

Challenges and opportunities for survival entrepreneurs in the township of Soweto

by

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Research Report

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Declaration

I, Refilwe Molapo, declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Student

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Date

31/05/2024.....

Dedication

This research is dedicated to my wife, Lindeni Molapo, and my daughter, Refilwe Motheo Molapo. Thank you for your patience, support, and encouragement throughout this journey.

Acknowledgments

To my supervisor, Dr. McEdward Murimbika. Thank you for your knowledge, guidance, and feedback throughout the research process.

Abstract

This research paper investigated the challenges and opportunities of survivalist entrepreneurs in Soweto by evaluating the effectiveness of the entrepreneurial ecosystem. The study also examined the potential of using education to improve the entrepreneurial mindset. Additionally, the research investigated how education and the entrepreneurial mindset can be leveraged to improve business performance.

A positivist paradigm was adopted to guide the quantitative research strategy. A cross-sectional study was conducted, and the data was collected from 125 respondents through a self-administered questionnaire. The population sample was subdivided into smaller groups based on the participant's geographical location within Soweto, this was done through cluster sampling. Thereafter, the convenience sampling technique based on availability and accessibility was employed to reach the participants within the designated clusters. The hypotheses were evaluated through a single moderated regression model as the conceptual framework perfectly represented a moderated mediation model.

The results from the model summary confirmed that all three variables – entrepreneurial mindset, entrepreneurial education, and entrepreneurial ecosystem – significantly influenced business performance. The direct effects of the entrepreneurial ecosystem on the entrepreneurial mindset were confirmed to be significant. Furthermore, the research demonstrated that the entrepreneurial mindset mediated the relationship between the entrepreneurial ecosystem and business performance in the township of Soweto.

The practical implications of the study are that further investment in developing the resources and strengthening the support infrastructure in the township of Soweto will create more opportunities for survivalist entrepreneurs to improve their business performance. The study revealed that those with increased education levels are not immune from the systemic challenges that may cause individuals to start informal businesses in the township. Therefore, creating educational programmes that focus on developing practical skills could have a positive effect, empowering these survivalist entrepreneurs with the necessary skills to improve their business performance.

Keywords: survivalist entrepreneur, entrepreneurial ecosystem, entrepreneurial mindset, entrepreneurial education, informal economy

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Chapter 1: Introduction

1.1 Introduction

South Africa is an unequal society affected by unemployment and poverty, especially among the youth. This has led to much of the underprivileged Black population being marginalised by the formal economy and forced to create possibilities in the informal economy by employing various forms of entrepreneurship (Masuku & Nzewi, 2021). These forms of entrepreneurship have become a crucial part of South African economic activity. The informal sector employs about 2.9 million individuals in the country, a figure which has increased by over 600 000 from 2013 (Lamb et al., 2019), demonstrating, that the sustainability and growth of the sector must be understood and encouraged.

Research by Ledingoane and Viljoen (2020) classifies businesses that operate in the informal sector into two main categories: survivalist enterprises and growth-oriented enterprises. The authors maintain that survivalist businesses form the majority in South Africa, at 78% of the enterprises in the informal sector. This indicates that most entrepreneurs are largely motivated by protecting their livelihoods. This is reflective of most businesses and entrepreneurs operating in the townships.

The township economy makes up a significant part of the informal sector, which is mainly characterised as unregulated, unregistered small-scale businesses not governed through conventional measures, as in the formal sector (Cant & Rabie, 2018). An alternative measurement or description of an informal business, in addition to the size and characteristics, is provided through the nature of the employment relationships that occur; often employees are not protected legally and socially (Stuart et al., 2018).

The township economy exists and manifests in three main areas: (1) apartheid townships, which were created for only residential purposes to house Black labourers, (2) post-apartheid townships that were built on the peripheries of suburban residential areas and remain underdeveloped, lacking public infrastructure and social services and (3) informal settlements which are constructed often illegally on land that was designated for something else (Scheba & Turok, 2020). This economy serves almost half of the population that lives in these overpopulated and underdeveloped communities in townships and informal settlements (Cant, 2017). In such societies, entrepreneurial activity, which was heavily policed and suppressed,

was severely restricted by the effects of the apartheid era. Furthermore, economic and financial literacy was and still is limited (Department of Planning, Monitoring and Evaluation, 2017).

Various types of businesses have formed in the township economy; street vendors sell a variety of products from clothes to food and informal convenience stores – locally known as spaza shops – as well as taverns make up most of the informal enterprises in this environment (Western Cape Economic Development Partnership, 2019). Research by Scheba and Turok (2020), which references a survey on township economies completed by the Sustainable Livelihoods Foundation (2016), shows that most of these businesses provide food and alcohol services, contributing 54% of the economic activity.

Local services, including businesses such as hair and beauty salons, mechanical and electrical repairs and home-based businesses such as childcare centres, also make a significant contribution at 34%. A small portion consists of manufacturing at 2%. The last 10% is attributed to miscellaneous activity, which also includes unlawful behaviour. The survey collected data from approximately 11 000 informal businesses from nine townships across South Africa (Scheba & Turok, 2020; Sustainable Livelihoods Foundation, 2016).

These informal businesses are operated by survivalist entrepreneurs who encounter significant management challenges that inhibit their enterprise development. The study focused on several key factors that could enhance and sustain their Business Performance. The study examines how the external socioeconomic and environmental factors impact the performance of these entrepreneurs – adopting the Social Cognitive Theory emphasizing the importance of the survivalist entrepreneur's interactions with their Entrepreneurial Ecosystem to develop their entrepreneurial mindset, enabling them to realize entrepreneurial effectiveness. Furthermore, the relationship between the survivalist entrepreneur and the resource-constrained environments is explored from the perspective of the Effectuation Theory, which refers to the decision-making process in uncertain environments, leveraging the limited resources available. Additionally, the study concentrates on Entrepreneurial Education's critical role in acquiring knowledge, the relevant entrepreneurial competence and the correct behaviours required for developing a strong Entrepreneurial Mindset enabling effective problem-solving and innovation. Developing a constructive Entrepreneurial Mindset is viewed through applying, the Cognitive Dissonance Theory.

1.2 Research Problem

Throughout the history of democracy in South Africa, the country has struggled to realize and sustain structural transformation, failing to create an economy that maintains high productivity levels in the labour market (Andreoni et al., 2021). As a result, the country has suffered low economic growth, only achieving 0.8% annually in average growth in GDP since 2012 due to high unemployment levels and widespread poverty (South African government: National Treasury, 2024). Research on informal entrepreneurship conducted by Urban & Ndou (2019) states that the high levels of unemployment and poverty have fuelled inequality in the country, creating a dual economy, with a small portion of the population living in a highly developed economy and much of the disadvantaged populace struggling for survival in the informal economy. Based on these circumstances, the growth of small and medium-sized enterprises (SMMEs) is considered crucial for creating jobs and alleviating poverty (Urban & Ndou, *Informal entrepreneurship: A focus on South African township entrepreneurs*, 2019).

Entrepreneurship can be used to make a significant improvement to the socio-economic development of the township economy. It has been recognised by researchers such as Wiid and Cant (2021) to have the potential to contribute to improving efforts to alleviate poverty, reduce the effects of economic exclusion and provide sustainable means for creating access to equitable opportunities (Local Government Sector Education and Training Authority, 2020; Wiid & Cant, 2021).

Although there has been a significant amount of research carried out on the township economy, there is a continuing requirement to gain comprehensive knowledge of the variables that promote and inhibit the expansion of township businesses (Urban & Ndou, *Informal entrepreneurship: A focus on South African township small, medium and micro-enterprises (SMMEs)*, 2019). Furthermore, most of the research only considers the external influences that impact the growth of small businesses in this environment. Nambiar et al. (2020) mention that most studies attributed the failure of small businesses to ineffective marketing, adverse financial circumstances, and inefficient operations. Moreover, a substantial amount of the literature focuses on the role of formal enterprises in the townships and excludes the significant contribution and challenges faced by small-scale survivalist entrepreneurs (Asoba & Mefi, 2021).

This research paper sought to investigate the challenges and opportunities of survivalist entrepreneurs in Soweto by evaluating the effectiveness of the entrepreneurial ecosystem. The study also examined the potential of using education to improve the entrepreneurial mindset. Additionally, the research investigated how education and the entrepreneurial mindset can be leveraged to improve business performance.

1.3 Research Questions

Evaluating the entrepreneurial ecosystem, education and mindset offers improved contextual knowledge of the environment in which survivalist entrepreneurs operate, providing awareness and understanding of the unique socio-economic challenges and opportunities encountered by these entrepreneurs. The research investigated the condition of the entrepreneurial ecosystem in the informal economy of Soweto and how it contributed to developing sustainable and scalable enterprises in this environment.

Furthermore, the study explored the entrepreneurial mindset of these entrepreneurs to establish whether they believed they were capable of creating their own success irrespective of the challenges brought on by the adverse economic, social, and political environment in which they operated. How entrepreneurial education contributed to the survivalist entrepreneurial mindset was explored by evaluating the individual capacity of these entrepreneurs to grow their small-scale operations to understand how this process influenced the effectiveness and empowerment of local township entrepreneurs in Soweto.

Therefore, the following research question was formulated: *What role does the entrepreneurial ecosystem, education, and mindset have in the development or success of the survivalist entrepreneur?* The following three sub-questions directed the data collection method:

- What challenges does the resource-constrained township environment of Soweto present for survivalist entrepreneurs?
- Would an improvement in education and training levels in Soweto have a positive influence on the survivalist entrepreneurial mindset?
- To what extent does the entrepreneurial mindset influence the business performance of the survivalist entrepreneurs operating in the informal economy of Soweto?

The study addressed the research questions by examining the direct relationships between the entrepreneurial ecosystem, entrepreneurial mindset, and business performance. In addition, the research explores the role of entrepreneurial education as a moderating variable between entrepreneurial mindset and business performance and whether entrepreneurial education mediates the relationship between the ecosystem and business performance.

1.4 Justification for the Research

1.4.1 Contribution to Theoretical Literature

This academic study will contribute to the literature focusing on the growth and development of survivalist entrepreneurs in township economies. Researchers and academics will gain more insights and comprehension into how the development of the entrepreneurial mindset and the entrepreneurial ecosystem in the township plays a role in achieving sustainable business performance, development, and sustained competitiveness.

1.4.2 Contribution to Practice

The research and theory were intended to provide survivalist entrepreneurs with a conceptual framework that could be used to improve their business performance, empowering themselves with the knowledge and competence required to manage and grow their enterprises effectively. Increasing the collective power of businesses in the informal township economy by promoting an entrepreneurial culture with the correct values, principles, and competencies would enable improved income generation (Danish et al., 2019; Malgas & Zondi, 2020).

Manyaka-Boshielo (2017) states that entrepreneurship begins with defining and understanding individual identity. It is followed by resolving issues around self-worth or the restoration of dignity to improve one's intrapersonal relationships and strengthen the interpersonal relationships one creates and shares with others. Manyaka-Boshielo concludes that this process should be supported by acquiring the necessary business competencies to create a successful entrepreneur.

1.4.3 Contribution to Policymaking

The study will provide government agencies and other key business development organisations involved in policymaking targeted at improving the township economy, with the necessary awareness to enhance their strategic approach to formulating legislation and policy guidelines

that seek to address some of the crucial socio-economic challenges encountered by survivalist entrepreneurs.

1.4.4 Empowerment of Local Township Communities

Township communities would benefit substantially from the success of these informal organisations, improving their standard of living through employment generation (Ledingoane & Viljoen, 2020). Survivalist enterprises are crucial in sustaining local economies, reducing unemployment, and providing an alternative source of income for those employed in the formal sector but who seek to supplement their income to endure the tough economic environment (Musara & Nieuwenhuizen, 2020).

The study will provide a diagnosis of entrepreneurial ecosystems in the township environment, emphasising aspects that can be improved and enabling community developmental initiatives focused on entrepreneurship to be adequately structured to support the growth of these informal enterprises.

1.5 Delimitations of the Study

The research constraints are designed to establish guidelines to ensure the feasibility of the study and confirm that it effectively addresses the research objectives. The scope of this analysis centred on survivalist entrepreneurs who operate informal enterprises in the township of Soweto. The delimitations of the study are outlined below:

- This study did not focus on enterprises operating in the formal economy.
- Non-governmental organisations and non-profit organisations were excluded.
- Only South African entrepreneurs were studied.
- The influence of gender on the results of the study, was not considered.

1.6 Operational Definitions

Table 1 provides a description of the operational definitions.

Table 1: Operational Definitions

Term	Definition
Entrepreneurial Mindset	The entrepreneurial mindset has three key factors: cognitive ability, behavioural competencies, and emotional aspects (Kuratko et al., 2021). Improving these three attributes develops self-leadership, inventiveness, and improvisation to readily act and organise under uncertain conditions to create and exploit business opportunities, irrespective of any external constraints that may be present (Kuratko et al., 2021). Moreover, having the correct mindset empowers the entrepreneur with the necessary risk appetite, the ambition to succeed, and the eagerness to acquire new skills to start and develop new business ventures (Bosman & Fernhaber, 2019; Kuratko et al., 2021).
Informal Sector	The informal sector is not regulated, and business activity is not directed by formal contractual agreements (Etim & Daramola, 2020).
Survivalist Enterprises	A business that operates in the informal sector, mostly in the township, where there is low market potential (Ledingoane & Viljoen, 2020). The revenue produced by this business is usually below the income level.
Survivalist Entrepreneurs	Survivalist entrepreneurs operate microenterprises with a survival objective to protect their livelihoods and provide for their families in under-resourced communities (Du Toit et al., 2020). They usually receive little to no assistance from government-led initiatives due to the informal nature of their enterprises (Asoba & Mefi, 2021).
Entrepreneurial Education	The research adopts the perspective of Gwija et al., (2014), which describes entrepreneurial education as an educator empowering a learner with the required entrepreneurial knowledge, capabilities, competence, and personal behavioural development to operate a business successfully. In the context of the study, this is defined as local training programs organized by either community, government, or organizations aimed at skill development for survival entrepreneurs, including coaching or mentoring provided by other entrepreneurs or business professionals, as well as workshops or seminars that offer informal learning opportunities aimed at developing specific entrepreneurial skills.

1.7 Outline of the Report

The opening chapter provides the rationale and insights into the selected area of research, providing the background of the research problem and objectives. An empirical review of the literature is then presented in the second chapter, evaluating the critical concepts that have been applied through similar studies, providing justification of the research questions, and permitting the identification of gaps in the literature. This chapter also delivers a conceptual framework comparing and contrasting various theoretical frameworks to guide the research. These frameworks enabled the formulation of hypotheses or statements of expectation that were evaluated in the study.

An outline of the proposed methodology for the study and the research design, which is based on a pragmatism paradigm using a quantitative approach to explore and examine the research, is presented in the third chapter. Finally, an analysis of the study is presented, and the results are interpreted and summarised to offer a unique perspective on the resolution of the study. The report concludes with the future implications for the research and recommendations.

1.8 Summary

The informal economy encourages economic growth, providing just over 17% of total employment. The township economy forms a significant part of the informal sector as most of the enterprises that operate in this environment are based in townships and are created by survivalist entrepreneurs out of the necessity for subsistence. However, these survivalist entrepreneurs fail to grow or sustain their businesses, most of which fail within five years of inception.

The study focused on Soweto, one of the largest townships in the City of Johannesburg. Much like in most townships across South Africa, survivalist entrepreneurs who operate in this environment are faced with numerous socio-economic challenges that contribute to high levels of poverty and low household income levels. The research sought to understand and evaluate the self-inclination and the resilience of these entrepreneurs to overcome adversity to grow their businesses. The growth and development of these enterprises could provide a much-needed solution to income generation and poverty alleviation in these overpopulated and underdeveloped communities.

The research aimed to create a form of reference and provide insights into the entrepreneurial ecosystem of survivalist entrepreneurs in the township of Soweto. This knowledge would empower survivalist entrepreneurs with a conceptual framework that could be leveraged to increase entrepreneurial performance to achieve business growth and sustained competitiveness and significantly contribute to the practice of entrepreneurship.

Policymakers would also benefit from the research as it might be used to formulate legislation or guidelines to address the socio-economic challenges encountered by survivalist entrepreneurs. Most importantly, local township communities could use the literature to identify how the entrepreneurial ecosystem contributes to this problem and how it might be addressed through community-led developmental initiatives.

To ensure the effectiveness of the study, it only focused on South African-born survivalist entrepreneurs who operate informal enterprises in the township of Soweto. The research also eliminated non-profit and non-governmental organisations as it sought to evaluate enterprises with profit-making potential.

Chapter 2: Literature Review

2.1 Introduction

The purpose of the literature review was first to investigate similar forms of research that investigate the development of survivalist entrepreneurs through the enhancement of the entrepreneurial mindset in township economies. Second, an analysis of the correlation between cognitive capability and business performance uncovered the research gaps supported by empirical evidence to guide the direction of the research. The review of the theoretical literature led to the utilisation and expansion of an available conceptual framework established through prior investigations. The literature review addressed the following question: *What role do the entrepreneurial ecosystem, education, and mindset have in the development or success of the survivalist entrepreneur?*

A pragmatism paradigm was adopted to conduct a critical review of the literature to evaluate the concepts and methodologies that provided practical resolutions and greater insights into the survivalist entrepreneurs' entrepreneurial mindset, their business motives and the constraints that contributed to their limited success and failure in the township of Soweto.

2.2 Empirical Literature Review

2.2.1 Defining Survivalist Entrepreneurs

Survivalist entrepreneurs can be classified as persons who are driven into entrepreneurship in order to survive and not due to the desire to pursue opportunities or profit motives (Mapuranga et al., 2021). These individuals struggle to find employment and form part of the poor working class. They have limited opportunities for finding alternative gainful employment and are compelled by their circumstances to employ a survival strategy to create a source of income to alleviate the effects of poverty (Ntoyanto & Khumalo, 2021).

