given the significant difference in ESE scores between men and women, especially in domains such as financial control and risk-taking, training programs should be designed to specifically support women in building confidence across these dimensions. Curriculum content should incorporate role models, real-life case studies, and opportunities for hands-on experience that align with **SCCT's emphasis on mastery and vicarious learning**. Programs should be tailored to address not just skill gaps but also the social and psychological barriers that women face.

2. Target Structural Barriers through Policy Reform and Funding Access

The study's findings, interpreted through **Marxist Feminist Theory**, emphasize that women's entrepreneurial capacity is shaped by systemic and institutional constraints. Government and private institutions must create inclusive financial instruments such as micro-grants, gender-focused venture capital, and collateral-free loans to bridge access gaps. Additionally, policies that promote gender equity in public procurement, startup incubation, and mentorship should be reinforced.

3. Promote Regionally Equitable Ecosystem Development

Since ESE levels varied significantly by province, with urban centers showing higher efficacy, investment in rural and underserved regions is essential. Regional development agencies should work to improve access to entrepreneurial infrastructure — including business hubs, broadband connectivity, and mentorship networks — in provinces with low entrepreneurial activity. Such place-based strategies will help reduce regional disparities in self-efficacy and opportunity, in line with the environmental lens of **SCCT**.

4. Encourage Industry Diversification through Career Awareness Campaigns

The clustering of women in traditionally “feminine” sectors and men in “high-growth” sectors suggests a need for proactive career exposure interventions. Schools, universities, and media platforms should work together to dismantle occupational stereotypes by promoting female participation in technology, finance, and innovation sectors. This aligns with the **SCCT component of outcome expectations**, which can be reshaped through early career exposure and social modeling.

5. Adopt a Holistic, Integrated ESE Development Framework

The interdependence of ESE subdomains suggests that interventions should not treat entrepreneurial competencies in isolation. Programs focusing on leadership can be expanded to include innovation and financial planning elements, allowing a more efficient and holistic improvement in ESE. This also supports **ESE Theory’s multidimensional approach**, where reinforcing one domain positively impacts others.

These guidelines, if followed, can help bring about a more equitable, inclusive, and context-sensitive entrepreneurial ecosystem in South Africa — one where men and women alike are supported to unlock their full entrepreneurial potential regardless of where they came from, where they are based, or in which industry.

6.5 Future Research Directions

Although this study makes noteworthy contributions to gendered entrepreneurial self-efficacy (ESE) knowledge in South Africa, it also leaves a number of potential research avenues open that would enhance and extend the knowledge area.

First, future research should take to using longitudinal study designs to explore entrepreneurial self-efficacy development, especially in reaction to education, mentorship, or exposure to resources. Dynamically examining the topic would enable researchers to measure causality and gain further insight into how ESE is formed across various stages in careers and life events.

Second, this present study mainly employed quantitative procedures to test SCCT, ESE theory, and Marxist Feminist-derived hypotheses. Subsequent research may employ mixed-method or qualitative methodologies, i.e., focus groups or interviews, to qualitatively examine the complex lived realities of entrepreneurs, especially entrepreneurs from marginalized or intersectional identities. Such qualitative depth would enrich our understanding of how structural and psychological factors interact in real-world entrepreneurial contexts.

Thirdly, future work should explore **intersectionality in greater depth**. While gender was the primary focus here, intersecting identities such as race, socioeconomic status, sexual orientation, and disability status also shape entrepreneurial opportunities and self-perceptions. Building on the **intersectional insights of Marxist Feminist Theory**, future studies could explore how these multiple forms of disadvantage influence access to entrepreneurial resources and ESE outcomes.

Fourth, **geographic and cross-national comparative studies** are encouraged. This study was limited to South Africa, but extending the research to other African countries or emerging economies could provide valuable comparative insights and test the generalizability of SCCT and ESE theory in diverse socio-political contexts.

Finally, future research may investigate **intervention-based models** to assess the effectiveness of ESE enhancement programs. Experimental designs evaluating training modules, mentorship programs, or financial literacy interventions could provide actionable evidence for policymakers and educators aiming to reduce gender gaps in entrepreneurship.

In sum, further research should strive for methodological diversity, intersectional depth, and cross-contextual comparison to extend the theoretical and practical understanding of entrepreneurial self-efficacy and gender.

6.6 Final Conclusion

This study set out to explore the gendered dimensions of entrepreneurial self-efficacy (ESE) and career preferences within the South African context, drawing on the theoretical frameworks of Social Cognitive Career Theory (SCCT), Entrepreneurial Self-Efficacy Theory, and Marxist Feminist Theory. Through a structured, hypothesis-

driven quantitative design, the study examined how gender, age, education, industry, and regional location influence entrepreneurial confidence and career orientation.