Survivalist entrepreneurs operate businesses that require minimal capital investment and struggle to generate income levels above the poverty line. Most survivalist entrepreneurs lack formal training, relevant business knowledge, and expertise (Mapuranga et al., 2021). Mapuranga et al. (2021) classify survival entrepreneurship and informal businesses into three categories: (1) lack or infringement of economic regulations, (2) small-scale operations, and (3) engaging in prohibited or illegal activities.

Survivalist entrepreneurs are distinct from the normal systematic or opportunity-driven entrepreneurs who explore business prospects for profit, opportunity development, and innovation. Survivalist entrepreneurs are often seen as short-term players in the economy instead of potential contributors to development (Ranyane, 2015). However, some survivalist entrepreneurs may have the ability to develop and legitimise their businesses over time.

2.2.2 The Township of Soweto

Soweto consists of the largest population in Johannesburg, with residents occupying 24% of the city. However, the population figures do not correlate with the employment rate, which is currently at 43%, making Soweto the region with the highest unemployment rate in the city (Ministry of Cooperative Governance and Traditional Affairs, 2020). Moreover, the township experiences considerable poverty levels and very low household income levels. Most survivalist entrepreneurs in the township of Soweto fail to develop past the initial stage, and their businesses remain fixed in their survivalist nature or fail within five years of inception, as examined in research by Asoba and Mefi (2021), which references literature from Choto et al. (2014) and Iwu et al. (2016).

The plight of local survivalist entrepreneurs has correspondingly created an opportunity for their foreign counterparts, who are now in control of almost 50% of informal businesses (Lamb et al., 2019). It is crucial to acknowledge that the immigrant entrepreneur is subjected to significantly worse socio-economic and political conditions, such as xenophobic attacks and poor government policy regulation. However, they tend to be more resilient and successful (Tengeh, 2016).

2.2.3 Survivalist Entrepreneur Growth Challenges

2.2.3.1 Entrepreneurial Ecosystem

External socio-economic environment factors impact the performance of entrepreneurs and, unfortunately, most of these factors are outside the entrepreneur's control and this complexity often leads to business failure (Ibidunni et al., 2021). The environment in which entrepreneurs operate, as well as their level of expertise, directly affects their entrepreneurial self-efficacy (Luo et al., 2022). Urban & Ndou (2019) assert that an enterprise's success primarily depends on the environment in which the entrepreneur is operating, regardless of the person's own capability and competence.

In the townships, survivalist entrepreneurs function in a resource-constrained environment that is not conducive to personal or economic development. The success of these informal entrepreneurs is affected by several socio-economic issues, such as dilapidated and underdeveloped infrastructure, high levels of poverty, low levels of skills, and the absence of business support services (Omonona et al., 2021).

Research from Ledingoane and Viljoen (2020) further explains that these entrepreneurs attribute their limited potential for success to poor economic infrastructure, restricted access to funding, increased cost of municipal services, increased competition from migrant traders and larger retailers, strikes and crime and the exorbitant cost of technology. Du Toit et al. (2020) identify that spatial patterns also have an impact on informal entrepreneurship because townships are often built 3 to 8 kilometres away from a region's main economic centres, a legacy of the country's pre-democratic apartheid past.

2.2.3.2 Education

A constant recurring theme in the literature describing the challenges faced by survivalist entrepreneurs is their lack of education and training. Iwu and Opute (2019) argue that survivalist entrepreneurs do not meet the requirements from a human capital perspective – referring to poor educational backgrounds, limited experience, and the lack of relevant knowledge, competence, levels of intellect, and entrepreneurial awareness and judgment. The typical survivalist entrepreneur has low levels of education and experience, and most are without formal qualifications (Manyaka-Boshielo, 2017); in contrast, most opportunity-driven entrepreneurs can be described as highly skilled and technical individuals who already possess an advanced mentality in problem-solving and innovation.

A study conducted by Jiatong et al. (2021) demonstrates a positive correlation between entrepreneurial education and mindset. Education increases awareness and capability, improves comprehension, and aids the individual in establishing a sustainable philosophy about entrepreneurship (Handayati et al., 2020). Research emphasises education as an antecedent variable, critical to sustaining the relationship between the entrepreneurial mindset and the entrepreneurial process (Cui & Bell, 2022). It is through this development that entrepreneurs acquire knowledge and skills and create the correct behaviours required for growing a successful enterprise.

2.2.4 Entrepreneurial mindset

Entrepreneurial success is typically evaluated based on the outcomes of an enterprise or the entrepreneur, such as revenue generation or enterprise growth, and it fails to consider the readiness and required changes in the mental ability of individuals who engage in the entrepreneurial process (Wigner et al., 2022). Thus, it is necessary to evaluate the entrepreneurial mindset.

In the context of this study, the concept applies to survivalist entrepreneurs operating under a highly volatile and uncertain environment and seeking to establish the status of the survivalist entrepreneurial mindset. Thereafter, a comparison must be made with the entrepreneurial mindset of systematic or opportunity-driven entrepreneurs to understand the deviation between the two different perspectives and the influence they have on entrepreneurial success.

2.2.4.1 Status of the Survivalist Entrepreneurial Mindset

Choto et al. (2014) refer to survivalist entrepreneurs as having a negative or fixed mindset, stating that they cannot maintain the required dedication and appetite to enable business success and that they consider themselves as having no control over changing the course of their lives. Choto et al. (2014) also describe these entrepreneurs as having limited awareness of their own potential as they are limited by their cognitive capacity to understand general business concepts and adopt a long-term perspective on business performance and sustainability. Therefore, they cannot maximise their potential to navigate and overcome business challenges.

A study investigating the link between poverty and the entrepreneurial mindset conducted by Morris and Tucker (2021) highlights the scarcity mindset as one of the dimensions that prevents those who are living in poverty from developing an effective entrepreneurial mindset that will enable them to build successful businesses. Further, they state that the effects of experiencing poverty have a negative psychological and emotional impact on entrepreneurs who come from impoverished backgrounds.

In contradiction to the view expressed by the authors above, a qualitative study investigating survivalist entrepreneurs operating in marginalised communities commissioned by Du Toit et al. (2020) identified some positive common themes relating to the survivalist entrepreneurial mindset; these included having a positive attitude and the ability to be creative and innovative to solve challenges in the environment around them and demonstrating that they wanted to be

purposefully engaged in constructive occupation to improve their economic situation. Furthermore, there was evidence that demonstrated that some of the respondents were not just concerned about self-preservation but also had an altruistic mindset to uplift and empower their community. Their study results also presented significant levels of perseverance and a strong work ethic among some of the respondents.

2.2.4.2 Desired Entrepreneurial Mindset

A study conducted by Lynch and Corbett (2021) that explored the entrepreneurial mindset emphasised the argument that expanding the entrepreneurial mindset is a key contributor to building sustainable business ventures and that the entrepreneur needs to continuously develop this mental capacity to avoid failure. Furthermore, the entrepreneurial mindset empowers entrepreneurs to adapt to change easily and prepares them to find solutions to complex challenges to advance their entrepreneurial objectives of every kind and not just enterprise development (Lynch & Corbett, 2021).

Lynch and Corbett (2021) describe the duality that exists within the concept of the entrepreneurial mindset as continuously moving between elaboration – feasibility and planning – and implementation – application and review. It is this relationship that drives the ability to activate the cognitive processes that facilitate the opportunity evolution from ideation to application, advancing entrepreneurial objectives and increasing the ability to overcome adversity when the desired results are not achieved.

2.2.5 Motivations for Survival Entrepreneurs

In a study investigating survivalist entrepreneurs and the eradication of poverty and unemployment, Iwu and Opute (2019) identify five key motives for survival entrepreneurs; these include establishing a source of income and creating an alternative source of income to increase earning potential to support the family. Another motive – a common theme among women participants – was referred to as “breaking the glass ceiling” (Iwu & Opute, 2019, p. 1442) and interpreted as the need to prove to their male counterparts that they can venture into business. Meeting social requirements, having a purpose and keeping active were further motives. Table 2 shows the corresponding comments from the qualitative research that led to the motivations mentioned here.

Table 2: Motivations for Survivalist Entrepreneurs (Iwu & Opute, 2019)

	Motivations	Selected comments from Interviewed Survivalist Entrepreneurs
1	Desire to escape unemployment	<p>"I did not have a job, so I decided to do something to make some money to keep myself going" (Interviewee 1)</p> <p>"I am happy I decided to open this shop, it has helped me to be active instead staying unemployed and idle" (Interviewee 2)</p> <p>"For a long time, I was unemployed, and I was tired of searching for job, so with the help of relatives, I was able to raise some money to start this business" (Interviewee 4)</p> <p>"Nothing else to do and the bills are piling up, so I decided to start my business " (Interviewee 7).</p>
2	To earn extra money to support family	<p>"My husband and I have two children. But I also have six siblings who look up to me for help. So, to assist my husband in meeting immediate and extended family support needs, I started my business" (Interviewee 6)</p> <p>"Actually, I am a pensioner, but I started my business to keep busy and make small money to support my family" (Interviewee 3)</p> <p>"No doubt, I started my business so that I can earn more money to assist my family" (Interviewee 11)</p>
3	Breaking the glass ceiling factor	<p>"Another reason why I started my business is because I wanted to prove that, unlike most men think, women can also run businesses" (Interviewee 6)</p> <p>"I am a divorcee, and a major reason why I started this business is because I want to show my former husband, who is a business man, that as a woman, I can also do what men can do" (Interviewee 9).</p> <p>"As a woman, I just wanted to run my own business" (Interviewee 10)</p>
4	Meeting social needs	<p>"I have friends who have their own businesses, so starting my own business makes me feel in their social class" (Interviewee 2)</p> <p>"Starting my own business gives me pride to associate with people in high social class" (Interviewee 10)</p>
5	To get something doing and stay active	<p>"Although I aim to make profit in this business, but making profit was not the major reason why I started my business. I am a widow and I can live a fairly good life from the pensions I receive since my husband died. The major reason why I started my business is because I want to get something doing and stay active" (Interviewee 8)</p> <p>"I am a pensioner, but I started my business to keep busy," (Interviewee 3)</p>

Survivalist entrepreneurs are perceived to be unmotivated to create new growth opportunities. However, Knox et al. (2019) in their study into the growth aspirations of informal enterprises refutes this perception, referencing Choto et al. (2014) who presented that "ninety per cent of the survivalist entrepreneurs that enrolled in incubator programmes did so because they aspired to grow" (Knox et al., 2019, p. 7). These authors further present an alternative argument, stating that informal enterprises should not be measured by their profit generation ability but rather should be evaluated on their potential impact on the local economy (Knox et al., 2019; Neves & Du Toit, 2012).

2.3 Theoretical Literature Review

2.3.1 Cognitive Dissonance Theory

A mindset is a predetermined approach or frame of mind that influences or predisposes an individual's perspective as well as how they act and behave consistently (Robinson & Gough, 2020). A deeper understanding of the entrepreneurial mindset can be achieved through the application of cognitive psychology. Given that the term 'mindset' refers to the collective

cognitive processes that are activated to start and complete any task or activity (Lynch & Corbett, 2021), cognitive consistency theories applied to entrepreneurship suggest that people need to develop behaviours, values, beliefs, emotions and attitudes consistent with the practice of entrepreneurship (Alves & Yang, 2022).

Alves and Yang (2022), further demonstrate how these cognitive mechanisms contribute to (1) improved entrepreneurship competence – which is required to evolve through the life cycle of a business, (2) cognitive flexibility and creativity – which focus on the capability of the entrepreneur to effectively organise their resources and use their skills and awareness to spontaneously respond and adapt to uncertainty, (3) the substantial effect on entrepreneurial self-efficacy and (4) the level of optimism in facing challenges and overcoming failure.

This perspective leverages the cognitive dissonance theory which correspondingly states that when there is cognitive inconsistency or discrepancy, it causes psychological discomfort, also referred to as dissonance discomfort, which will encourage the entrepreneur to eliminate the dissonance (Harmon-Jones & Mills, 2019). Figure 1, shows a visual interpretation of the process flow illustrating the application of cognitive dissonance theory (Festinger, 1957; Gaya, 2017).

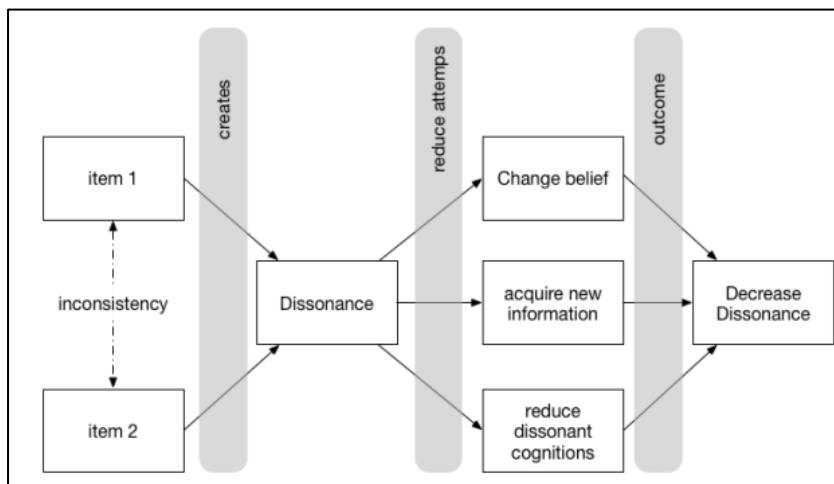


Figure 1: Cognitive Dissonance Theory (Festinger, 1957; Gaya, 2017)

2.3.2 Social Cognitive Theory

The social cognitive theory investigates human behaviour from a psychological perspective. The main principles of the theory are based on people's interactions with their social surroundings that have a significant impact on their learning ability, their level of motivation

and their self-regulation (Schunk & DiBenedetto, 2020). This theory can assist survivalist entrepreneurs in developing their entrepreneurial mindset, enabling them to understand their own cognitive aptitude regarding self-determination, resilience and commitment, all of which are factors that will ultimately determine the level of effort they will implement to realise entrepreneurial effectiveness (Bandura et al., 1999; Elnadi & Gheith, 2021).

Based on social cognitive theory, self-efficacy beliefs have a crucial role in the development of human cognition as it empowers individuals with the ability to regulate their actions, emotions, and behaviours (Schunk & Pajares, 2010). Figure 2 presents a visual illustration of social cognitive theory.

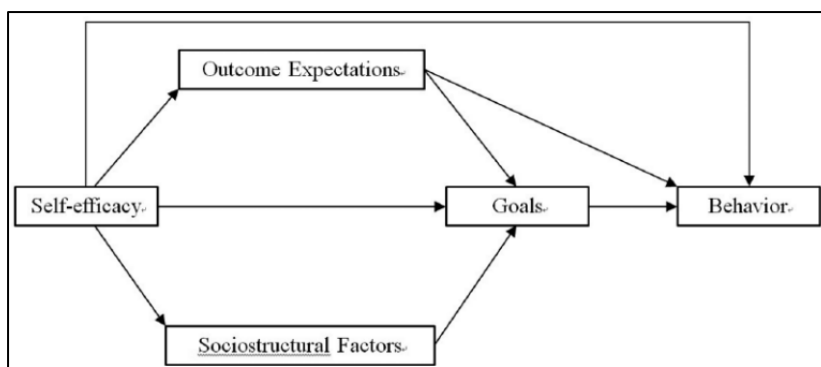


Figure 2: Visual Illustration of Social Cognitive Theory (Bandura, 2004; Lee et al., 2018)

2.3.3 Effectuation Theory

The effectuation theory refers to the process of decision-making in uncertain environments; the logic provides entrepreneurs with the ability to be agile in their response to volatile situations or resource-constrained environments (Matalamäki, 2017). Entrepreneurs who adopt this approach develop a resource-based view, creating opportunities by leveraging the limited resources available as opposed to using a predictive planning perspective.

Survivalist entrepreneurs are created out of urgency and, therefore, may not follow a predetermined process. These entrepreneurs need to be able to act and effectively use the resources at their disposal to start and grow their businesses. Neck et al. (2018) agree with this perspective as they believe that entrepreneurship does not follow a direct process based on planning and predetermined objectives. Entrepreneurship rather requires a method that can be improved through continuous learning and practice, applying the creation logic aimed to achieve business objectives by taking advantage of the available resources in an uncertain

business environment. This concept is similar to the approach taken by survivalist entrepreneurs.

2.3.4 Conceptual Framework for Entrepreneurs

Cognitive dissonance theory provides a framework of how the survivalist entrepreneur's mindset, through psychological discomfort, can be motivated to improve and correct the inconsistencies brought on by the impoverished township environment. The theory provides the entrepreneur with a purpose to achieve the required behavioural outcomes. However, this is assuming an optimistic outcome.

Contrastingly, cognitive theories can also explain how negativity in the mind can lead to maladaptive behaviour that is reinforced through repetition leading to increased anxiety and depression and producing adverse and undesirable results (LeMoulta & Gotlib, 2019). This explains the current reality of these survivalist entrepreneurs, where a challenging political, economic and social environment perpetuates and reinforces poverty and inequality. Thus, these entrepreneurs are compelled to focus only on creating a source of sustenance for themselves and their families (Iwu & Opute, 2019).

The literature considers entrepreneurial learning through the application of Bandura's social cognitive theory which emphasises the importance of self-belief in the cognitive process and the decisive role it has in stimulating motivation and creating sustainable behavioural change (Schunk & DiBenedetto, 2020).

Chen (2022), referencing Schunk & Pajares (2010), describes the social cognitive theory as a psychological perspective that encourages individuals to have the cognitive ability to effectively manage internal biological factors, take initiative and apply self-regulation to prevent themselves from being negatively impacted by external factors in their environment. These authors further maintain that self-efficacy enables the necessary self-influence to achieve personal goals and facilitates the transformation from the real self to the ideal self. The theory provides direction on how learning and development can be applied to survivalist entrepreneurs to enhance their entrepreneurial mindset.

The conceptual framework shown in Figure 3 was derived from the research to investigate the influence of the entrepreneurial mindset on improving the entrepreneurial effectiveness of

survivalist entrepreneurs to achieve entrepreneurial success and growth in the township of Soweto and evaluate their readiness to overcome their adverse environment.

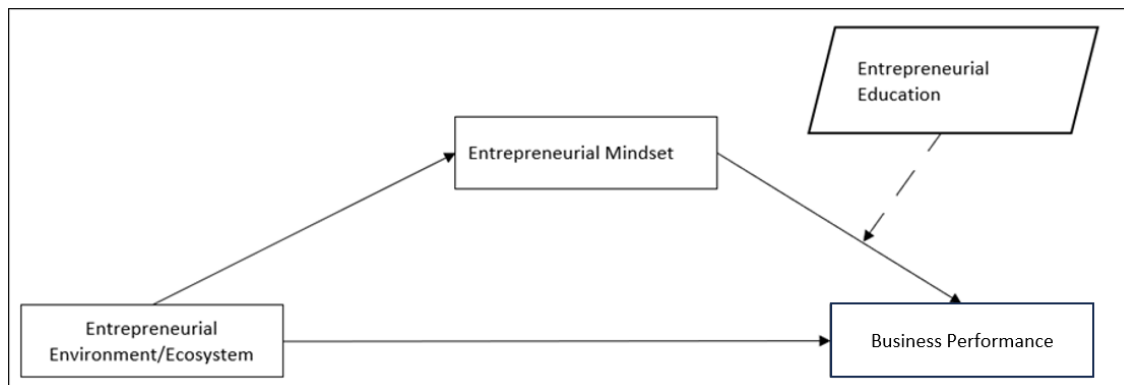


Figure 3: Conceptual Framework for Enterprise Growth

The independent variable of the framework is the entrepreneurial environment and is based on interpretations of the entrepreneurial ecosystem by Isenberg (2010), Stam and Bosma (2015) and Urban and Ndou (2019) which describes six interdependent variables that facilitate successful entrepreneurship within an environment. These are (1) access to suitable infrastructure and institutional assistance, (2) a conducive market for trading goods and services, (3) access to finance, (4) policy certainty with good governance and leadership, (5) exceptionally skilled human resources and (6) a supportive entrepreneurial culture.

Entrepreneurial education is the moderating variable which is based on a research done by Iwu et al. (2021). This variable focuses on the perceived benefits of improving the entrepreneurial mindset by increasing innovation and equipping entrepreneurs with essential business management expertise and the ability to leverage the resources around them. The entrepreneurial mindset, as interpreted by Kuratko et al. (2021), includes emotional, cognitive and behavioural characteristics and mediates the relationship between the environmental factors and entrepreneurial business performance.

The synthesis of the relationships explored in the review of the literature and the resultant conceptual framework shown in Figure 3 led to the following hypotheses:

- H1: Entrepreneurial ecosystems in the township of Soweto have a considerable influence on survivalist entrepreneurs achieving business performance.
- H2: The entrepreneurial ecosystem has a significant influence on the survivalist entrepreneurial mindset in the township of Soweto.

Academics have identified that the ecosystem has a positive predictive influence on the development of entrepreneurial capability. Societal norms, academic systems and family background are crucial to the development of entrepreneurial competence. The environment provides the necessary support for entrepreneurs to start, scale and commercialise their business ventures (Luo et al., 2022).

- H3: Entrepreneurial education moderates the relationship between the entrepreneurial mindset and business performance.

Iwu et al. (2021) describe entrepreneurial education as the foundation of entrepreneurial action as it has a significant impact on the entrepreneurial mindset and encourages entrepreneurial intention. It also creates innovative thinking, promotes entrepreneurial awareness, and improves business performance. This is achieved by instilling the correct attitudes, principles, and beliefs and through education and training in the correct knowledge and skills.

- H4: Improved entrepreneurial mindset has a positive influence on business performance in the context of Soweto.
- H5: Entrepreneurial mindset mediates the relationship between entrepreneurial ecosystem and business performance (indirect effect).

The entrepreneurial mindset is the culmination of intentions and competence in the cognitive process entrepreneurs apply for critical decision-making, opportunity identification, value creation and business performance. It refers to connecting various components of entrepreneurship to advance entrepreneurial objectives, continuously improving business venture opportunities by effectively using the available resources (Kuratko et al., 2021). Lastly, it empowers the entrepreneur with the ability to overcome complex challenges and difficulties (Lynch & Corbett, 2021).

2.4 Chapter Summary

The literature review was guided by preceding investigations into the operational components of entrepreneurship, which could contribute to the development of survivalist entrepreneurs

and enable them to build effective, reliable and successful enterprises. The analysis of the study was directed to pursue resolutions that could be applied to the research problem and to identify gaps in the literature that could be tested against the research questions.

The theoretical review of the literature explored how various aspects of entrepreneurship contributed to creating entrepreneurs that could grow and create successful business ventures. Furthermore, the study sought to examine how these factors could be improved through the deliberate application of the entrepreneurial mindset. Incorporating learning that considers cognitive consistency theories and sociological theories to reconstruct the survivalist mindset could improve entrepreneurial success. This approach was then utilised to generate a conceptual framework for entrepreneurs to improve business performance. The framework was evaluated against the context of the study.

Chapter 3: Research Methodology

3.1 Introduction

This chapter begins by exploring the research methodology adopted for the study, detailing the procedures and methodological selections used for identifying, sampling, collecting and interpreting data to analyse the research problem. The research paradigm, which established the philosophical underpinnings that directed the research strategy, is also outlined. Furthermore, the quality of the research that was assessed for consistency and accuracy through reliability and validity testing is explained. The chapter concludes by considering the ethical issues.

3.2 Research Paradigm

A positivist paradigm was used to guide the research strategy. As the key relationships that affect the growth and development of survivalist entrepreneurs had to be identified, adopting an interpretivist philosophy would not be as valuable as employing a realist or positivist paradigm ontology. Hence, the decision was to utilise a positivist research philosophy as the overarching approach. This perspective depends on the collection of measurable data that can then be statistically examined and is based on the hypothetico-deductive method (Park et al., 2020).

Positivism is based on the confirmation of prior knowledge and investigation through the application of hypothesis testing, with the findings used to guide and improve future studies (Park et al., 2020). Park et al. (2020) further explain that this philosophy focuses on using quantitative analysis to identify associations in data, making this approach suitable for evaluating and generating an understanding of how the various variables of entrepreneurship are influenced by the entrepreneurial mindset.

The study, which investigated the entrepreneurial ecosystem, education and mindset of survivalist entrepreneurs, began with the identification of the phenomenon – the lack of growth enterprises in the informal sector. Thereafter, hypotheses, which focused on how the entrepreneurial mindset of the survival entrepreneurs operating in this environment can be developed to improve their self-efficacy and enable them to build successful businesses, were formulated. Empirical evidence was used to determine the validity of the hypothesis to address the research problem.

3.3 Methodological Decisions

A quantitative approach was selected because the research sought to test existing psychological theories against the research problem. Alharahsheh & Pius (2020) state that quantitative research is often utilised to assess existing ideology or concepts, quantifying discrete or continuous data based on application to a specific phenomenon.

3.4 Research Design

The research paper adopted a realist paradigm and applied deductive methodology throughout the investigation. A cross-sectional study was used to gather the necessary data to effectively examine the hypotheses developed through the review of the literature. A self-administered survey was used to collect the primary data from the population sample. Participants either completed an online questionnaire electronically for those with access to the internet or physical copies were made available for those without an internet connection to complete manually.

The cross-sectional research design enabled the collection of data from multiple individuals at a single point in time. It provided a convenient technique to evaluate and develop a broad understanding of the interactions between distinct factors and situations (Hunziker & Blankenagel, 2021). However, this approach was not without its weaknesses in that the survey or questionnaire was completed only once within a set timeframe making it difficult to establish causality (Woodside, 2011).

3.5 Population

The target population of interest for the study was survivalist entrepreneurs in the township of Soweto. These individuals are characterised by owning and operating a business in the informal sector. Their businesses engage in low-income-producing activities as they operate out of necessity rather than the pursuit of opportunity. However, the study sought to gain a better understanding of the growth and success of these entrepreneurs in the informal sector and, therefore, it considered a broad cross-section of survivalist entrepreneurs in the township at various stages of their enterprise development.

3.6 Sample Size and Targeted Sample

In a research paper investigating the justification of sample size, Lakens (2022) mentions six approaches, listed in Table 3, to determine the sample size in quantitative research. Survivalist entrepreneurs are not registered with any official organisation or association as they operate informally, making it difficult to quantify the sample size. Thus, for this study, a heuristic approach, guided by prior literature investigating simple size justification and similar studies conducted in the same context, was adopted. However, Lakens (2022) cautions that one should not simply aim for the same sample size as used in previous studies, explaining that this approach can only be adopted if the size justification applies to the current study.

Table 3: Approaches to Determining the Sample Size (Lakens, 2022)

Type of justification	When is this justification applicable?
Measure entire population	A researcher can specify the entire population, it is finite, and it is possible to measure (almost) every entity in the population.
Resource constraints	Limited resources are the primary reason for the choice of the sample size a researcher can collect.
Accuracy	The research question focusses on the size of a parameter, and a researcher collects sufficient data to have an estimate with a desired level of accuracy.
A-priori power analysis	The research question has the aim to test whether certain effect sizes can be statistically rejected with a desired statistical power.
Heuristics	A researcher decides upon the sample size based on a heuristic, general rule or norm that is described in the literature, or communicated orally.
No justification	A researcher has no reason to choose a specific sample size, or does not have a clearly specified inferential goal and wants to communicate this honestly.

A study by Koran (2016), which investigated sample size requirements for confirmatory factor analysis models, established the minimum sample sizes for satisfactory convergence, power and bias; they ranged from 93 to 108 based on the factor determinacy which was placed at either 0.4 or 0.8. This study referenced and built on research conducted by Jackson et al. (2013) which suggested a minimum sample size of 50 observations. However, Lakens (2022) advises that such investigations must not be incorrectly cited to justify collecting any more than the suggested minimum sample size without acknowledging the effect size. Based on the informality of survivalist entrepreneurs and the complexities of quantifying their size, this study aimed for a sample size of 110 respondents.

3.7 Sampling Method

Cluster or area sampling was used to identify and extract data from potential participants. Cluster sampling is typically used when the population and the desired sample size are

particularly large. This technique refers to a probability sampling method where a large population is separated into smaller clusters and then the sample is randomly chosen from the selected clusters (Simkus, 2022). Therefore, to conduct the investigation, individuals that made up the population were grouped into clusters based on geographic location and organised into a single cluster based on their neighbourhood or local region. Then, simple random sampling was used to determine the clusters or groups that would be involved in the study. Thereafter, individual survivalist entrepreneurs were randomly selected from the different clusters to form the sample of the study.

Convenience sampling was employed, based on participant availability and accessibility within the designated cluster. The convenience sampling method provides an efficient and inexpensive method to complete the sample size (Stratton, 2021); this was carried out through in-person recruitment. These decisions considered resource constraints – the geographical proximity of the participants, their perceived inclination to engage and participate in the research and the time available to complete the study.

3.8 Data Collection Procedure

A questionnaire was created and distributed to the target sample. The researcher physically identified and approached entrepreneurs who fell within the boundaries of the study. The population was subdivided into smaller groups based on their geographical location and then random sample selection was used to select the clusters that would represent the population. After that, the participants in a particular cluster were randomly sampled through a combination of convenience and snowball sampling.

Due to the limitation that survivalist entrepreneurs may have due to time, the research conducted structured interviews based on the survey in groups to eliminate any difficulties and ensure that the participants completed the questionnaire timeously. This approach also assisted in resolving any literacy or comprehension issues that might have arisen as the researcher was available to translate and explain, ensuring their understanding of the questions.

The use of the internet and web-based platforms was restricted as survivalist entrepreneurs list the exorbitant cost of technology as one of their growth constraints (Ledingoane & Viljoen, 2020), meaning that most of the target sample did not have access to technology. However, the internet option was made available to those who had access to a computer or smartphone with a stable internet connection.

3.9 Research Instrument

The research instrument consisted of five sections. The first part gathered the participants' demographic profiles. This section consisted of five variables: age, level of education, years of experience, location in the township of Soweto and reason for operating in the informal sector. Pre-selected reasons adopted from the motivations for survivalist entrepreneurs provided by Iwu and Opute (2019) as presented in Table 2 were offered. The four other sections were extracted from validated research instruments from prior sources of literature. All the items were measured on a seven-point Likert scale (1 = strongly disagree and 7 = strongly agree).

The second section was adopted from Iwu et al. (2021). This section also included a seven-point Likert scale to assess the survivalist entrepreneur's perception of entrepreneurship education. The third section evaluated the respondent's entrepreneurial mindset using a seven-item scale adopted by Handayati et al. (2020). The fourth section covered the entrepreneurial ecosystem factors using a scale adopted by Elnadi & Gheith (2021). The final section assessed enterprise success, the dependent variable, by using a six-item scale to assess performance adopted from González-Benito et al. (2008) which compared the respondents' business performance against that of their competitors.

Appendix B presents a summary of the research instrument.

3.10 Data Analysis and Interpretation

SPSS statistical software was used for data analysis. Descriptive and inferential techniques were used to identify trends in the statistics and evaluate the hypotheses. Descriptive statistics provided an analysis of the distinctive population characteristics, such as the mean, standard deviation, range, skewness and kurtosis, and inferential statistics were formulated to develop models to detect relationships between the different variables.

3.10.1 Descriptive Statistics

Descriptive statistics were used to systematically summarise the data by describing and characterising the relationships that existed between the variables in the sample (Kaur et al., 2018). The demographic statistics were descriptive and included the age, education level, years of experience, geographic location and motive for operating in the informal sector. These

served as control variables as they might have influenced the results, even though they were constant and unchanged throughout the investigation.

3.10.2 Validity and Reliability

Reliability and validity tests were used to assess the quality, dependability and credibility of the measurements and findings of the research instrument. Reliability is concerned with the reproducibility, consistency and stability of the instrument, while validity is the degree to which a measurement accurately measures the stated area of the investigation (Taherdoost, 2016). Sürücü & Maslakci (2020) indicate that researchers should aim for high validity and reliability in their measurements to obtain precise and reliable findings and to minimise any measurement error that might occur.

3.10.3 Hypothesis Testing

To test all the hypotheses, a single moderated regression model was used as this approach is more effective and statistically powerful. The conceptual framework in Figure 3 perfectly represents a moderated mediation model. Wen & Ye (2014) define moderated mediation as the result of a moderator moderating a mediation effect. The result is referred to as moderated mediation and the model is known as the moderated mediation model.

3.11 Ethical Considerations

The study explored survivalist entrepreneurs, a group that may be considered vulnerable due to the nature of their work and the context in which they operate. As previously noted in the literature review, these entrepreneurs are forced into entrepreneurship out of necessity to protect their livelihood and not by the recognition of opportunity advancement.

The study sought to protect the confidentiality and anonymity of those who contributed to the research. The information collected was stored and processed securely to safeguard the privacy and integrity of the respondents. A consent form was attached to each survey, informing each participant about the objective of the research, and ensuring that they were aware that involvement was voluntary and to prevent any undue influence or coercion during the completion of the questionnaire. The participants had the right to withdraw their consent at any point during the process.

The literature that is referred to in this study is included in in-text citations and references to ensure that no plagiarism occurs and that the original author's ideas and concepts are represented fairly, ensuring that credit is given to the original sources. Furthermore, an ethics clearance request was made to the Witwatersrand Business School's Ethics Committee to obtain permission to conduct the research and collect the data. This guarantees that the research procedure complies with the ethics standards established by the university.

3.12 Chapter Summary

This chapter outlined the research design and methodology that was used to guide this study. A positivist paradigm was adopted to guide the quantitative research strategy. The population sample was subdivided into smaller groups based on the participant's geographical location within Soweto, this was done through cluster sampling. Thereafter, the participants in a particular cluster were randomly sampled using the convenience sampling technique.

A cross-sectional study was conducted, and the data was collected through a self-administered questionnaire, targeting at least 110 respondents. The responses on the questionnaire were entered into a spreadsheet Excel, and the data was cleaned and exported to SPSS statistical software for data analysis. Using the statistical software, the data were evaluated using descriptive and inferential statistics techniques to identify trends in the data and test the hypotheses. The analysis derived from the statistics are presented and discussed in Chapter 4.

Chapter 4: Presentation of Results

4.1 Introduction

The results of the research are presented and examined in this chapter of the study. The preceding chapter characterised the target population as survivalist entrepreneurs operating in the township of Soweto. This chapter begins by detailing the data screening procedure and then goes on to a description of the demographic profile of the respondents in question. It then proceeds to assess the construct validity and reliability of the measurement of the scales. The chapter concludes with the findings of the hypotheses testing.

4.2 Data Validation and Screening

The data screening process evaluated the data for accuracy and consistency and assessed for any missing values to ensure the quality of the data set. In total, the data set consisted of 125 cases and 33 questions. In total from the 125 observations, only four had missing values. The missing values accounted for 0.35% of the complete data set.

Although the missing values formed a very small percentage of the complete data set, it was still important to check whether the values were missing completely at random (MCAR). This was confirmed using Little's MCAR test, which was performed using SPSS. The significant value ($p = 0.931$) from Little's MCAR test was greater than the significance level of 0.05. Therefore, the null hypothesis that the missing values were MCAR was supported.

The data imputation function on SPSS was then used to replace the missing values, this method was selected because it does not add bias or distortion in the complete data set. After the data imputation, the data set was complete and ready for further analysis.

4.3 Sample Characteristics

4.3.1 Age of Respondents

The data indicated a significant age distribution among the surveyed population and, therefore, participants were categorised into four age groups. The first was made up of those who were between the ages of 19 and 29; the survey consisted of 10.4% of responses from this age group. A significant portion of the study consisted primarily of individuals who were between the ages of 30 and 40. Of the 125 respondents, this age group constituted 52.8% of the population. The

third age group included individuals that fell within the 41 to 50 age range; they made up 28% of the data. Lastly, the group with the lowest percentage, accounting for 8.8% of the participants, was the 51 to 60 years of age population. Table 5 presents this data graphically.