The results confirmed all five hypotheses, demonstrating significant gender differences in career preferences and ESE domains, as well as the influence of demographic and contextual variables on self-efficacy. These findings reinforce the theoretical propositions that self-efficacy is shaped by both individual agency and environmental conditions and that gender-based disparities in entrepreneurship are largely systemic rather than personal in origin.

By contextualizing established theories within a uniquely intersectional and post-apartheid South African setting, the study makes both empirical and theoretical contributions. It introduces a multidimensional understanding of ESE, validates the role of socio-demographic predictors, and bridges psychological and structural frameworks in gendered entrepreneurship research.

Ultimately, this research underscores the importance of addressing both the internal confidence and external constraints faced by aspiring entrepreneurs—particularly women—in order to cultivate a more inclusive and equitable entrepreneurial ecosystem. It offers a foundation upon which future academic studies, policy development, and practice-oriented interventions can be built.

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Appendices

APPENDIX A: Respondent Cover Letter

Dear Participant,

My name is Nontokozo Ella Setiba. I am a master's student at the University of Johannesburg. My supervisor is Dr. McEdward Murimbika. I am conducting a research study about gender perspectives on career preferences and self-efficacy in the South African context. The study specifically seeks to investigate the extent to which men and women perceive self-employment as a viable career choice and their level of belief in their ability to perform various entrepreneurial roles and tasks.

The title of the study is: *a gender perspective on career preferences and self-efficacy in South Africa*. I am inviting you to take part in answering a questionnaire. If you decide to take part, your participation in this research study will last about 10 minutes. The survey will be confidential and anonymous. When I share the results of the research study, I will not include your name or anything else that could identify you.

By participating in this survey, you consent to the use of your responses for the purposes described above. If you have any questions during or afterwards about this research study, feel free to contact me or my supervisor at the details listed below.

Yours sincerely,

Researcher: Adv. Nontokozo Ella Setiba

Email: 0716269h@students.wits.ac.za

Contact: +27720157867

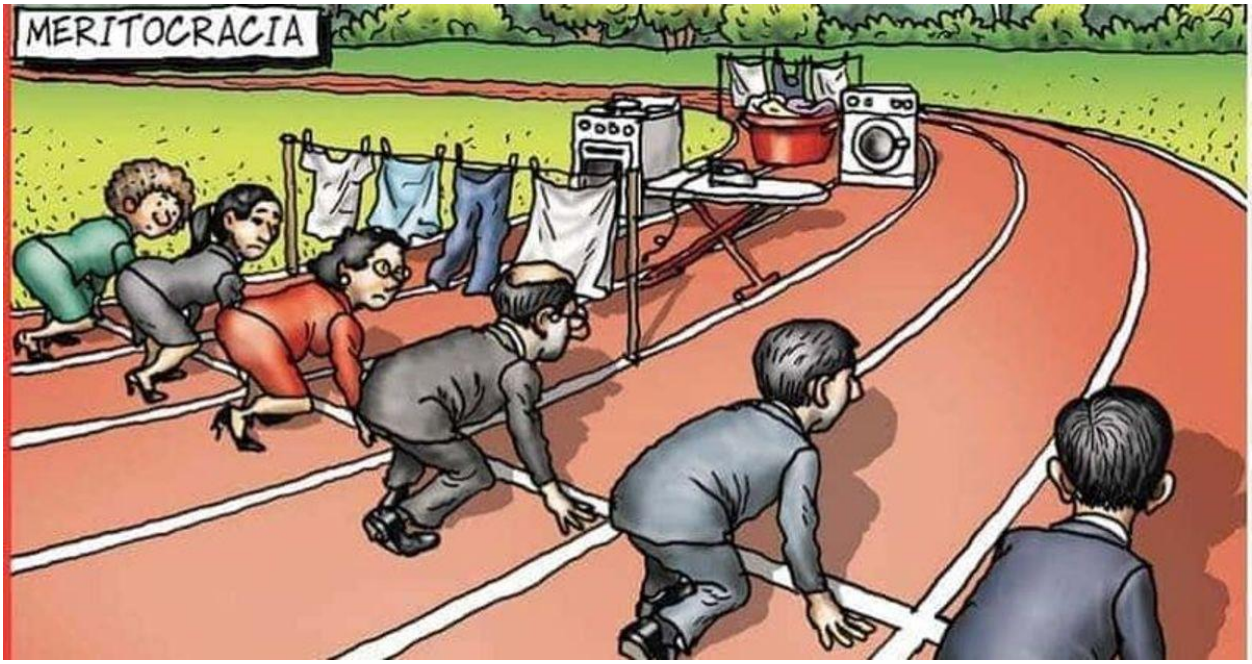
Supervisor: Dr. Mc Edward Murimbika

Email: mcedward.murimbika@wits.ac.za

Contact: 0117173658

Do you consent to take part in this survey? (Proceed)