Table 4: Age of Respondents

		Age			
		Frequency	Per cent	Valid per cent	Cumulative per cent
Valid	19–29	13	10,4	10,4	10,4
	30–40	66	52,8	52,8	63,2
	41–50	35	28,0	28,0	91,2
	51–60	11	8,8	8,8	100,0
	Total	125	100,0	100,0	

4.3.2 Location

The data displayed a distribution of respondents throughout many parts of the township of Soweto, revealing information about the geographical distribution of the sampled respondents. Pimville and Protea Glen had the least number of participants, with 4.8% and 3.2%, respectively. Meadowlands contributed 14.4%, followed by the district of Dube, which had a participation of 16%. The community of Kliptown was the second largest contributor, with 22.4% of respondents. The area of Orlando had the most participation, accounting for 24% of all responses. Figure 4 presents the distribution of the respondents.

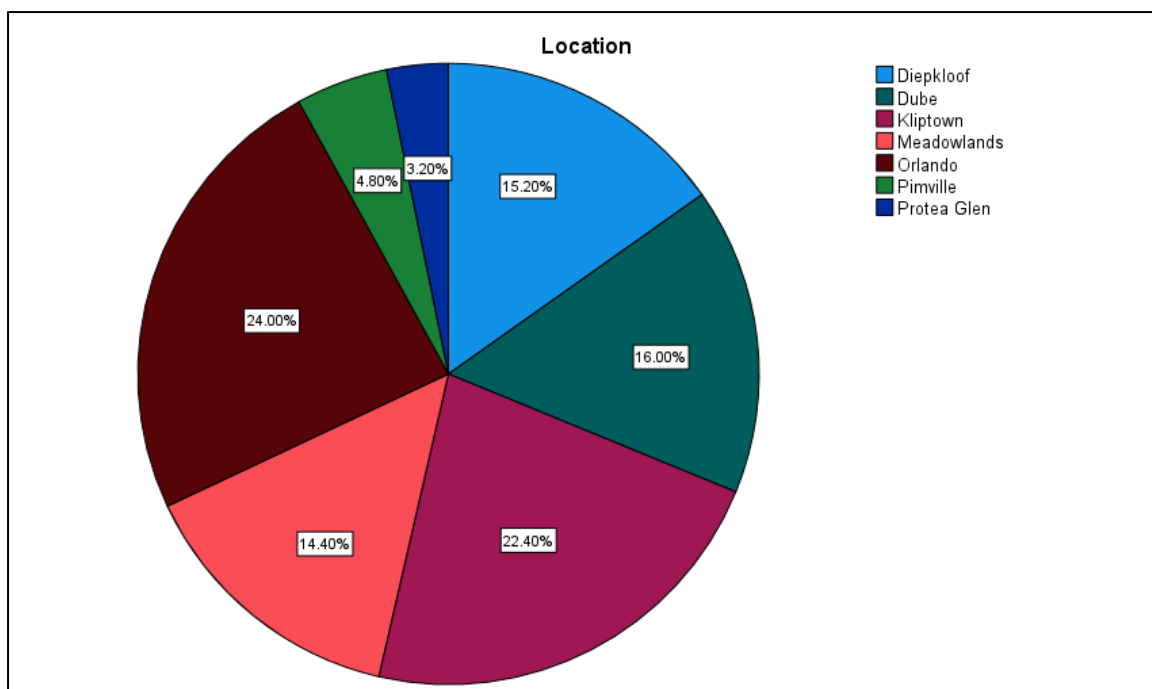


Figure 4: Distribution of Respondents

4.3.3 Education Level

The education levels varied across the surveyed participants. The data showed that the majority of the respondents had completed matric but had no tertiary education; this group constituted 39.2% of the total population. Those who had started school but did not matriculate were the second largest group, contributing 29.6% of responses. Individuals without a formal education made up 24% of the sampled population. The group with the lowest representation, with only 9 respondents and making up only 7.2%, were those with an undergraduate qualification.

The cumulative proportion of those who had begun school but had not completed it as well as those who had no formal education, amounted to more than half of all participants – 53.6%. This discovery is significant as it offers valuable insights into the educational levels of the majority of survivalist entrepreneurs. Figure 5 presents the education levels of the respondents.

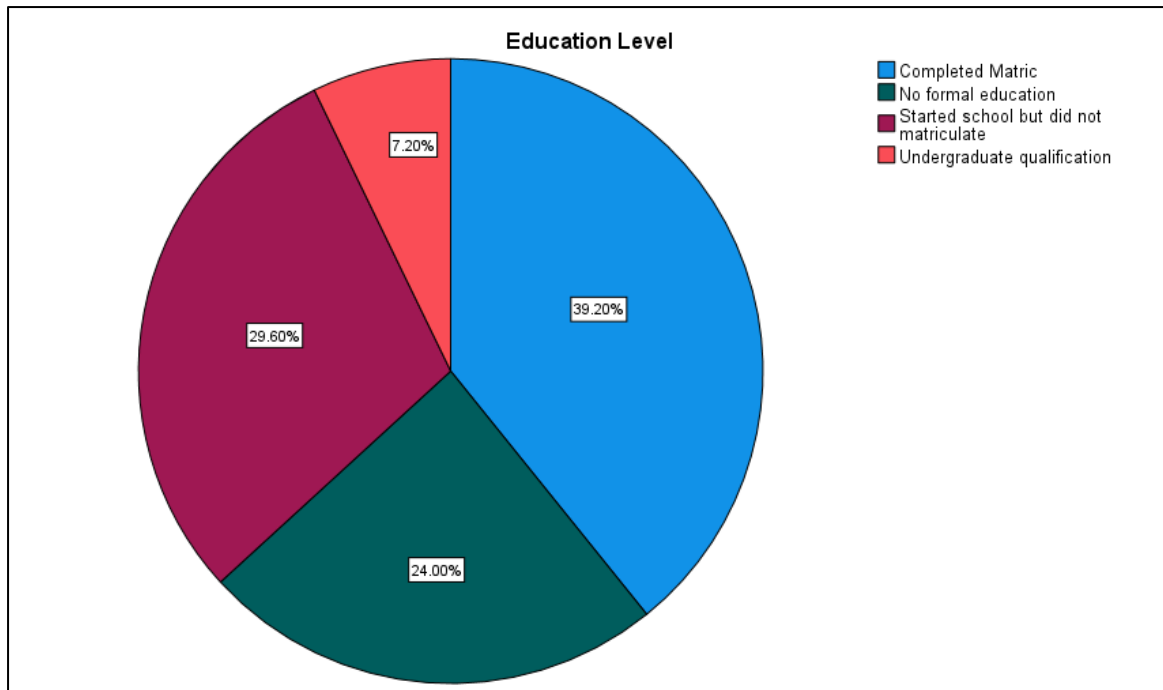


Figure 5: Education Levels

4.3.4 Reason for Operating in the Informal Sector

The respondents were required to specify their reason for operating in the informal sector from five pre-selected reasons referenced from the motivations for survivalist entrepreneurs adopted from Iwu & Opute (2019) and presented in Table 2. The various choices, together with their matching data set, are presented in Table 5.

Table 5: Reasons for Informal Business

Reason for operating in the informal sector					
		Frequency	Per cent	Valid per cent	Cumulative per cent
Valid	Creating a source of income	54	43,2	43,2	43,2
	Meeting social requirements	4	3,2	3,2	46,4
	Overcoming the barriers set to prevent access to advancement	21	16,8	16,8	63,2
	To earn extra money to support family	43	34,4	34,4	97,6
	To get something to do and stay active	3	2,4	2,4	100,0
	Total	125	100,0	100,0	

A significant portion of the respondents listed creating a source of income to escape unemployment as the main reason for their existence in the informal sector. The second most selected option was to earn extra income to support their families. Both these reasons had a cumulative total of 83.2%. This finding is significant as it was consistent with the survivalist nature of the entrepreneurs who were being investigated.

4.4 Validity Analysis – Exploratory Factor Analysis

A validity test was done using SPSS statistical software. An exploratory factor analysis was conducted to discover groups of related variables that showed the underlying factors in the data. This was done to confirm either the convergence or the discrimination of the research constructs in the study. The dataset of 125 rows was prepared and Kaiser-Meyer-Olkin (KMO) and Bartlett’s test of sphericity were selected. Exploratory factor analysis was performed on the scales of entrepreneurial education, entrepreneurial mindset, entrepreneurial ecosystems, and business performance using the principal axis factoring method for the factor extraction and oblimin rotation for factor rotation.

4.4.1 Sampling Adequacy

The KMO measure of sampling adequacy and Bartlett's test of sphericity tests are important for evaluating the factorability of the data (Shrestha, 2021). Shrestha (2021) further states that a KMO value between 0.8 and 1 is deemed acceptable or adequate and that Bartlett's test of sphericity should produce a significant value < 0.5 .

The KMO test produced a value of 0.878, indicating that the sample adequacy was good enough to proceed with factor analysis as it was far greater than the minimum acceptable levels, which fall between 0.6 and 0.69 (Shrestha, 2021). Bartlett's test of sphericity indicated that factor analysis may be done as it had a significant value < 0.05 ; the p-value is 0.000. These results are presented in Table 7.

Table 6: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0,878
Bartlett's Test of Sphericity	Approx. Chi-Square	2978,130
	df	406
	Sig.	0,000

4.4.2 Total Variance Explained

According to Table 8, the variance was divided into 29 potential extraction factors, with only 6 of them having an eigenvalue larger than one. A general guideline to extract the number of factors above the eigenvalue greater than one is given by Kaiser's criterion (Yong & Pearce, 2013). Yong and Pearce (2013) further state in their research that using only the general guideline may result in an overestimation of the factors retained and advise that a scree test should also be used to support the selection number of factors that are retained.

Table 7: Total Variance Explained

Total Variance Explained						
Component	Initial Eigenvalues			Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12,182	42,008	42,008	12,182	42,008	42,008
2	4,035	13,914	55,922	4,035	13,914	55,922
3	1,677	5,784	61,706	1,677	5,784	61,706
4	1,329	4,584	66,290	1,329	4,584	66,290
5	1,062	3,663	69,953	1,062	3,663	69,953
6	1,023	3,527	73,480	1,023	3,527	73,480
7	0,784	2,703	76,183			
8	0,755	2,604	78,787			
9	0,607	2,093	80,880			
10	0,573	1,977	82,858			
11	0,546	1,882	84,740			
12	0,522	1,800	86,540			
13	0,483	1,667	88,207			
14	0,402	1,388	89,594			
15	0,373	1,286	90,880			
16	0,338	1,164	92,044			
17	0,327	1,127	93,171			
18	0,317	1,093	94,264			
19	0,267	0,919	95,183			
20	0,247	0,853	96,036			
21	0,224	0,772	96,808			
22	0,194	0,668	97,476			
23	0,163	0,560	98,036			
24	0,140	0,483	98,520			
25	0,130	0,449	98,969			
26	0,104	0,359	99,328			
27	0,083	0,287	99,614			
28	0,062	0,213	99,828			
29	0,050	0,172	100,000			

Extraction Method: Principal Component Analysis.

The scree plot (Figure 6) supports the choice of four components as it shows the eigenvalues levelling out after the fourth component. Therefore, only four factors were selected for the solution as they reflect the main essential structure of the data and explain a total of 66.29% of the variation.

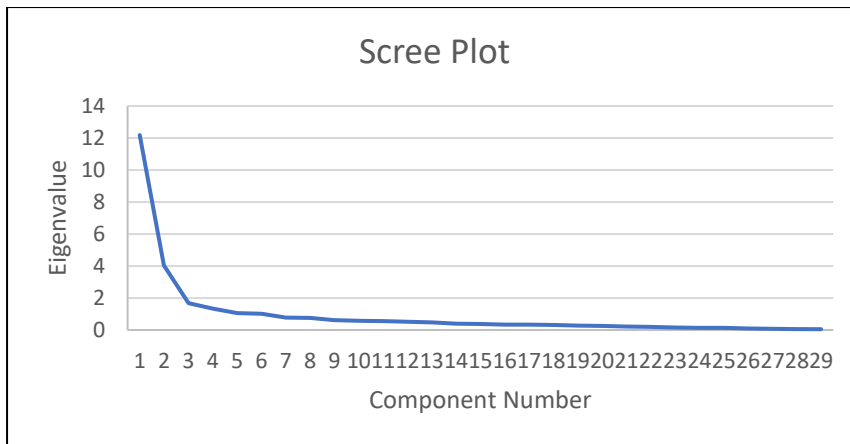


Figure 6: Scree Plot

4.4.3 Rotation of Factors

The principal axis extraction method and the oblimin rotation method were used as the factors were expected to correlate. Additionally, this combination results in fewer cross-loadings as it aims to simplify the complexity of both the structure and the statistical results (Yong & Pearce, 2013). A cut-off level of 0.4 was selected for factor loading cut-off, as described by Hair et al. (1995) in their book which gives practical guidance for doing different forms of multivariate statistical analysis. They characterise a cut-off level of 0.3 as having minimal importance, one of 0.4 to be significant and anything above 0.5 to be very significant.

Based on the results, Factor 1, entrepreneurial ecosystems, retained all the 7 items initially presented and Factor 2, entrepreneurial education, also retained all 10 items. All 6 items from Factor 3, business performance, were also retained. However, Factor 4, entrepreneurial mindset, lost one item; just 5 items were retained.

Furthermore, Factor 4 had one item from Factor 2 with loadings of 0.429 and 0.422, respectively, suggesting a moderate association. This correlation is reasonable as the item from Factor 2 “Entrepreneurship_education2 Entrepreneurship education is a discipline that can promote self-reliance” focuses on a key theme (self-reliance) that has an impact on the role of the entrepreneurial mindset in entrepreneurship. Convergent validity was confirmed as all the items that were initially grouped converged on their own scales. Table 9 presents the pattern matrix.

Table 8: Pattern Matrix

Pattern Matrix ^a				
	Factor			
	1	2	3	4
Entrepreneurial_ecosystem4 Enabling Infrastructure	0,892			
Entrepreneurial_ecosystem2 Supportive Government Policies and Regulations	0,866			
Entrepreneurial_ecosystem1 Access to Finance	0,828			
Entrepreneurial_ecosystem5 Supportive Cultural Factors	0,821			
Entrepreneurial_ecosystem3 Supportive Government Programmes and Support	0,793			
Entrepreneurial_ecosystem6 Supportive Social Factors	0,712			
Entrepreneurial_ecosystem7 Excellent Education and Training	0,634			
Entrepreneurship_education5 Entrepreneurship education reduces poverty		0,788		
Entrepreneurship_education4 Entrepreneurial education decreases unemployment among youth		0,744		
Entrepreneurship_education10 Entrepreneurship education helps reduce the number of failed businesses		0,702		
Entrepreneurship_education6 Entrepreneurship education enhances creative and innovative ideas		0,688		
Entrepreneurship_education8 Entrepreneurship education equips graduates with business creation skills		0,668		
Entrepreneurship_education9 Entrepreneurship education helps in harnessing local resources		0,655		
Entrepreneurship_education7 Entrepreneurship education can facilitate the development of commerce in informal communities		0,644		
Entrepreneurship_education3 Entrepreneurship education promotes self-employment among people		0,596		
Entrepreneurship_education2 Entrepreneurship education is a discipline that can promote self-reliance		0,429		0,422
Entrepreneurship_education1 Entrepreneurship education is suitable for any economy		0,425		
Business_Performance2 Higher Sales Growth			-0,824	
Business_Performance6 High chances for New Product/Service Success			-0,707	
Business_Performance3 Higher Market Share Growth			-0,699	
Business_Performance1 More Profitability			-0,693	
Business_Performance5 Better Image and Reputation			-0,653	
Business_Performance4 Better Customer Satisfaction			-0,544	
Entrepreneurship_mindset4 I evaluated both opportunities and challenges associated with entrepreneurial activities.				0,751
Entrepreneurship_mindset3 I have considered the financial opportunities for involvement in entrepreneurial activities.				0,740
Entrepreneurship_mindset5 I've decided to pursue entrepreneurial ideas for business opportunities.				0,551
Entrepreneurship_mindset2 I've noticed the allocation of time for entrepreneurial activities.				0,502
Entrepreneurship_mindset1 I have thought about both the opportunities and challenges concerning entrepreneurial activities.				0,414
Entrepreneurship_mindset6 I have debated whether engaging in entrepreneurial activities would be beneficial for me.				

4.5 Reliability Analysis

Reliability refers to the consistency and stability of the measurement instrument to ensure repeatability under constant conditions (Taherdoost, 2016). Taherdoost (2016) notes that reliability testing is crucial as it ensures consistency across the components of the measuring instrument. The Cronbach's alpha coefficient is generally used to measure internal consistency and is considered a suitable measure of reliability when using Likert scales such as the ones used in this study (Schrum et al., 2020).

The output from the pattern matrix determined the number of items to be included in each factor. The factors were then selected individually and evaluated. The significant results from the reliability assessment are the Cronbach's alpha coefficient as well as the inter-item correlation figures and item-total information. An acceptable level for Cronbach's alpha coefficient is above 0.6 and for the inter-item correlation, a value greater than 0.30 is considered acceptable, the item-to-total correlation must be greater than 0.50 (Hajjar, 2018). Table 10 gives a summary of the reliability of the scales.

Table 9: Reliability of Measurement Scales

Construct	No. of items	Cronbach's alpha	Reliability level
Entrepreneurship education	10	0.895	Acceptable
Entrepreneurial mindset	5	0.817	Acceptable
Entrepreneurial ecosystem	7	0.948	Highly satisfactory
Business performance	6	0.939	Highly satisfactory

4.5.1 Factor 1 – Entrepreneurship Education

The first factor consisted of 10 items designed to measure various aspects of the perceived benefits of entrepreneurship education. The analysis was performed on a dataset comprising 125 cases, with no cases excluded from the analysis due to missing data. The Cronbach's alpha for entrepreneurial education was 0.895, indicating a high internal consistency. Standardisation slightly increased the alpha coefficient to 0.908, confirming its reliability (Table 11). The average inter-item correlation (Table 12) was 0.481, indicating moderate to strong relationships. The correlation ranged from 0.298 to 0.677, indicating a coherent construct. Removing any item from the scale did not significantly increase the alpha coefficient, indicating that each item contributed to its consistency (Table 13).