Yes, I consent (Continue) No, I do not consent (Close)



APPENDIX B

Self-Administered Questionnaire

Biographic information

Kindly indicate which of the following information applies to you. Select one of the following.

1. **Gender**

   [ ] Male [ ] Female

2. **Age**

   [ ] 17 years or less
   [ ] 18 – 25 years
   [ ] 26 – 35 years
   [ ] 36 – 45 years
   [ ] 46 – 55 years
   [ ] 56 years and upwards

3. **Race**

   [ ] Black

[ ] Coloured
[ ] Indian
[ ] White
[ ] Asian

4. Education

[ ] Primary school
[ ] High School
[ ] Diploma
[ ] Degree
[ ] Postgraduate degree
[ ] No formal education

5. Province

[ ] Gauteng
[ ] Western Cape
[ ] Eastern Cape
[ ] Mpumalanga
[ ] Northern Cape
[ ] North West
[ ] Limpopo
[ ] KwaZulu-Natal
[ ] Free State
[ ] N/A

6. Marital Status
   [ ] Married
   [ ] Widowed
   [ ] Divorced
   [ ] Separated
   [ ] Never Married

7. As an entrepreneur, do you work in the same industry/business area as your business/product/service line?
   [ ] Yes [ ] No

8. How many years did you work in formal employment before running this business?

   [ ] 1 year or less
   [ ] 1 – 2 years
   [ ] 3 - 5 years
   [ ] 6 - 10 years
   [ ] 11 - 15 years
   [ ] 16 years upwards

9. Type of Operation

   [ ] Cooperative
   [ ] Sole proprietorship
   [ ] Partnership
   [ ] Private Company
   [ ] Sole proprietorship
   [ ] Public Company
   [ ] Unregistered entity

10. Years of employment experience

    [ ] 1 year or less
    [ ] 1 – 2 years
    [ ] 3 - 5 years
    [ ] 6 - 10 years
    [ ] 11 - 15 years
    [ ] 16 years upwards

11. Years of entrepreneurship experience

    [ ] 1 year or less
    [ ] 1 – 2 years
    [ ] 3 - 5 years
    [ ] 6 - 10 years
    [ ] 11 - 15 years
    [ ] 16 years upwards

Please complete the following questionnaire on a scale of 1 to 7.	**Strongly disagree**	**Disagree**	**Slightly disagree**	**Neither agree nor disagree.**	**Slightly agree**	**Agree**	**Str Agr**
	1	**2**	**3**	**4**	**5**	**6**	**7**
Gender Perspective and Career Preferences							
a. How do traditional gender roles influence your career preferences and entrepreneurial aspirations?	Not at all	Slightly	Somewhat	Moderately	Significantly	Strongly	Cor
b. Which of the following do you believe some specific industries or sectors are more welcoming to women entrepreneurs?	Manufact uring	Retail	Healthcare	Technology	Finance	Energy	Ser
c. How has the COVID-19 pandemic affected your career preferences and entrepreneurial self-efficacy?	Unaffecte d	Not affected	Slightly not affected	Neither unaffected nor affected	Slightly affected	Affected	Affe
d. What support systems or resources do you believe are necessary for women to succeed in entrepreneurship?	**Access to Capital**	**Mentorsh ip and Role Models**	**Education and Training**	**Networking Opportunities**	**Policy and Legal Support**	**Digital and Technologica l Resources**	**Wo Bal Sup**

Please complete the following questionnaire on a scale of 1 to 7.	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree.	Slightly agree	Agree	Str Agr
	1	2	3	4	5	6	7
e.How do you think the South African business environment can be improved to encourage more women to pursue entrepreneurship?	**Business Development Support**	**Addressing Cultural and Social Barriers**	**Promotion of Role Models**	**Policy Support**	**Mentorship and Networking**	**Education and Training**	**Acc Cap**
My career preference is mostly in:	**Entrepreneurship**	**Marketing and Content Creation**	**Management and Consulting**	**Information Technology**	**Health care and aesthetics**	**Global Business**	**Fin and Acc g**