Table 10: Factor 1 – Reliability Statistics

Cronbach's Alpha Based on		
Cronbach's Alpha	Standardized Items	N of Items
0,895	0,908	10

Table 11: Factor 1 – Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	0,481	0,298	0,677	0,379	2,270	0,010	5

Table 12: Factor 1 – Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Entrepreneurship education is suitable for any economy	55,90	49,666	0,587	0,413	0,889
Entrepreneurship education is a discipline that can promote self-reliance	56,02	49,137	0,603	0,504	0,888
Entrepreneurship education promotes self-employment among people	55,88	49,502	0,685	0,537	0,886
Entrepreneurial education decreases unemployment among the youth	56,55	43,527	0,607	0,490	0,890
Entrepreneurship education reduces poverty	56,59	42,397	0,734	0,615	0,878
Entrepreneurship education enhances creative and innovative ideas	56,05	47,619	0,693	0,541	0,883
Entrepreneurship education can facilitate the development of commerce in informal ...	56,26	46,308	0,692	0,529	0,882
Entrepreneurship education equips graduates with business creation skills	56,17	46,718	0,692	0,522	0,882
Entrepreneurship education helps in harnessing local resources	56,44	43,051	0,697	0,557	0,881
Entrepreneurship education helps in reducing the number of failed businesses	56,70	41,916	0,660	0,476	0,887

4.5.2 Factor 2 – Entrepreneurial Mindset

The second factor included five items designed to evaluate the respondent’s entrepreneurial mindset. The analysis was also performed using the complete dataset, with no cases being excluded from the analysis. With a value of 0.817, Cronbach's alpha for entrepreneurial mindset demonstrated great internal consistency (Table 14). The alpha coefficient improved slightly to 0.823 after standardisation, indicating its reliability. A moderate to strong association was indicated by the mean inter-item correlation of 0.481 (Table 15). The correlation coefficient had a minimum value of 0.304 and a maximum of 0.646, suggesting an acceptable construct. The analysis confirmed that eliminating any of the items on the scale would not result in a significant increase in the alpha (Table 16).

Table 13: Factor 2 – Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0,817	0,823	5

Table 14: Factor 2 – Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	0,481	0,298	0,677	0,379	2,270	0,010	5

Table 15: Factor 2 – Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
I have thought about both the opportunities and challenges in relation to entrepreneurial activities.	22,83	14,955	0,566	0,402	0,794
I've noticed the allocation of time for entrepreneurial activities.	22,96	15,096	0,566	0,357	0,794
I have considered the financial opportunities for involvement in entrepreneurial activities.	22,53	14,423	0,662	0,492	0,767
I evaluated both opportunities and challenges associated with entrepreneurial activities.	22,71	13,262	0,743	0,596	0,740
I've decided to pursue entrepreneurial ideas for business opportunities.	22,69	13,587	0,537	0,354	0,811

4.5.3 Factor 3 – Entrepreneurial Ecosystem

Factor 3 consisted of seven items that measured the respondents' perceived perspective on the effectiveness of the entrepreneurial ecosystem in the township of Soweto. The scale produced a Cronbach's alpha of 0.948 (Table 17). A significantly strong association was indicated by the mean inter-item correlation of 0.728 (Table 18). The coefficient had a minimum value of 0.619 and a maximum of 0.852, further confirming the scale's reliability. The analysis demonstrated that Cronbach's alpha would not significantly change if any of the scale elements were removed (Table 19).

Table 16: Factor 3 – Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0,948	0,949	7

Table 17: Factor 3 – Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	0,728	0,619	0,852	0,233	1,377	0,004	7

Table 18: Factor 3 – Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Access to Finance	27,08	86,703	0,831	0,721	0,940
Supportive Government Policies and Regulations	27,05	86,299	0,849	0,791	0,938
Supportive Government Programs and Support	27,20	87,045	0,823	0,763	0,940
Enabling Infrastructure	26,88	85,341	0,864	0,792	0,937
Supportive Cultural	26,60	90,097	0,845	0,810	0,939
Supportive Social Factors	26,37	91,942	0,797	0,748	0,943
Excellent Education and Training	26,48	85,825	0,786	0,641	0,944

4.5.4 Factor 4 – Business Performance

The Cronbach's alpha for the fourth factor which focused on the scale that measured business performance was 0.939, indicating high internal consistency (Table 20). Table 21 presents the

summary item statistics for Factor 4. The analysis demonstrated that Cronbach's alpha would not significantly increase if any of the scale elements were removed (Table 22).

Table 19: Factor 4 – Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0,939	0,940	6

Table 20: Factor 4 – Summary Item Statistics

	Mean	Minimum	Maximum	Range	Minimum	Variance	N of Items
Inter-Item Correlations	0,722	0,629	0,871	0,242	1,386	0,006	6

Table 21: Factor 4 – Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
More Profitability	25,69	45,742	0,819	0,768	0,927
Higher Sales Growth	25,69	44,231	0,885	0,851	0,919
Higher Market Share Growth	25,81	43,458	0,841	0,755	0,926
Better Customer Satisfaction	25,10	47,824	0,790	0,771	0,931
Better Image and Reputation	24,99	48,075	0,814	0,786	0,929
High chances for New Product/Service Success	24,98	48,711	0,768	0,605	0,934

4.6 Descriptive Statistics and Normality Tests

Descriptive statistics and normality tests must be done before the correlation and the regression analysis as data that are not normally distributed may lead to the incorrect interpretation of the study (Mishra et al., 2019). Descriptive statistics, including histograms, normal probability, and the box plot, were generated to ensure the data were normally distributed. This confirms that the significance level (p-value) can be determined by using the resultant mean values.

Initially, the skewness and the kurtosis values were evaluated; these measure the asymmetry and the shape of the data distribution (Lee, 2009). An acceptable assumption for normality is that kurtosis results fall between -7 and +7 and that for skewness, the outcome ranges from -2 to +2 (Hair et al., 2010). Table 23 presents the descriptive statistics, including skewness and kurtosis.

Table 22: Descriptive Statistics (Including Skewness and Kurtosis)

	N	Mean	Std. Dev.	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Entrepreneurial_Education	125	6,2505	0,74911	-1,011	0,217	0,357	0,430
Entrepreneurial_Mindset	125	5,7148	0,89244	-0,714	0,217	0,198	0,430
Entrepreneurial_Ecosystem	125	4,4132	1,54403	0,172	0,217	-0,971	0,430
Business_Performance	125	5,0749	1,35324	-0,414	0,217	-0,090	0,430
Valid N (listwise)	125						

The histograms in Figure 7 were used to visualise the skewness and the central tendency of the data. Based on the SPSS analysis, the histograms can be interpreted as having a normal distribution as the majority of responses are concentrated in the central range.

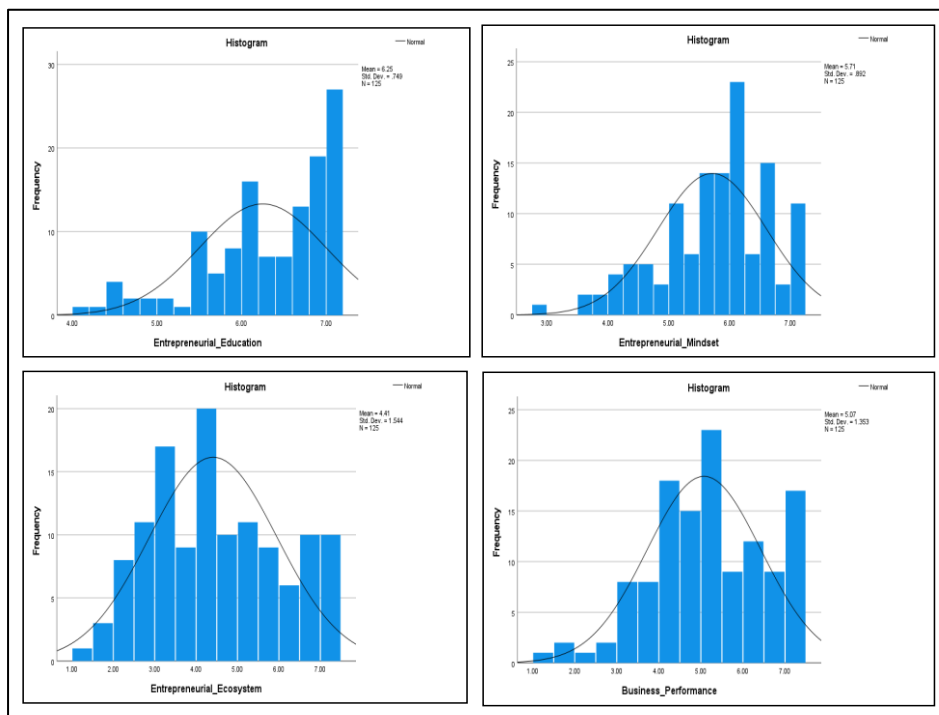


Figure 7: Histograms

The quantile-quantile (Q-Q) plot, which is shown in Figure 8, further supports that the sample is normally distributed as the data points align closely with the straight line that serves as a reference for comparing the ordered distribution of a test sample with the quantiles of a standard normal distribution (Henderson, 2006).

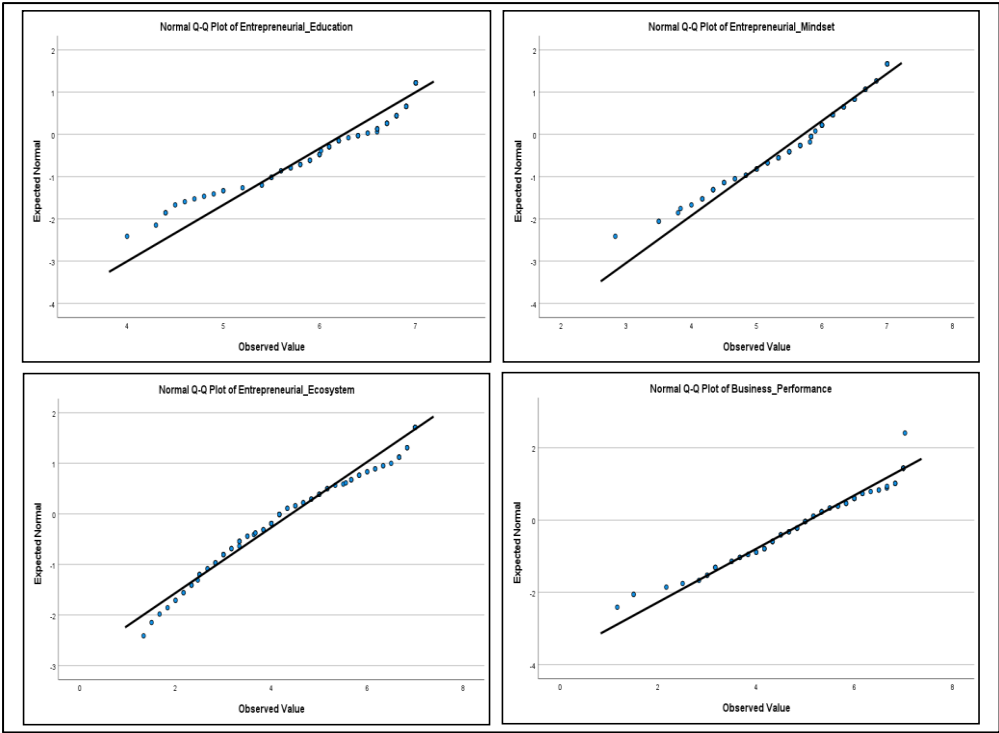


Figure 8: Q-Q Plots

Regression analysis is a method that evaluates the linear relationship between two variables, making it very sensitive to outliers (Walfish, 2006). Outliers in the data may also negatively affect the correlation analysis as it assesses the degree of association between variables (Aggarwal & Ranganathan, 2016). Hence, any outliers in the data must be eliminated before performing the correlation and the regression analysis. The box plots presented in Figure 9 indicate that there are no outliers in the data.

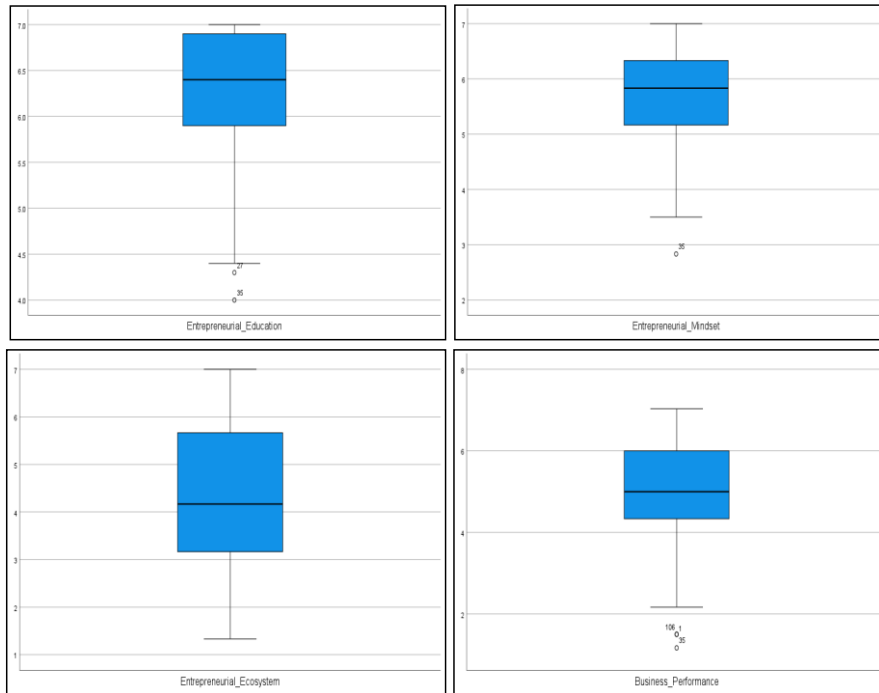


Figure 9: Box Plots

4.7 Correlation Analysis

The correlation analysis was done by calculating Pearson’s correlation coefficient, which requires the data to be normally distributed and assumes a direct relationship between the variables being assessed (Gogtay & Thatte, 2017). Based on an evaluation of the univariate properties of the variables, in conjunction with an examination of the normal probability plots, it was confirmed that the data for the variables were normally distributed.

The correlation analysis outcome in Table 24 presents that all the variables have statistically significant positive correlations, as they range from 0.344 to 0.715. These values suggest that within the context of the study, improvements in entrepreneurial education, mindset and ecosystem contribute to improvements in overall business performance.

The strongest correlation was between the entrepreneurial ecosystem and business performance ($r = 0.715$). This was followed by the relationship between entrepreneurial mindset and business performance, which was also relatively high ($r = 0.604$). The results presented a moderate to strong correlation between entrepreneurial education and business performance ($r = 0.422$), as well as entrepreneurial education and entrepreneurial ecosystem ($r = 0.473$). The

connection between entrepreneurial education and the entrepreneurial mindset was also significant ($r = 0.582$).

Table 23: Pearson's Correlation Coefficient

Correlations					
		Entrepreneurial_Education	Entrepreneurial_Mindset	Entrepreneurial_Ecosystem	Business_Performance
Entrepreneurial_Education	Pearson Correlation	--			
	N	125			
Entrepreneurial_Mindset	Pearson Correlation	.582**	--		
	Sig. (2-tailed)	0,000			
	N	125	125		
Entrepreneurial_Ecosystem	Pearson Correlation	.344**	.473**	--	
	Sig. (2-tailed)	0,000	0,000		
	N	125	125	125	
Business_Performance	Pearson Correlation	.422**	.604**	.715**	--
	Sig. (2-tailed)	0,000	0,000	0,000	
	N	125	125	125	125

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

4.8 Hypotheses Testing

The regression analysis was done through SPSS using the Andrew F. Hayes PROCESS macro function. This macro is generally used to perform conditional process analysis, mediation, moderation, and regression analysis (Hayes, 2017). The key variables for the models are classified according to Table 25.

Table 24: Regression Analysis – Variable Classification

	Description	Variable	Abbreviation
Y	Dependent variable	Business Performance	PERF
X	Independent variable	Entrepreneurial Ecosystem	ECO
M	Mediating variable	Entrepreneurial Mindset	MIND
W	Moderating variable	Entrepreneurial Education	EDU

A summary and the classification of the paths in the model are presented in Table 26.

Table 25: Conceptual Framework Summary

Hypothesis	Path
H1: Entrepreneurial Ecosystems in the township of Soweto has a significant relationship with Business Performance.	Path C
H2: The Entrepreneurial Ecosystem has a significant influence on entrepreneurial mindset in the township of Soweto.	Path A
H3: Entrepreneurial Education moderates the relationship between the entrepreneurial mindset and Enterprise Growth.	Path B3
H4: Improved entrepreneurial mindset has a positive influence on Business Performance in the context of Soweto.	Path B
H5: Entrepreneurial Mindset mediates the relationship between Entrepreneurial Ecosystem and Business Performance.	(indirect effect)

4.8.1 Model Summary

The model summary confirms that all the variables significantly influence the dependent variable (Table 27). The variables account for 60.55% ($R^2 = .6055$) of the variance in business performance and a significant p-value ($p < .0000$).

Table 26: Business Performance – Model Summary

OUTCOME VARIABLE:						
PERF						
Model Summary						
R	R-sq	MSE	F	df1	df2	p
.7782	.6055	.7465	46.0507	4.0000	120.0000	.0000
Model						
	coeff	se	t	p	LLCI	ULCI
constant	-2.2615	3.4001	-.6651	.5072	-8.9934	4.4704
ECO	.4897	.0592	8.2731	.0000	.3725	.6069
MIND	.8365	.6319	1.3237	.1881	-.4146	2.0876
EDU	.4095	.5709	.7173	.4746	-.7208	1.5397
Int_1	-.0600	.1042	-.5755	.5660	-.2662	.1463

4.8.2 Hypothesis 1

The regression analysis results confirmed a positive relationship between the entrepreneurial ecosystem and business performance. The direct effects of the entrepreneurial ecosystem on business performance were significant, with a coefficient of .4897 and a p-value = .0000, which is less than 0,05. Further supporting the significance was that 0 does not fall within the confidence intervals LLCI and ULCI, which are 0.3725 and 0.6069, respectively (Table 28). These findings indicated that a favourable entrepreneurial ecosystem could significantly enhance business performance. Ecosystem is thus a significant predictor of performance and, thus, H1 is supported.

Table 27: Direct Effect of Entrepreneurial Ecosystem on Business Performance

Direct effect of X on Y					
Effect	se	t	p	LLCI	ULCI
.4897	.0592	8.2731	.0000	.3725	.6069

4.8.3 Hypothesis 2

The correlation coefficient ($R = 0.4731$) indicated a moderately positive relationship between the entrepreneurial ecosystem and the entrepreneurial mindset (Table 29). Entrepreneurial ecosystem accounted for 22.38% ($R^2 = .2238$) of the variance in the entrepreneurial mindset. The p-value ($p < .0000$) was significant, indicating a strong relationship between the two variables proving that the entrepreneurial ecosystem had a notable impact on the variance in entrepreneurial mindset.

Table 28: Entrepreneurial Mindset – Model Summary

OUTCOME VARIABLE: MIND							
Model Summary							
	R	R-sq	MSE	F	df1	df2	P
	.4731	.2238	.6232	35.4672	1.0000	123.0000	.0000
Model							
	coeff	se	t	p	LLCI	ULCI	
constant	4.5080	.2146	21.0081	.0000	4.0832	4.9327	
ECO	.2734	.0459	5.9554	.0000	.1826	.3643	

4.8.4 Hypothesis 3

However, the regression analysis did not support the hypothesis that entrepreneurial education moderates the relationship between entrepreneurial mindset and business performance. The interaction term (Int_1) between entrepreneurial mindset and entrepreneurial education, which evaluates the moderating influence, has a p-value of .5660 ($p > 0.05$) (Table 30). The lack of significance was further supported by the fact that 0 fell within the Lower-Level and Upper-Level Confidence Intervals (LLCI and ULCI), which are -0.2662 and 0.1463, respectively, as seen in Table 26. Furthermore, the change in R-squared ($R^2\text{-chng} = .0011$), which represents the amount of additional variance in the dependent variable business performance explained by the interaction term, is insignificant. Therefore, the hypothesis is rejected.

Table 29: Interaction Between Mindset and Education

Product terms key:						
Int_1:	MIND	x		EDU		
Test(s) of X by M interaction:						
F	df1	df2		p		
.2881	1.0000	119.0000		.5924		
Test(s) of highest order unconditional interaction(s):						
	R2-chng	F	df1	df2		p
M*W	.0011	.3312	1.0000	120.0000		.5660

Focal predict: MIND (M)						
Mod var: EDU (W)						

4.8.5 Hypothesis 4

The regression analysis did not support the hypothesis that an improved entrepreneurial mindset positively influences survivalist performance in the context of Soweto. As seen in Table 27, the entrepreneurial mindset had a coefficient of .8365 and a p-value of .1881 ($p > 0.05$), indicating that the relationship between the two variables was not significant. Therefore, it cannot be concluded that a developed entrepreneurial mindset substantially and positively impacts the business performance of these survivalist entrepreneurs operating in this informal environment. Therefore, H4 is rejected.

4.8.6 Hypothesis 5

The conditional indirect effects support the hypothesis that the entrepreneurial ecosystem had an impact on business performance via the mediation effect of the entrepreneurial mindset. The three different levels of entrepreneurial education are shown in Table 31; the effects of this indirect relationship were measured at 0.1386, 0.1238, and 0.1140, respectively. None of the bootstrap confidence levels of these values contain 0, indicating that the indirect effects were significant at different levels of entrepreneurial education. This supports Hypothesis 5.

Table 30: Conditional Indirect Effects of X on Y

Conditional indirect effects of X on Y:					
INDIRECT EFFECT:					
ECO	-> MIND	-> PERF			
	EDU	Effect	BootSE	BootLLCI	BootULCI
	5.5000	.1386	.0470	.0481	.2304
	6.4000	.1238	.0462	.0411	.2201
	7.0000	.1140	.0559	.0175	.2382

However, according to the moderated mediation index, there was no notable change in the strength of this indirect effect across different levels of entrepreneurial education as 0 is included in the confidence interval for this index as it ranges from -0.0689 to 0.0645 (Table 32).

Table 31: Index of Moderated Mediation

Index of moderated mediation:				
	Index	BootSE	BootLLCI	BootULCI
EDU	-.0164	.0341	-.0689	.0645

4.9 Chapter Summary

The data screen process cleaned and prepared the data for further analysis. Only four cases had missing values, accounting for 0.35% of the entire data collection. These errors were then replaced using the data imputation function in SPSS.

The ages for the surveyed population ranged from 19 to 60, with the 30 to 40 age group having the most contributions to the study at 52.8% of the population. The surveyed population comes from the following locations: Pimville, Protea Glen, Meadowlands, Klipspruit and Orlando, showing the geographical distribution of respondents in Soweto. The survey revealed that most survivalist entrepreneurs, accounting for 39.2% of the population, have completed matric but do not have a tertiary education. A total of 83.2% of respondents selected their primary reason for operating in the informal sector as creating a source of income and earning extra money to support their family, indicating a survivalist nature in these entrepreneurs.

The data screening enabled the next stage of the analysis, which was to assess the construct validity and reliability of the measurement scale. The KMO test produced a value of 0.878, indicating that the sample adequacy was sufficient to move ahead with factor analysis as it was far greater than the minimum acceptable levels which fall between 0.6 to 0.69, according to Shrestha (2021).

The total variance was divided into 29 potential extraction factors, with only 6 of them having an eigenvalue larger than one. However, a scree test was implemented to support the selection number of factors that were retained; it showed the eigenvalues levelling out after the fourth component. Therefore, only four factors were selected for the solution as they reflected the main essential structure of the data and explained a total of 66.29% of the variation.

The principal axis extraction technique and the oblimin rotation method were applied for the rotation of factors and 0.4 was selected for the factor loading cut-off. The convergent validity was confirmed as all the items converged on their own scales. All factors retained their items except for the entrepreneurial mindset, which lost one item. The Cronbach's alpha coefficient was used to confirm the reliability of the measurement scales. All factors achieved a Cronbach's alpha coefficient above the acceptable level ($\alpha = 0.80$).

The correlation analysis was guided by calculating Pearson's correlation coefficient and showed that all the variables had statistically significant positive correlations, ranging from 0.344 to 0.715. To test all the hypotheses, a single moderated regression model was used as this approach was more effective because the conceptual framework perfectly represented a moderated mediation model. The summary of the results from the hypothesis testing is shown in Table 33.

Table 32: Hypothesis Summary

Hypothesis	Statistical Significance	Supported
H1: The entrepreneurial ecosystem in the township of Soweto has a significant relationship with business performance.	The direct effect of ecosystems on performance is significant ($p < .0005$).	Yes
H2: The entrepreneurial ecosystem significantly influences the entrepreneurial mindset in the township of Soweto.	The direct effect of the ecosystem on mindset is significant ($p < .0005$).	Yes
H4: Improved entrepreneurial mindset positively influences business performance in the context of Soweto.	Mindset's direct effect on business performance is not significant ($p = .1881$), ($p > 0.05$).	No
Moderation		
H3: Entrepreneurial education moderates the relationship between the entrepreneurial mindset and business performance.	The interaction term between (mindset and education) on business performance is not significant ($p = .5660$).	No
Mediation		
H5: Entrepreneurial mindset mediates the relationship between entrepreneurial ecosystem and business performance (indirect effect).	The indirect effect of the ecosystem on performance through mindset is significant at all levels of education (bootstrap confidence intervals do not include 0).	Yes

Chapter 5: Discussion of the Results

5.1 Introduction

This study began by assessing the significance of the relationship between the entrepreneurial ecosystem and business performance to establish whether the resource-constraint environment was a predictor of business performance. The study also considered whether the informal environment had an influence on the effectiveness of the entrepreneurial mindset and how it could be used to identify opportunities or overcome the various challenges that impact the sustainable growth of the enterprises of survival entrepreneurs, evaluating whether the mindset had a positive influence on business performance. The moderating effect of education on the relationship between the entrepreneurial mindset and enterprise performance was evaluated. The research further examined the mediating effects of the entrepreneurial mindset on the relationship between the entrepreneurial environment and business performance.

The results from the empirical study are discussed and interpreted in this chapter to determine the extent to which the study's research objectives were achieved. The chapter begins with a discussion of the sample characteristics to understand the demographic profile of the research participants and concludes with an interpretation of the hypotheses testing.

5.2 Demographics and Sample Characteristics

5.2.1 Age

The first important characteristic that was established was age as that can offer valuable insights into how the different age groups perceive and understand the entrepreneurial ecosystem, education and mindset. Age can indicate the potential support mechanisms that can be used to improve business performance. Strydom (2015), in his paper on determining the survival of micro-businesses in Soweto, noted that the age of the owner is one of the key predictors of success.

The age distribution of the participants established that most of the entrepreneurs in the informal sector in Soweto were between the ages of 30 and 40; this is similar to what other studies have found about survivalist entrepreneurs operating in the township of Soweto (Moagi et al., 2021). Moagi et al. (2021) linked this to high levels of unemployment among this age group.

5.2.2 Education Levels

Many studies have found a significant and positive correlation between education and entrepreneurial or sustainable business success for both informal and formal businesses. (Ligthelm, 2012; Strydom, 2015). The results confirmed that the participants' main reason for operating in the informal economy was to earn extra money to support their families. This reason was common across all education levels but, especially, among those who had completed matric.

Notably, the data shows that most of the participants surveyed have completed matric. However, a significant portion of the participants did not have formal education or had started school but had not completed their matric. The statistics from the study further confirm that the group aged between 30 and 40 had the lowest levels of education, supporting why this group would form part of the high unemployment figures. Table 34 presents the education level of participants by age group.

Table 33 Education Level by Age Group

Education Level	Age			
	19-29 Count	30-40 Count	41-50 Count	51-60 Count
Completed Matric	4%	18%	15%	2%
No formal education	2%	11%	6%	4%
Started school but did not matriculate	4%	18%	6%	2%
Undergraduate qualification	0%	6%	1%	0%

5.2.3 Ecosystem

The results show that more respondents tend to agree with the view that their ecosystem provided some level of support for them, with 47% of the responses divided between 'Somewhat agree', 'Agree' and 'Strongly agree'. However, the histogram in Figure 10 indicates that the combined responses of this variable have a mean value of 4.41, indicating that a significant portion of the answers fall in the 'Neither agree/disagree' category. This suggests that better clarity on these factors may be required.

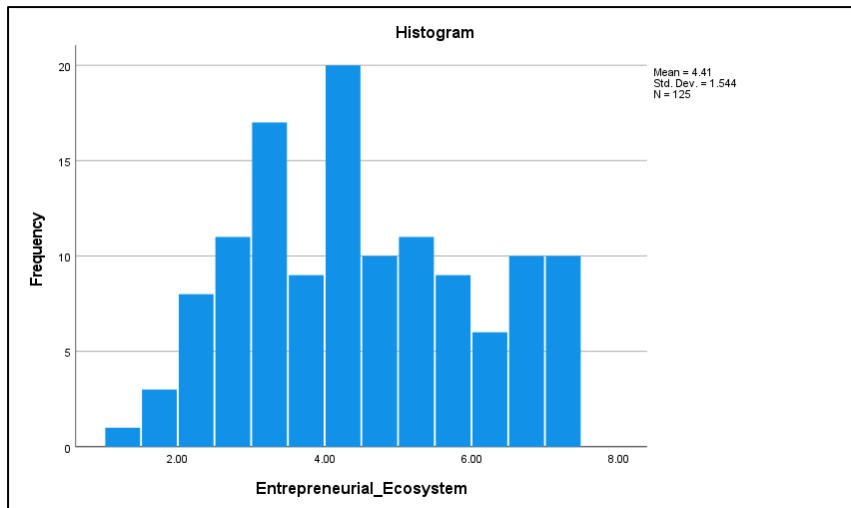


Figure 10: Entrepreneurial Ecosystem – Combined Responses

5.3 Discussion of Findings

5.3.1 Hypothesis 1

Hypothesis 1: Entrepreneurial ecosystems in the township of Soweto have a significant relationship with business performance.

A key research objective was to identify and understand the main issues affecting survival entrepreneurs' growth and development in Soweto's township. Therefore, it was important first to determine if the resource-constrained township environment influenced the performance of these survival entrepreneurs, as well as the significance of the relationship between the entrepreneurial ecosystem and the growth of these entrepreneurs.

The correlation and regression analyses confirmed a positive and significant relationship between the two variables. The person correlation presented a strong correlation between the two variables ($r = 0.715$) and the regression analysis confirmed that the direct effects of the entrepreneurial ecosystem on business performance were significant, with a coefficient of .4897 and a p-value = .0000. Therefore, these results agree with Ibidunni et al. (2021), who present that external socio-economic environment factors have an impact on the performance of entrepreneurs as was indicated in the literature review in Chapter 2.

However, the results from the regression model summary show that the ecosystem is not the only variable responsible for business performance, which deviates from the perspective of Urban and Ndou (2019), who offer that a business's success depends primarily on the

environment in which the entrepreneur is operating, regardless of the person's capability and competence – also highlighted in the literature review.

One such factor that could affect the strength and direction of the relationship between the two variables is that the entrepreneurial support levels vary across the different areas in the township of Soweto. As shown below in Table 34, the values of the means of the ecosystem variable are different for each of the geographical areas sampled in Soweto.

Table 34: Entrepreneurial Support Levels vs Location

Location	Entrepreneurial_Ecosystem	
	Mean	
Diepkloof	4,05	
Dube	5,19	
Kliptown	4,81	
Meadowlands	4,71	
Orlando	3,68	
Pimville	3,72	
Protea Glen	4,67	

The relationship could also have been improved by considering the individual differences among the survival entrepreneurs, such as different education levels, which also vary across the geographical areas of Soweto, as shown in Table 35.

Table 35: Education vs Location

Location	Education Level			
	Completed Matric	No formal education	Started school but did not matriculate	Undergraduate qualification
Diepkloof	12	2	5	0
Dube	5	5	5	5
Kliptown	8	8	9	3
Meadowlands	7	4	6	1
Orlando	10	10	10	0
Pimville	4	1	1	0
Protea Glen	3	0	1	0

5.3.2 Hypothesis 2

H2: The entrepreneurial ecosystem has a significant influence on the survivalist entrepreneurial mindset in the township of Soweto.

It was important to establish the current state of the survivalist entrepreneurial mindset before evaluating if the entrepreneurial ecosystem had any influence on the entrepreneurial mindset of these entrepreneurs. The review of the literature highlighted the importance of the entrepreneurial mindset, stating that it empowered entrepreneurs to adapt to change and find solutions to challenges, enabling them to advance their entrepreneurial objectives.

The literature review referenced Choto et al. (2014) who describe survival entrepreneurs as having a negative or fixed mindset and limited awareness regarding their potential. These factors prevented them from adopting a long-term perspective on business performance and sustainability. This was in contradiction to Du Toit et al. (2020) who claim the opposite and describe survival entrepreneurs as having a positive attitude with an altruistic mindset and seeking to be purposefully engaged in a constructive activity to improve their economic situation.

The data collected from the survey agrees with the perspective of Du Toit et al. (2020), as seen in figure 10, the combined responses of the entrepreneurial mindset variable, which has a mean value of 5.71, showing that a significant portion of the participants rate themselves between the 'Somewhat agree' and 'Agree' about having a positive entrepreneurial mindset.

The results obtained indicated a positive association between the entrepreneurial ecosystem and the entrepreneurial mindset. The regression analysis supported the second hypothesis, H2, indicating that the entrepreneurial ecosystem significantly and positively influenced the entrepreneurial mindset among survivalist entrepreneurs in the township of Soweto. The positive coefficient for the entrepreneurial ecosystem of 0.2734 and its significant p-value ($p = .0000$) confirmed that as the entrepreneurial ecosystem improves, the entrepreneurial mindset of survivalist entrepreneurs is likely to progress as well. However, the R-squared value ($R^2 = .2238$) and the Pearson correlation coefficient ($R = 0.473$) indicated only a moderate relationship between the two variables, meaning that while the entrepreneurial ecosystem is an essential factor for the entrepreneurial mindset, other significant factors impact the formation of the survivalist entrepreneurial mindset.

5.3.3 Hypothesis 3

H3: Entrepreneurial education moderates the relationship between the entrepreneurial mindset and business performance.

The regression analysis rejected the hypothesis that entrepreneurial education moderates the relationship between the entrepreneurial mindset and business performance. The interaction effect between entrepreneurial mindset and entrepreneurial education, which evaluates the moderating influence, had a considerably high p-value of .5660 ($p > 0.05$), with 0 falling within the confidence levels, meaning that entrepreneurial education does not significantly moderate the relationship between entrepreneurial mindset and business performance.

This notion is partially supported by the literature review, as it is cited that improving entrepreneurial education positively affects and enhances the entrepreneurial mindset (Jiatong et al., 2021). Moreover, this is also evident in the Pearson correlation analysis, which presented a moderate to strong relationship between entrepreneurial education and entrepreneurial mindset ($R = 0.582$). Nevertheless, although education may improve the entrepreneur's knowledge and skills and enable the implementation of correct behaviours, strengthening the entrepreneurial mindset, it does not always guarantee sustainable business performance and enterprise growth. Hence, H3 was rejected.

5.3.4 Hypothesis 4

H4: Improved entrepreneurial mindset has a positive influence on business performance in the context of Soweto.

H4 was also rejected as the direct effects of the entrepreneurial mindset on business performance are not significant. The regression analysis presented a high p-value of .1881 ($p > 0.05$). Entrepreneurial education merely promotes entrepreneurial awareness and improves entrepreneurial self-efficacy (Iwu et al., 2021), while apart from the internal entrepreneurial characteristics, other external business factors, such as competition, customers and other economic factors, must be considered (Shakeel et al., 2020). Hence, H4 was rejected as the mindset is not a significant predictor of performance.