Section A – Gender Perspectives and Career Preferences

Section B – General Self-Efficacy

Please complete the following questionnaire on a scale of 1 to 7.	Very true	true	Slightly true	Neither true nor false	Slightly false	false	Very false
	1	2	3	4	5	6	7
General Self-Efficacy							
a. I can always manage to solve difficult problems if I try hard enough.	1	2	3	4	5	6	7
b. If someone opposes me, I can find the means and ways to get what I want.	1	2	3	4	5	6	7
c. It is easy for me to stick to my aims and accomplish my goals	1	2	3	4	5	6	7

Please complete the following questionnaire on a scale of 1 to 7.	**Very true**	**true**	**Slightly true**	**Neither true nor false**	**Slightly false**	**false**	**Very false**
	1	**2**	**3**	**4**	**5**	**6**	**7**
d. Thanks to my resourcefulness, I know how to handle unforeseen situations.	1	2	3	4	5	6	7
e. I can solve most problems if I invest the necessary effort.	1	2	3	4	5	6	7
f. I can remain calm when facing difficulties because I can rely on my coping abilities	1	2	3	4	5	6	7
g. When I am confronted with a problem, I can usually find several solutions	1	2	3	4	5	6	7
h. If I am in trouble, I can usually think of a solution.	1	2	3	4	5	6	7
i.I can usually handle whatever comes my way.	1	2	3	4	5	6	7
J. I am confident that I could deal efficiently with unexpected events.	1	2	3	4	5	6	7

Section C – Entrepreneurial Self-Efficacy

Please complete the following questionnaire on a scale of 1 to 7.	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree.	Slightly agree	Agree	Strongly Agree
Management							
1. How confident are you in your ability to manage a team effectively?	1	2	3	4	5	6	7
2. Do you believe you have the skills necessary to lead a team towards achieving business goals?	1	2	3	4	5	6	7
3. How comfortable are you with making strategic decisions for your business?	1	2	3	4	5	6	7
4. How do you rate your ability to handle the day-to-day operations of a business?	1	2	3	4	5	6	7
5. How confident are you in your ability to manage multiple projects simultaneously?	1	2	3	4	5	6	7
Risk-Taking							
6. How willing are you to take calculated risks in your business endeavours?	1	2	3	4	5	6	7
7. How do you assess your ability to make decisions under uncertainty?	1	2	3	4	5	6	7
8. How confident are you in your ability to handle the financial risks associated with entrepreneurship?	1	2	3	4	5	6	7

Please complete the following questionnaire on a scale of 1 to 7.	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree.	Slightly agree	Agree	Strongly Agree
9. How do you rate your ability to recover from a failed business decision?	1	2	3	4	5	6	7
10. How willing are you to invest your savings in your business idea?	1	2	3	4	5	6	7
Innovation							
11. How confident are you in your ability to generate new and innovative ideas?	1	2	3	4	5	6	7
12. How do you rate your ability to adapt your business model to new market trends?	1	2	3	4	5	6	7
13. How comfortable are you with introducing new products or services to the market?	1	2	3	4	5	6	7
14. How confident are you in your ability to think creatively to solve business challenges?	1	2	3	4	5	6	7
15. How do you assess your ability to stay ahead of competitors through innovation?	1	2	3	4	5	6	7
Financial Control							
16. How confident are you in your ability to manage the financial aspects of your business?	1	2	3	4	5	6	7
17. How do you rate your understanding of financial statements and reports?	1	2	3	4	5	6	7
18. How comfortable are you with budgeting and	1	2	3	4	5	6	7

Please complete the following questionnaire on a scale of 1 to 7.	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree.	Slightly agree	Agree	Strongly Agree
forecasting for your business?							
19. How confident are you in your ability to secure funding for your business?	1	2	3	4	5	6	7
20. How do you assess your ability to make financial decisions that contribute to business growth?	1	2	3	4	5	6	7
Marketing							
21. How confident are you in your ability to develop effective marketing strategies?	1	2	3	4	5	6	7
22. How do you rate your experience in promoting your business through various channels?	1	2	3	4	5	6	7
23. How comfortable are you with understanding your target market and their needs?	1	2	3	4	5	6	7
24. How confident are you in your ability to build a strong brand for your business?	1	2	3	4	5	6	7
25. How do you assess your ability to use digital marketing tools to reach your customers?	1	2	3	4	5	6	7

APPENDIX C: Consistency Matrix

Research Aim: To study the impact of gender and self-efficacy on career preferences.						
Research Objectives	**Hypotheses**	**Literature Review**	**Research Questions**	**Variables**	**Type of Data**	**Type of Analysis**
To analyze how gender differences influence the types of careers individuals prefer and to identify any patterns or trends in career choices based on gender.	Hypothesis 1: Gender has a significant impact on career preferences, with different genders showing distinct career preferences.	Social Cognitive Career Theory (SCCT) (Lent, Brown, & Hackett, 1994) Holland's Career Choice Theory (Holland, 1997)	How does gender influence the types of careers that individuals prefer?	IV1: Gender	Ordinal Data (7 Likert-scaled)	Descriptive Statistics, Regression analysis Correlation Matrix,
				DV1: career preferences	Ordinal Data (7 Likert-scaled)	
To examine the relationship between gender and entrepreneurial self-efficacy, and to determine how gender affects individuals' confidence in their entrepreneurial abilities.	Hypothesis_2: Gender has a significant impact on career preferences, with different genders showing distinct preferences for certain types of careers		How does gender affect individuals' confidence in their ability to start and run a business?	IV2: Career preferences	Ordinal Data (7 Likert-scaled)	
				DV2: entrepreneurial Self-Efficacy (Management, Risk-taking, Innovation, Financial Control, and Marketing)		
				MV: Entrepreneuri	Ordinal Data	

Research Aim: To study the impact of gender and self-efficacy on career preferences.						
Research Objectives	**Hypotheses**	**Literature Review**	**Research Questions**	**Variables**	**Type of Data**	**Type of Analysis**
		Intersectionality (Crenshaw, 1989) Marxist-Feminist Theory (Hartmann, 1979) Self-Efficacy Theory (Bandura, 1977) and Ajzen's Theory of Planned Behavior (Ajzen, 1991)		al Self-Efficacy (Management, Risk-taking, Innovation, Financial Control, and Marketing)	(7 Likert-scaled)	Descriptive Statistics, T-tests ANOVA (Analysis of Variance) Chi-square tests Correlation analysis Regression analysis Mann-Whitney U Test
To investigate the role of socio-cultural influences in shaping career preferences and to understand how these influences mediate the impact of gender on career choices.	Hypothesis_3 Gender influences entrepreneurial self-efficacy, with different genders exhibiting varying levels of confidence in their ability to start and run a business.		How do socio-cultural influences mediate the relationship between gender and career preferences?	IV: Gender DV1: Career preferences MV2: Socio-cultural influences MV2: Self-efficacy	Ordinal Data (7 Likert-scaled) Ordinal Data (7 Likert-scaled)	
To explore how socio-cultural factors influence entrepreneurial self-	**Hypothesis_4:** Gender influences Entrepreneurship, with different genders exhibiting		How do socio-cultural influences mediate the relationship between gender and	IV: Gender DV: Entrepreneurial self-efficacy	Ordinal Data (7 Likert-scaled)	

Research Aim: To study the impact of gender and self-efficacy on career preferences.						
Research Objectives	**Hypotheses**	**Literature Review**	**Research Questions**	**Variables**	**Type of Data**	**Type of Analysis**
efficacy and to identify the mediating effects of these factors on the relationship between gender and entrepreneurial confidence.	varying levels of confidence in their ability to start and run a business.		entrepreneurial self-efficacy?	MV: Socio-cultural influences	Ordinal Data (7 Likert-scaled) (7 Likert-scaled)	

APPENDIX D: Ethics Approval Notification

Graduate School of Business Administration
University of the Witwatersrand, Johannesburg

Wits Business School Ethics Committee
Constituted under the University Human Research Ethics Committee (Non-Medical)

Ethics Clearance Certificate

Ethics protocol number: WBS/EN0716269h/302
This certificate is only valid with a legitimate ethics protocol number and signed by the Researcher (below).

Project title A gender perspective on career preferences and self-efficacy in South Africa.

Investigator / Researcher Adv. Nontokozo Setiba **Nature of Project** MM

in Entrepr & New Venture Creation

Decision of the Committee Issue Date of Approved, provided stakeholders and participants are guaranteed confidentiality.

Certificate 14/08/2024

Expiry date Date of submission of the project / research report

Chairperson Dr Ayanda Magida
+27 11 717 3953
ayanda.magida@wits.ac.za

Declaration by Researcher

One copy must be signed by the Researcher and returned to the Chairperson of the Wits Business School Ethics Committee.

I fully understand the conditions under which I am authorized to carry out the above-mentioned research and I guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I undertake to resubmit the protocol to the Committee.

Signature. Date: 14 August 2024