5.3.5 Hypothesis 5

H5: Entrepreneurial mindset mediates the relationship between entrepreneurial ecosystem and business performance (indirect effect).

H5 theorises that the entrepreneurial mindset mediates the relationship between the entrepreneurial ecosystem and business performance. The indirect effects of the entrepreneurial ecosystem on business performance through entrepreneurial mindset show a relationship between the ecosystem and performance at low, moderate and high levels of mindset; at all three levels, 0 does not fall within the confidence interval, which suggests that mediation is statistically significant at all levels of entrepreneurial education. This supports the mediation hypothesis and, therefore, H5 was supported.

5.4 Chapter Summary

Chapter 5 compared and discussed the results of the study outlined in Chapter 4 concerning the different perspectives highlighted in the literature review presented in Chapter 2. The chapter began by contextualising and discussing the sample characteristics. The age of the participants offered insights into how the different age groups perceived entrepreneurship in the informal economy of Soweto.

Most of the participants fell in the 30 to 40 age group, a common finding to that of other studies about survival entrepreneurs operating in the township of Soweto. A key driver for this is that this age group suffers from high unemployment levels, causing these individuals to seek alternative sources of income in the informal economy to protect their livelihoods. Additionally, the education levels presented in the data analysis showed that a significant portion of the group aged 30 to 40 had the lowest levels of education, supporting why this group would form part of the high unemployment figures.

Thereafter, each hypothesis and its results were outlined and discussed. Hypothesis 1 was supported by the regression analysis, confirming that the direct effects of the entrepreneurial ecosystem on business performance were significant. However, the data showed that there are other factors that might impact the strength and direction of the relationship between the two variables, such as varying entrepreneurial support levels across the different areas in the township and the different education levels that also vary across the sampled areas of Soweto,

were not considered. Hypothesis 2 was also supported, confirming that as the entrepreneurial ecosystem improves, so does the entrepreneurial mindset.

Hypothesis 3 was rejected, meaning that entrepreneurial education does not significantly moderate the relationship between entrepreneurial mindset and business performance. Hypothesis 4 was also rejected as the regression analysis showed that the entrepreneurial mindset is not a significant predictor of business performance. Hypothesis 5 was supported, confirming that the entrepreneurial mindset mediates the relationship between the entrepreneurial ecosystem and business performance.

Chapter 6: Conclusion, Implications and Recommendations

6.1 Introduction

The final chapter concludes by addressing the objectives that were set out at the beginning of the study, comparing, and evaluating them against the discussions from Chapter 5. Thereafter, the implications of the research are discussed, and the limitations of the study are pointed out. The chapter closes with recommendations for future research.

6.2 Conclusion of the Findings

The first objective of the data collection was to determine what challenges the resource-constrained township environment of Soweto presents for survivalist entrepreneurs. This determination led to Hypothesis 1, which sought to evaluate whether the entrepreneurial ecosystem in the township of Soweto had a positive and significant influence on business performance. This hypothesis was supported as the Pearson correlation presented a strong correlation between the two variables, and the regression analysis confirmed that the direct effects of the entrepreneurial ecosystem on business performance were significant. This perspective was supported by the literature review, which highlighted that external socio-economic environment factors have an impact on the performance of entrepreneurs.

Thereafter, continuing with the evaluation of the influence of the entrepreneurial ecosystem, it was important to understand if it had a significant influence on the survivalist entrepreneurial mindset. This relationship was assessed through Hypothesis 2. H2 was supported as it was proven that the direct effect of the entrepreneurial ecosystem on entrepreneurial mindset was significant ($p < 0.05$). Before the confirmation of Hypothesis 2, the data provided valuable insight into the current mindset of the participants, describing them as having a positive attitude and seeking to be purposefully engaged in a constructive activity to improve their economic situation. This was important because it was in contrast to some of the literature that claims that survival entrepreneurs have a fixed mindset and limited awareness regarding their potential.

The second guiding objective for the data collection was directed at understanding Soweto's entrepreneurial education levels and their impact on survivalist entrepreneurs. This led to the development of Hypothesis 3, which theorised that entrepreneurial education moderated the relationship between the entrepreneurial mindset and business performance. This hypothesis

was not supported by the regression analysis as although education might improve the entrepreneur's capability and competence, strengthening the entrepreneurial mindset, does not always guarantee sustainable business performance and enterprise growth.

The third guiding objective sought to establish the extent to which the entrepreneurial mindset influences business performance for the survivalist entrepreneurs operating in the informal economy of Soweto. This led to the development of Hypothesis 4, which posited that the entrepreneurial mindset had a positive influence on the business performance of the entrepreneurs. This hypothesis was rejected because apart from the internal entrepreneurial characteristics, other external business factors facilitate or inhibit business performance. However, it was proven through the evaluation of Hypothesis 5 that the entrepreneurial mindset mediates the relationship between the entrepreneurial ecosystem and business performance.

6.3 Implications and Recommendations

The study showed that the entrepreneurial ecosystem directly impacts the business performance of survivalist entrepreneurs. Further investments into developing the resources and strengthening the support infrastructure in the township of Soweto will create more opportunities for survivalist entrepreneurs to improve their business performance.

Additionally, the study showed that those with increased education levels were not immune from systemic challenges, such as high unemployment, that might cause individuals to start informal businesses in the township. Therefore, creating educational programmes that focus on developing practical skills could have a positive effect, empowering survivalist entrepreneurs with the necessary skills to manage and grow their businesses effectively. Furthermore, to overcome the systemic challenges, government agencies and other key policymakers should develop legislation and policy guidelines that promote equal opportunities and access to resources.

6.4 Limitations of the Study

The limitations of the research are provided below:

- The study used a cross-sectional approach, which is not without its weaknesses in that the survey or questionnaire was completed only once, within a set timeframe, making it difficult to establish causality (Woodside, 2011).

- The data collection only considered six suburbs in Soweto due to resource constraints and geographical proximity; this may limit the generalisation of the research findings.

6.5 Recommendations for Future Research

Lamb et al. (2019) state that migrants are now in control of a significant portion of the informal township economy in South Africa. Research based on South African survivalist entrepreneurs shows that their businesses fail within five years of inception (Asoba & Mefi, 2021; Choto et al., 2014; Iwu et al., 2016). Future research should attempt to analyse, identify and understand the significant differences in the entrepreneurial mindset, the effective utilisation of the ecosystem, the difference in education levels and the impact thereof among local survivalist entrepreneurs and their foreign counterparts.

References

- Aggarwal, R., & Ranganathan, P. (2016). Common pitfalls in statistical analysis: The use of correlation techniques. *Perspectives in Clinical Research*, 187-190. doi:10.4103/2229-3485.192046
- Alharahsheh, H. H., & Pius, A. (2020). A Review of key paradigms: positivism VS interpretivism. *Global Academic Journal of Humanities and Social Science*, 2(3), 39-43. doi:10.36348/gajhss.2020.v02i03.001
- Alves, J., & Yang, W. (2022). Cognitive Mechanisms in Entrepreneurship Competence: Its Implication for Open Innovation. *Journal of Open Innovation: Technology, Market and Complexity*, 1-31. doi:https://doi.org/10.3390/joitmc8020065
- Andreoni, A., Mondliwa, P., Roberts, S., & Tregenna, F. (2021). *Structural transformation in South Africa: The challenges of inclusive industrial development in a middle-income country*. New York: Oxford University Press.
- Asoba, S. N., & Mefi, N. P. (2021). The Profit Motive And The Enabling Environment For Growth Of Survivalist Township Entrepreneurship: A Study At A Township In Cape Town. *Academy of Entrepreneurship Journal*, 1-10.
- Bandura, A., Freeman, W. H., & Lightsey, R. (1999). Self-Efficacy: The Exercise of Control. *Journal of Cognitive Psychotherapy*, 158-166.
- Bosman, L., & Fernhaber, S. (2019). Applying authentic learning through cultivation of the entrepreneurial mindset in the engineering classroom. *Education Sciences* 9(1).
- Cant, M. C. (2017). The Availability of Infrastructure in Townships: Is there Hope for Township Businesses? *International Review of Management and Marketing* 7(4), 108-115.
- Cant, M. C., & Rabie, C. (2018). Township SMME Sustainability: A South African Perspective. *Acta Universitatis Danubius. OEconomica, Danubius University of Galati, issue 14(7)*, 227-247.

- Chen, J. (2022). The effectiveness of self-regulated learning (SRL) interventions on L2 learning achievement, strategy employment and self-efficacy: A meta-analytic study. *Frontiers in Psychology, 13*, 1-17. doi: <https://doi.org/10.3389/fpsyg.2022.1021101>
- Choto, P., K.Tengeh, R., & Iwu, C. G. (2014). Daring to survive or to grow? The growth aspirations and challenges of survivalist entrepreneurs in South Africa. *Environmental Economics, 93*-101.
- Cui, J., & Bell, R. (2022). Behavioural entrepreneurial mindset: How entrepreneurial education activity impacts entrepreneurial intention and behaviour. *The International Journal of Management Education 20*(2). doi:<https://doi.org/10.1016/j.ijme.2022.100639>
- Danish, R., Asghar, J., Ahmad, Z., & Ali, H. (2019). Factors affecting “entrepreneurial culture”: The mediating role of creativity. *Journal of Innovation and Entrepreneurship 8*(14), 2-12.
- Department: Planning, Monitoring and Evaluation. (2017). *Research on the Limited Success of Entrepreneurial Activity by Locals in Townships and Rural Areas*. Pretoria: Department: Planning, Monitoring and Evaluation.
- Elnadi, M., & Gheith, M. H. (2021). Entrepreneurial ecosystem, entrepreneurial self-efficacy, and entrepreneurial intention in higher education: Evidence from Saudi Arabia. *The International Journal of Management Education entrepreneurial intention in higher education: Evidence from Saudi Arabia*.
- Etim, E., & Daramola, O. (2020). The Informal Sector and Economic Growth of South Africa and Nigeria: A Comparative Systematic Review. *Journal of Open Innovation: Technology, Market, and Complexity, 1*-26.
- Festinger, L. (1957). *A theory of cognitive dissonance*. California: Row, Peterson and Company.
- Gaya, M. C. (2017). Autotelic Principle: the role of intrinsic motivation in the emergence and development of artificial language.
- Gogtay, N., & Thatte, U. (2017). Principles of Correlation Analysis. *Journal of The Association of Physicians of India, 65*(1), 78-81.

- González-Benito, O., González-Benito, J., & Muñoz-Gallego, P. A. (2008). Role of entrepreneurship and market orientation in firms' success. *European Journal of Marketing*, 500-522.
- Gwijja, S. A., Eresia-Eke, C., & Iwu, C. G. (2014). The Link between Entrepreneurship Education and Business Success: Evidence from Youth Entrepreneurs in South Africa. *Journal of Economics*, 5(2), 165-175. doi:<https://doi.org/10.1080/09765239.2014.11884993>
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1995). *Multivariate data analysis*. New Jersey: Prentice-Hall Inc.
- Hair, J. F., Black, W., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective*. New York: Pearson.
- Hajjar, S. T. (2018). Statistical Analysis: Internal-Consistency Reliability And Construct Validity . *International Journal of Quantitative and Qualitative Research Methods*, 6(1), 46-57.
- Handayati, P., Wulandari, D., Soetjipto, B. E., Wibowo, A., & Narmaditya, B. S. (2020). Does entrepreneurship education promote vocational students' entrepreneurial mindset? *Heliyon*, 1-7. doi:<https://doi.org/10.1016/j.heliyon.2020.e05426>
- Harmon-Jones, E., & Mills, J. (2019). An introduction to cognitive dissonance theory and an overview of current perspectives on the theory. In E. Harmon-Jones, *Cognitive Dissonance, Second Edition: Reexamining a Pivotal Theory in Psychology* (pp. 3-24). American Psychological Association. doi:<https://doi.org/10.1037/0000135-001>
- Hayes, A. F. (2017). Partial, conditional, and moderated moderated mediation: Quantification, inference, and interpretation. *Communication Monographs*, 4-40. doi:<http://dx.doi.org/10.1080/03637751.2017.1352100>
- Henderson, A. R. (2006). Testing experimental data for univariate normality. *Clinica Chimica Acta*, 366(1-2), 112 – 129. doi:<https://doi.org/10.1016/j.cca.2005.11.007>
- Hunziker, S., & Blankenagel, M. (2021). Cross-Sectional Research Design. *Research Design in Business and Management*, 187-199.

- Ibidunni, A. S., Ogundana, O. M., & Okonkwo, A. (2021). Entrepreneurial Competencies and the Performance of Informal SMEs: The Contingent Role of Business Environment. *Journal of African Business*, 22(4), 468-490. doi:<https://doi.org/10.1080/15228916.2021.1874784>
- Isenberg, D. (2010). How to start an entrepreneurial revolution. *Harvard Business Review*, 88(6), pp. 41–50.
- Iwu, C. G., & Opute, A. P. (2019). Eradicating Poverty and Unemployment: Narratives of Survivalist Entrepreneurs. *Journal of Reviews on Global Economics*, 8, 1438-1451. doi:<https://doi.org/10.6000/1929-7092.2019.08.127>
- Iwu, C. G., Gwija, S., Tengeh, R., Cupido, C., & Mason, R. B. (2016). The unique role of the survivalist retail entrepreneur in job creation and poverty reduction. implications for active stakeholder participation. *Acta Universitatis Danubius, OEconomica* 12(4), 16-37.
- Iwu, C. G., Opute, P. A., Nchu, R., Eresia-Eke, C., Tengeh, R. K., Jaiyeoba, O., & Aliyu, O. A. (2021). Entrepreneurship education, curriculum and lecturer-competency as antecedents of student entrepreneurial intention. *The International Journal of Management Education*, 19(1), 1-13. doi:<https://doi.org/10.1016/j.ijme.2019.03.007>
- Jackson, D. L., Voth, J., & Frey, M. P. (2013). A note on sample size and solution propriopriety for confirmatory factor analytic models. *Structural Equation Modeling*, 86-97. doi:[10.1080/10705511.2013.742388](https://doi.org/10.1080/10705511.2013.742388)
- Jiatong, W., Murad, M., Bajun, F., Tufail, M. S., Mirza, F., & Rafiq, M. (2021). Impact of Entrepreneurial Education, Mindset, and Creativity on Entrepreneurial Intention: Mediating Role of Entrepreneurial Self-Efficacy. *Frontiers in Psychology*, 1-13.
- Kaur, P., Stoltzfus, J., & Yellapu, V. (2018). Descriptive statistics. *International Journal of Academic Medicine*, 4(1), 60-63.
- Knox, A. J., Bressers, H., Mohlakoana, N., & Groot, J. D. (2019). Aspirations to grow: when micro- and informal enterprises in the street food sector speak for themselves. *Journal of Global Entrepreneurship Research*, 9(1), 38. doi:[10.1186/s40497-019-0161-7](https://doi.org/10.1186/s40497-019-0161-7)

- Koran, J. (2016). Preliminary Proactive Sample Size Determination for Confirmatory Factor Analysis Models. *Measurement and Evaluation in Counseling and Development*, 49(4), 296–308. doi:10.1177/0748175616664012
- Kuratko, D. F., Fisher, G., & Audretsch, D. B. (2021). Unraveling the entrepreneurial mindset. *Small Business Economics* 57(4), 1681–1691.
- Lakens, D. (2022). Sample Size Justification. *Collabra: Psychology*, 8(1), 33267.
- Lamb, B., Kunene, L. N., & Dyili, N. F. (2019). Lessons from Foreign Owned Spaza Shops in South African Townships. *Journal of Reviews on Global Economics*, 1351-1362.
- Ledingoane, C. M., & Viljoen, J. M. (2020). Employment growth constraints of informal enterprises in Diepsloot, Johannesburg. *Acta Commercii - Independent Research Journal in the Management Sciences* 20(1), 1-15.
- Lee, J. (2009). Statistics, Descriptive. *International Encyclopedia of Human Geography*, 422-428. doi:https://doi.org/10.1016/B978-008044910-4.00534-4
- LeMoulta, J., & Gotlib, I. H. (2019). Depression: A cognitive perspective. *Clinical Psychology Review*, 69, 51-66. doi:https://doi.org/10.1016/j.cpr.2018.06.008
- Ligthelm, A. (2012). The viability of informal micro businesses in South Africa: A longitudinal analysis (2007 to 2011). *African Journal of Business Management*, 6(46), 11416-11425.
- Local Government Sector Education and Training Authority (LGSETA). (2020). *Assessment of the viability and potential of township economies for municipalities*. Retrieved from https://cdn.lgseta.co.za/resources/research_and_reports/2019%20%E2%80%932020%20RESEARCH%20PROJECTS/RESEARCH%20REPORT%20-%20TOWNSHIP%20ECONOMY.pdf
- Luo, L., Guo, M., Huang, J., & Yang, J. (2022). Research on the Effect of an Entrepreneurial Environment on College Students' Entrepreneurial Self-Efficacy: The Mediating Effect of Entrepreneurial Competence and Moderating Effect of Entrepreneurial Education. *Sustainability*, 14(11), 1-17. doi:https://doi.org/10.3390/su14116744
- Lynch, M. P., & Corbett, A. C. (2021). Entrepreneurial mindset shift and the role of cycles of learning. *Journal of Small Business Management*, 80–101.

- Malgas, M., & Zondi, W. B. (2020). Challenges facing small business retailers in selected South African townships. *The Southern African Journal of Entrepreneurship and Small Business Management*, 1-9.
- Manyaka-Boshielo, S. J. (2017). Social entrepreneurship as a way of developing sustainable township economies. *HTS Teologiese Studies/Theological Studies* 73(4), 1-10.
- Mapuranga, M., Maziriri, E. T., & Rukuni, T. F. (2021). A Hand to Mouth Existence: Hurdles Emanating from the COVID 19 Pandemic for Women Survivalist Entrepreneurs in Johannesburg, South Africa. *African Journal of Gender, Society and Development*, 10(3), 113-140. doi:DOI: <https://doi.org/10.31920/2634-3622/2021/v10n3a6>
- Masuku, B., & Nzewi, O. (2021). The South African informal sector's socio-economic exclusion from basic service provisions: A critique of Buffalo City Metropolitan Municipality's approach to the informal sector. *Journal of Energy in Southern Africa* 32(2), 59–71.
- Matalamäki, M. J. (2017). Effectuation, an emerging theory of entrepreneurship – towards a mature stage of the development. *Journal of Small Business and Enterprise Development*, 24(4), 928-949.
- Ministry of Cooperative Governance Traditional Affairs. (2020). *PROFILE AND ANALYSIS DISTRICT DEVELOPMENT MODEL*. Johannesburg: City of Johannesburg.
- Mishra, P., Pandey, C. M., Singh, U., Gupta, A., Sahu, C., & Keshri, A. (2019). Descriptive Statistics and Normality Tests for Statistical Data. *Annals of Cardiac Anaesthesia*, 22(1), 67-72. doi:10.4103/aca.ACA_157_18
- Moagi, T. J., Ivanovic, M., & Adinolfi, M. C. (2021). Business Challenges of Arts and Crafts Street Vendors at Key Tourist Attractions in Soweto, South Africa. *African Journal of Hospitality, Tourism and Leisure*, 10(1), 85-101. doi:<https://doi.org/10.46222/ajhtl.19770720-88>
- Morris, M. H., & Tucker, R. (2021). The entrepreneurial mindset and poverty. *Journal of Small Business Management*, 61(1), 102-131. doi:<https://doi.org/10.1080/00472778.2021.1890096>

- Musara, M., & Nieuwenhuizen, C. (2020). Informal sector entrepreneurship, individual entrepreneurial orientation and the emergence of entrepreneurial leadership. *Africa Journal of Management*, 6(3), 194-213. doi:<https://doi.org/10.1080/23322373.2020.1777817>
- Nambiar, Y., Sutherland, M., & Scheepers, C. B. (2020). The stakeholder ecosystem of women entrepreneurs in South African townships. *Development Southern Africa*, 37(1), 70-86. doi:<https://doi.org/10.1080/0376835X.2019.1657001>
- Neck, H. M., Neck, C. P., & Murray., E. L. (2018). *Entrepreneurship: the practice and mindset*. Los Angeles: SAGE Publications, Inc.
- Neves, D., & Toit, A. d. (2012). Money and sociality in South Africa's informal economy. *Africa: Journal of the international African Institute*, 131-149. doi:<https://doi.org/10.1017/S0001972011000763>.
- Ntoyanto, S., & Khumalo, P. (2021). Conceptualising Informal Business Support in South Africa: A Critical Theory Perspective. *Conference on Public Administration and Development Alternatives* (pp. 374-380). University of Venda.
- Omonona, S., Oni, O., & Oluwole, O. J. (2021). COVID-19 pandemic and the South African township economy: A focus on King Williams Town, Eastern Cape, South Africa. *Harvard Deusto Business Research*, 370-381. doi:<https://doi.org/10.48132/hdbr.356>
- Park, Y. S., Konge, L. M., & Artino, A. R. (2020). The Positivism Paradigm of Research. *Academic Medicine*, 95(5), 690-694. doi:10.1097/ACM.0000000000003093
- Ranyane, D. K. (2015). Survivalist Entrepreneurship: An Income Generating Alternative for the Unemployed populace. *Mediterranean Journal of Social Sciences*, 6(4), 301-306. doi:10.5901/mjss.2015.v6n4p301
- Reichardt, C. S. (2021). The Hypothetico-Deductive Method. In *The Method of Multiple Hypotheses: A Guide for Professional and Academic Researchers* (p. 3). New York: Routledge. doi:<https://doi.org/10.4324/9781003198413>
- Robinson, P. B., & Gough, V. (2020). The right stuff: Defining and influencing the entrepreneurial mindset. *Journal of Entrepreneurship Education*, 23(2), 1-16.

- Scheba, A., & Turok, I. N. (2020). Strengthening Township Economies in South Africa: the Case for Better Regulation and Policy Innovation. *Urban Forum*, 77–94.
- Schrump, M. L., Johnson, M., Ghuy, M., & Gombolay, M. C. (2020). Four Years in Review: Statistical Practices of Likert Scales in Human-Robot Interaction Studies. *Companion of the 2020 ACM/IEEE International Conference on Human-Robot Interaction*. Retrieved from <https://api.semanticscholar.org/CorpusID:210156928>
- Schunk, D. H., & DiBenedetto, M. K. (2020). Motivation and social cognitive theory. *Contemporary Educational Psychology*, 60. doi:<https://doi.org/10.1016/j.cedpsych.2019.101832>
- Schunk, D., & Pajares, F. (2010). Self-Efficacy Beliefs. In P. Peterson, E. Baker, & B. McGaw, *International Encyclopedia of Education (Third Edition)* (pp. 668-672). Oxford: Elsevier. doi:<https://doi.org/10.1016/B978-0-08-044894-7.00620-5>
- Schunk, D., & Pajares, F. (2010). Self-Efficacy Beliefs. In P. Peterson, E. Baker, & B. McGaw, *International Encyclopedia of Education (Third Edition)* (pp. 668-672). Oxford: Elsevier.
- Schunke, D. H., & DiBenedetto, M. K. (2020). Motivation and social cognitive theory. *Contemporary Educational Psychology*, 60, 101832. doi:<https://doi.org/10.1016/j.cedpsych.2019.101832>
- Shakeel, M., Yaokuang, L., & Gohar, A. (2020). Identifying the Entrepreneurial Success Factors and the Performance of Women-Owned Businesses in Pakistan: The Moderating Role of National Culture. *SAGE Open*, 10(2), 1-17. doi:<https://doi.org/10.1177/2158244020919520>
- Shrestha, N. (2021). Factor Analysis as a Tool for Survey Analysis. *American Journal of Applied Mathematics and Statistics*, 9(1), 4-11. doi:<https://doi.org/10.12691/ajams-9-1-2>
- Simkus, J. (2022, November 3). *Cluster Sampling: Definition, Method And Examples*. Retrieved July 3, 2023, from Simply Psychology: <https://www.simplypsychology.org/cluster-sampling.html>

- South African government: National Treasury. (2024). *2024 Budget Review*. Pretoria: South African government: National Treasury.
- Stam, E., & Bosma, N. (2015). Growing entrepreneurial economies: Entrepreneurship and regional development. In T. Baker, & F. Welter, *In The Routledge Companion to Entrepreneurship* (pp. 325– 340). London: Routledge.
- Stratton, S. J. (2021). Population Research: Convenience Sampling Strategies. *Prehospital and Disaster Medicine*, 36(4), 373 - 374. doi:<https://doi.org/10.1017/S1049023X21000649>
- Strydom, J. (2015). David Against Goliath: Predicting The Survival Of Formal Small Businesses In Soweto. *International Business & Economics Research Journal*, 14(3), 463-476.
- Stuart, E., Samman, E., & Hunt, A. (2018). *Informal is the new normal: Improving the lives of workers at risk of being left behind*. London: Overseas Development Institute.
- Sürücü, L., & Maslakci, A. (2020). Validity and reliability in quantitative research. *Business & Management Studies: An International Journal*, 2694-2726.
- Sustainable Livelihoods Foundation. (2016). *South Africa's informal economy economy: research findings from nine townships*. Cape Town: Sustainable Livelihoods Foundation.
- Taherdoost, H. (2016). Validity and Reliability of the Research Instrument; How to Test the Validation of a Questionnaire/Survey in a Research. *International Journal of Academic Research in Management*, 5(3), 28-36.
- Tengeh, R. K. (2016). Entrepreneurial resilience: the case of Somali grocery shop owners in a South African Township. *Problems and Perspectives in Management* 14(4), 203-211.
- Toit, M. d., Witte, H. d., Rothmann, S., & Broeck, A. v. (2020). Positive deviant unemployed individuals: Survivalist entrepreneurs in marginalised communities. *South African Journal of Business Management* 51(1), 1-10.
- Urban, B., & Ndou, B. (2019). Informal entrepreneurship: A focus on South African township entrepreneurs. *Journal of Developmental Entrepreneurship* 24(4), 1-19. doi:<https://doi.org/10.1142/S1084946719500213>

- Urban, B., & Ndou, B. (2019). Informal entrepreneurship: A focus on South African township small, medium and micro-enterprises (SMMEs). *Journal of Developmental Entrepreneurship*, 24(2), 1-19. doi:<https://doi.org/10.1142/S1084946719500213>
- Walfish, S. (2006). A Review of Statistical Outlier Methods. *Pharmaceutical Technology*, 1-5.
- Wen, Z., & Ye, B. (2014). Different methods for testing moderated mediation models: Competitors or backups? *Acta Psychologica Sinica*, 46(5), 714–726.
- Western Cape Economic Development Partnership. (2019). *Strengthening Township economies*. Cape Town: Western Cape Government.
- Wigner, A., Kuang, S., & Miceli, K. (2022). Assessing Entrepreneurial Mindsets – A Work-In-Progress paper exploring how to create and deploy quantitative and qualitative assessments for student entrepreneurial mindset development. *ASEE 2022 Annual Conference - Excellence Through Diversity*. Minneapolis: American Society for Engineering Education.
- Wiid, J. A., & Cant, M. C. (2021). Obstacles Faced By Owners Of Township Micro, Small And Medium Enterprises To Acquire Funds For Survival And Growth (2010-2020). *Entrepreneurship and Sustainability Issues* 9(1), 52-65.
- Wiid, J., & Cant, M. (2021). The future growth potential of township SMMEs: An African perspective. *Journal of Contemporary Management*, 18(1), 508-530. doi:<https://doi.org/10.35683/jcm21005.115>
- Woodside, A. G. (2011). Responding to the Severe Limitations of Cross-Sectional Surveys: Commenting on Rong and Wilkinson's Perspectives. *Australasian Marketing Journal*, 19(3), 153-156. doi:<https://doi.org/10.1016/j.ausmj.2011.04.00>
- Yong, A. G., & Pearce, S. (2013). A Beginner's Guide to Factor Analysis: Focusing on Exploratory Factor Analysis. *Tutorials in Quantitative Methods for Psychology*, 9(2), 79-94. doi:10.20982/tqmp.09.2.p079

Appendices

Appendix A: Research Instrument

Age	Please select which range you fall into	19-29	30-40	41-50	51-60
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Location	Which area of Soweto do you stay in?	
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Education level		Completed Matric
		No formal education
		Started school but did not
		Undergraduate qualification

Reasons for operating in the informal sector		Creating a source of income
		Meeting social requirement
		Overcoming the barriers set to
		To earn extra money to support
		To get something to do and stay

Please rate the following statements in terms of how much you agree		Strongly disagree	Disagree	Somewhat disagree	Neither	Somewhat agree	Agree	Strongly agree
		1	2	3	4	5	6	7
1	Entrepreneurship education							
1.1	Entrepreneurship education is suitable for any economy	1	2	3	4	5	6	7
1.2	Entrepreneurship education is a discipline that can promote self-reliance	1	2	3	4	5	6	7
1.3	Entrepreneurship education promotes self-employment among people	1	2	3	4	5	6	7
1.4	Entrepreneurial education decreases unemployment among the youth	1	2	3	4	5	6	7
1.5	Entrepreneurship education reduces poverty	1	2	3	4	5	6	7
1.6	Entrepreneurship education enhances creative and innovative ideas	1	2	3	4	5	6	7
1.7	Entrepreneurship education can facilitate the development of commerce in informal communities	1	2	3	4	5	6	7
1.8	Entrepreneurship education equips graduates with business creation skills	1	2	3	4	5	6	7
1.9	Entrepreneurship education helps in harnessing local resources	1	2	3	4	5	6	7
1.10	Entrepreneurship education helps in reducing the number of failed businesses	1	2	3	4	5	6	7
2	Entrepreneurship mindset							
2.1	I have thought from both sides (opportunities or challenges) reactions incorporating with the entrepreneurial activities.	1	2	3	4	5	6	7
2.2	I have seen time allocation for entrepreneurial matters.	1	2	3	4	5	6	7
2.3	I have deliberated the financial chances to be engaged in the entrepreneurial activities.	1	2	3	4	5	6	7
2.4	I have evaluated for both opportunities and challenges linked with entrepreneurial activities.	1	2	3	4	5	6	7
2.5	I have decided toward ideas for business opportunity in the entrepreneurial activities.	1	2	3	4	5	6	7
2.6	I have disserted whether it is beneficial for me to be engaged in the entrepreneurial activities	1	2	3	4	5	6	7
3	Entrepreneurial ecosystem							
3.1	Access to Finance	1	2	3	4	5	6	7
3.2	Government Policies and Regulations	1	2	3	4	5	6	7
3.3	Government Programmes and Support	1	2	3	4	5	6	7
3.4	Infrastructure	1	2	3	4	5	6	7
3.5	Cultural Factors	1	2	3	4	5	6	7
3.6	Social Factors	1	2	3	4	5	6	7

3.7	Education and Training	1	2	3	4	5	6	7
4	Business Performance compare yourself to competitor's performance	Much worse than competitors	Moderately worse than the	Slightly Worse than the competitors	About the same as the competitors	Slightly better than the competitors	Moderately better than the	Much better than competitors
4.1	Profitability	1	2	3	4	5	6	7
4.2	Sales Growth	1	2	3	4	5	6	7
4.3	Market Share Growth	1	2	3	4	5	6	7
4.4	Customer Satisfaction	1	2	3	4	5	6	7
4.5	Image and Reputation	1	2	3	4	5	6	7
4.6	New Product Success	1	2	3	4	5	6	7

Appendix B: Consistency Matrix

Construct	Literature sources	Dimensions/content	Comment on instrument reliability
Entrepreneurship Education 7-point Likert, 1 = Strongly disagree to 7 = Strongly agree	Iwu et al., 2021	<ul style="list-style-type: none"> • Economic sustainability • Self-reliance and entrepreneurial promotion • Impact on unemployment and poverty reduction • Enhancement of creativity and innovation • Development of commerce in informal communities • Skill development for business creation • Utilisation of local resources • Reduced business failures 	Cronbach's alpha: 0.95
Entrepreneurial mindset 7-point Likert, 1 = Strongly disagree to 7 = Strongly agree	Handayati et al., 202)	<ul style="list-style-type: none"> • Opportunities and challenges • Time allocation • Financial considerations for entrepreneurial activities • Idea generation • Personal evaluation 	Cronbach's alpha: 0.920
Entrepreneurial ecosystem 7-point Likert, 1 = Strongly disagree to 7 = Strongly agree	Elnadi & Gheith, 2021	<ul style="list-style-type: none"> • Suitable infrastructure • Institutional assistance • A conducive market • Access to finance • Policies certainty with good governance and leadership • Human resources • Supportive entrepreneurial culture 	Cronbach's alpha: 0.881
Enterprise success 7-point Likert, 1 = much worse than the competitors to 7 = much better than competitors	González-Benito et al., 2008	<ul style="list-style-type: none"> • Performance profitability • Performance market response • Performance market position value • Performance of new product success 	PCA 95.07% of variance explained

Appendix C: Participant Information Sheet

Dear Sir / Madam

My name is Refilwe Molapo. I am a Masters student member in Business Administration at the University of the Witwatersrand, Johannesburg. My supervisor is Dr. Mc Edward Murimbika. I am conducting a research study about entrepreneurship in the informal economy, focused on the area of Soweto. The study title is “Challenges and opportunities for survival entrepreneurs in the township of Soweto”

I am inviting you to take part in a questionnaire. If you decide to take part, your participation in this research study will last about 15 minutes. The questionnaire will take place in person at your place of business. However, should you prefer to complete the survey online a link will be provided to complete the self- administered survey online.

With your permission, I would like to record the interview. This data in a password protected computer and deleted after 2 years. Only I the researcher, will have access to the data.

During the research activity, I will need to ask for some personal information about you, including: your age, level of education, years of experience, geographical location in the township of Soweto, and the reason or motive for operating in the informal sector.

When I share the results of the research study, I will not include your name or anything else that could identify you.

If you decide to take part in the research study, it should be because you want to volunteer. You do not have to take part. You can stop being in the study at any time. You do not have to answer any questions if you do not want to. You will not get any direct benefits if you choose to join the research study. You will not lose any services, benefits or rights you would normally have if you decide not to join. Taking part in the research study will not cost you anything. You will not be paid for being in this research study.

The risks for this research study are no more than what happens in everyday life. However, should you feel uncomfortable at anytime during the interview please note that you have the right to withdraw your consent at any time during the process and we may cancel or reschedule the interview.

This research study will be written up as a research report. The report will be available on the university library website. If you would like to receive a summary of this report, I will be happy to send it to you.

If you have any questions during or afterwards about this research study, feel free to contact on the details listed below. If you have any concerns or complaints about the ethical procedures of this research study, you are welcome to contact the University Human Research Ethics Committee (Non-Medical), telephone +27(0) 11 717 1408, email hrecnon-medical@wits.ac.za.

Yours sincerely,

Researcher:

Refilwe Molapo, 2153493@students.wits.ac.za, 066 218 1233

Supervisor:

Dr. Mc Edward Murimbika, mcedward.murimbika@wits.ac.za, +27 11 717 3658

Appendix D: Ethical Clearance Certificate

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/BA2153493/125

This certificate is only valid with a legitimate ethics protocol number and signed by the Researcher (below).

Project title	Challenges and opportunities for survival entrepreneurs in the township Soweto
Investigator / Researcher	Mr Refilwe Molapo
Nature of Project	MBA (Research Article)
Decision of the Committee	Approved, provided stakeholders and participants are guaranteed confidentiality.
Issue Date of Certificate	2023-08-07
Expiry date	Date of submission of the project / research report
Chairperson	Dr Pius Oba  +27 11 717 3976  +27 82 733 6587  pius.oba@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 abovementioned 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

30/08/2023

Date: