

Book of Economic Development and Entrepreneurship

Edited by Prof. Michael Twum-Darko



BP International

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India ■ United Kingdom



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FIRST EDITION 2026

ISBN 978-81-998711-1-3 (Print)

ISBN 978-81-998711-0-6 (eBook)

DOI: <https://doi.org/10.9734/bpi/mono/978-81-998711-1-3>

Maximum Retail Price (MRP): INR 1500 (For Delivery within India)*
Maximum Retail Price (MRP): USD 55 (For Delivery outside India)*
(*Specification: Printed Book One Copy; Black and white print with
colour cover page, Paper Back Perfect Binding)

Maximum Retail Price (MRP): INR 3000 (For Delivery within India)#
Maximum Retail Price (MRP): USD 75 (For Delivery outside India)#
(#Specification: Printed Book One Copy; Complete color print with
colour cover page, Paper Back Perfect Binding)



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Peer-Review Policy: Advanced Open Peer Review policy has been followed for review. All chapters were thoroughly checked to prevent plagiarism. As per editorial policy, a minimum of two peer-reviewers reviewed the manuscript. After review and revision of the manuscript, the Book Editor approved the manuscript for final publication.

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Preface

The published book chapters and related research were shared at the International Conference for Business and Management Dynamics (ICBMD), which strives to stimulate research at the crossroads of business management and economic development. Like many ICBMD conferences, this book brings together several scholars and researchers to address the evolving landscape of economic development and entrepreneurship.

The entrepreneurial scholarship of this book seeks to explain the equity of position and value afforded to entrepreneurship in the development theory of contemporary societies. More specifically, it seeks to tackle the fundamental societal issues of structural disequilibrium, continuing unemployment, technological unemployment, and ultimately, the sustainable development of society as a whole. The entrepreneurship scholarship of this book is situated at the nexus of a firm, market, and socio-economic activities. Within the socio-economic activities, the book examines entrepreneurial activities within the systemic constraints of the culture, innovation, and public policy of the socio-economic systems. Most importantly, this book is the ICBMD's theory and practice integration to the global and regional development phenomenon.

We now have a wide variety of contributions from Africa and the Global South for this edition. This preference is noted in the ICBMD's scholarship geographies. Peripheral regions in terms of the academic publishing of the sub-disciplines of economics are crucial for the inclusive growth, industrialisation and sustainable development scholarship streams. The contributions focus on: entrepreneurial ecosystems, small and medium enterprise (SME) development, innovation-driven growth, digital entrepreneurship, youth and women entrepreneurship, and the inputs of various development actors and institutions.

The book incorporates, for example, various empirical, analytical and constructive frameworks and pluralism of methodologies. The conference recognised that intricate development challenges are best addressed through the application of multiple methodologies and diversified perspectives. Such an approach broadens the development of the book and ensures it reaches a varied audience, from the academic world, policymakers and development actors to postgraduate students.

This volume, as an ICBMD-bound publication, aims to document current research, but also foster an ongoing dialogue regarding the possible role of entrepreneurship as a transformative vehicle for economic development. We hope that the insights provided will inspire research in new directions, advocacy for the development of evidence-based policies, and for entrepreneurial activities that are inclusive, resilient, and adaptive to the prevailing contexts of uncertainty.

A Qualitative Exploration of Risk Management Strategies in Family Businesses

Angela Pike-Bowles ^{a*} and Juliet Townes ^a

DOI: <https://doi.org/10.9734/bpi/mono/978-81-998711-1-3/CH1>

Peer-Review History:

This chapter was reviewed by following the Advanced Open Peer Review policy. This chapter was thoroughly checked to prevent plagiarism. As per editorial policy, a minimum of two peer-reviewers reviewed the manuscript. After review and revision of the manuscript, the Book Editor approved the manuscript for final publication. Peer review comments, comments of the editor(s), etc. are available here: <https://peerreviewarchive.com/review-history/6771.1>

Abstract

Family businesses face various business risks that affect the continuance of operations if not managed efficiently. Such business risks entail changes in government legislation, economic uncertainty, and the family dynamic. Although family business research has recently proliferated, there is insufficient reference to risk management, particularly within the South African context. The purpose of this study was to explore risk management within family businesses, specifically using a qualitative lens. This study adopted an exploratory research design as it sought to gain insight into a topic, identify practical solutions, and generate innovative ideas. A total of 13 family-owned businesses within the Eastern Cape locale were interviewed using a semi-structured interview guide. The snowball sampling technique was used to select participants for this study, with one family business owner or manager per family business serving as the sample unit. Thematic analysis was then used to analyse the data, during which codes and themes were developed. The research findings concluded that the majority of the family businesses were experiencing a range of risks, ranging from operational, financial and security risks to succession and continuity risks. The results further highlighted that risk aversion and intergenerational risk issues were prevalent in these family businesses. These findings align with agency theory and behavioural family business research, which highlight the complex relationship between business owners (principals) and managers (agents). Formal risk management protocols were common, as well as the development of individual risk management plans focusing on each risk the business may experience. Whilst emotional reactions were often prevalent, most family businesses were engaging in strategic innovation and flexibility to manage business risks.

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Business continuity, knowledge transfer and ongoing adjustment were common matters discussed when considering risk management in these family businesses. The study's findings have implications and recommendations for family business owners, managers, and practitioners regarding the implementation of a universal risk management framework.

Keywords: Family business; risk management; business performance; South Africa.

1. Introduction and Background

A family business is a profitable business in which many generations of a family are linked by blood, marriage, or adoption. These family members have the power to influence the business's vision and achieve diverse aims within the business (Berrone et al., 2022). According to Baggio and Valeri (2022), family members are leaders or owners of the business. Even if the income is high, a family business is still in its beginning if all the shares are held by one person (Berrone et al., 2022). The ownership circle may include family members, investors, and employee-owners (Rovelli et al., 2022). Non-family members who work for the family business are often included in the management circle (Baggio and Valeri, 2022).

Family businesses are essential since they link financial and social wealth (Nwekpa & Wabara, 2022). These businesses pursue a combination of both business and family goals, which usually overlap. Among these non-economic objectives is the preservation of socioemotional wealth, which represents the non-economic rewards that owners of family firms obtain from their businesses (Hernández-Perlines et al., 2023). Family businesses dominate the global economy and contribute to the economies of both developed and developing countries (Tan et al., 2021). According to Azizi et al. (2021), family-owned businesses account for over 80% of all businesses and are the most common form of business organisation worldwide. Family businesses exhibit a flexible approach to technological shifts and greater adaptability to customer requirements, and their business structure enables quick decision-making (Gherghina et al., 2020).

Business performance is a multidimensional concept that requires consideration of both economic and non-economic factors when measuring performance. This is especially true in family businesses where non-economic objectives are prominent antecedents (Sreih et al., 2019). In this type of business, the family and the business are "inextricably intertwined". The effects of social exchange between generations mean that successful enterprising families show tremendous respect for the sensitive relations between the family and the business (Nnabuiife et al., 2018). Family businesses are concerned not just with financial factors, but also with the requirements of the family. As a result, a family's identity, reputation, and the maintenance of its values may occasionally affect the business's performance (Martinez-Romero et al., 2020). Family members involved in the ownership of a family business, therefore, have control over a business's performance and success (Azizi et al., 2021). Family

businesses outperform nonfamily businesses because they do not incur free-rider agency costs, thereby improving financial performance (Eckey & Memmel, 2022; Köhr et al., 2019).

Family businesses are more adaptable to technological advances, have greater flexibility in responding to consumer requirements, and have a business structure that allows for swift decision-making (Gherghina et al., 2020). Razzak et al. (2019) and Ng et al. (2019) agree that there is a positive association between family members' emotional attachment and family business performance.

Risk management (RM) enables decision-makers to comprehend and measure the effect of risk in businesses, and controlling difficult risks increases the cost of productivity (Milanés-Batista et al., 2020). RM includes the strategies, techniques, and supporting tools used to identify and control risk to an acceptable level in a business. It is a coordinated collection of actions and procedures that drive a business to minimise risk and achieve business goals (Gurtu & Johny, 2021; Yiu et al., 2020).

There are multiple risks family businesses experience in their development and continuance, such as problems in the family, lack of training resources for growth, and the lack of a succession plan (Baltazar et al., 2023; Thakur & Sinha, 2023; Tan et al., 2021). In family businesses, other risks include the risk of loss inherent in business operations (Nwekpa & Wabara, 2022), the environment that reduces the business's capacity to generate returns on investment (Ibáñez, 2021), and the prospect of lower-than-anticipated profitability (Nwekpa & Wabara, 2022). It is difficult for a family business to implement RM because family members do not pay adequate attention to some risks, such as criminal history and health problems. Therefore, family businesses may find RM challenging (Tan et al., 2021).

The relevance of family businesses in research has increased significantly in the last few decades (Rovelli et al., 2022). Despite the need for family businesses to succeed, the family business literature is narrower than in other management areas (Nuradhi & Kristanti, 2020; Tan et al., 2021). Many family businesses need more structure to manage the various risks they may face. This lack of necessary structure can result in financial losses, legal troubles, damaged reputations, and other concerns that can have a long-term detrimental influence on corporate performance and sustainability (Baba Ahmed & Megnounif, 2020). Family businesses must build effective RM strategies tailored to the specific risks and challenges they face (Ibáñez, 2021). Authors have suggested that additional family business research themes should be investigated, such as RM in uncertain economic conditions (Aldrich et al., 2021; Darwiesh et al., 2022; Rovelli et al., 2022). Family business growth has also been neglected, specifically in South African research (Aldrich et al., 2021).

Furthermore, there is a call for multiple perspectives on the relationship between RM and family business performance (Pike-Bowles et al., 2022; Pike-Bowles et al., 2024). This study investigated this qualitative lens gap by exploring the types of risks family businesses are experiencing, their perceptions of these risks, and

the influence of RM on family business decision-making and performance. The study aimed to understand the RM mitigations that family businesses apply to reduce risk and improve performance. The following sections provide a concise literature review, followed by an explanation of the research methodology used by the authors.

2. Literature Review

2.1 Agency Theory

This study adopted the agency theory. This theory seeks to explain the complex relationship between business owners (i.e., the principal) and business managers (i.e., agents) (Mitnick, 2013). The behavioural agency theory establishes the connection between leaders and managers and their decision-making inside the business (Massa et al., 2020). The theory looks at potential conflicts of interest that may arise between the principal and the agent due to their different goals and/or risk preferences. With this in mind, the theory helps managers analyse the business's strengths and weaknesses, as well as monitor and recognise risks (Abdelnour & El-Farr, 2023; Tekin & Polat, 2020). The agency theory is applied in this study because it recognises agency risks in family businesses and their potential influence on RM mitigation. Understanding these risks enables family businesses to establish RM techniques and systems that assure acceptable risk assessment and risk mitigation. RM can impact management in risk-taking and risk-aversion behaviours (Basheer et al., 2021).

2.2 Family Business Performance

Family business performance is a highly complex process with various phases that are shaped by factors including the size and sector of the business. Family dynamics such as the degree of harmony, the number of siblings, and the age of family members also play a role (Urban & Nonkwelo, 2022). The business's culture influences the decision-making processes of family businesses, as well as the weight that emotional and spiritual information has in comparison to intellectual knowledge (Buzzao & Rizzi, 2020). Family businesses require dynamic skills to adapt to changes in a vibrant business environment (Tiberius et al., 2021).

Sustainability has evolved as a significant and established theme in the family business literature during the last decades (Bernhard et al., 2019). Sustainability in family businesses allows future generations to meet business needs (Calabrò et al., 2019). An investment in sustainability makes an important contribution to a family business's success and long-term sustainability. However, few family businesses invest in sustainable practices, placing the business at risk (Mahto et al., 2020). There are long-term consequences for the survival (i.e., across generations) and growth of family businesses due to family members' inability to manage business risks effectively (Bernhard et al., 2019).

One of the risks family businesses face is family dynamics. Unresolved emotions, especially in family systems, can distort risk judgment and delay decisions

(Brundin et al., 2022; Maharajh et al., 2024; Treffers et al., 2020). Moreover, unresolved interpersonal tensions within the family can act as hidden stressors, interfering with fair and transparent processes and reducing governance effectiveness (Alderson, 2015).

Innovation helps businesses stay ahead of the curve and grow (Rovelli et al., 2022). Innovation is a critical component of competitive advantage and improved business performance (Erdogan et al., 2020). It is described as the collection of actions a business conceives, creates, manufactures, and releases new goods, services, processes, and business models (Rondi et al., 2019). Even though the family business agrees on the positive effect of innovation on the business's performance, innovation levels in family businesses are lower than in non-family businesses (Calabrò et al., 2019; Eddleston et al., 2019). Family businesses invest less in innovation (De Massis & Rondi, 2020). The culture of family businesses tends to be conservative, as they are hesitant to innovate (Carney et al., 2019; Gjergji et al., 2019; Rondi et al., 2019). A family business's innovation levels can be affected by family dynamics and their willingness to innovate. This, in turn, can damage the performance levels of the business (Eddleston et al., 2019).

2.3 Risk Management

RM enables decision-makers to comprehend and measure the effect of risk in businesses and control the difficult risks in order to sustain productivity (Milanés-Batista et al., 2020). Traditional RM focuses on risks that arise from physical or legal sources, such as natural disasters like fires, accidents, fatalities, and lawsuits. Financial RM deals with risks that can be handled by using a financial implementation analyst (Milanés-Batista et al., 2020; Oliveira & Almeida, 2019). Improved RM processes have a good influence on the performance of businesses (Darwiesh et al., 2022).

Actions made to lessen or eliminate the possibility or effect of recognised risks are referred to as mitigation. RM mitigation is an essential component of every organisation's strategy for identifying, assessing, and addressing any risks that may jeopardise its objectives (Syrová & Špička, 2022). The first step is identifying any possible risks (Masita & Yuhertiana, 2022). This entails investigating internal and external elements that might jeopardise the organisation's objectives, such as operational, financial, strategic, or compliance risks (Basco et al., 2021). Effective risk identification enables businesses to plan for risk mitigation actions in advance (Adomako et al., 2021). Once identified, risks must be evaluated in terms of their chance of occurrence and possible effects (Basco et al., 2021). This evaluation aids in risk prioritisation and selecting the right degree of mitigation activities (Tan et al., 2021). After analysing the risks, businesses create and implement effective risk mitigation methods (Adomako et al., 2021). The most prevalent risk-mitigation tactics are risk avoidance, risk reduction, risk transfer, risk acceptance, and risk diversification (Adomako et al., 2021). Once mitigation solutions have been identified, they must be put into action and monitored (Basco et al., 2021). Assigning tasks, providing resources, and

implementing controls to ensure that mitigation measures are effective are all part of this process (Masita & Yuhertiana, 2022). Regular monitoring and assessment assist businesses in identifying any gaps or changes in risk exposure, allowing them to alter their risk mitigation methods accordingly (Adomako et al., 2021).

Family businesses that use RM tools, especially business intelligence approaches, to manage risks are efficient at dealing with substantial amounts of business risks (Oliveira & Almeida, 2019). RM brings value to the family business by ensuring that any risk is effectively handled (Mihaylov & Zurbruegg, 2021; Mitter et al., 2022). Family businesses participate in RM for compliance (e.g., legislation and regulations) and performance (e.g., optimisation of efficiency and effectiveness) purposes (Tan et al., 2021). The implementation of RM within family businesses decreases possible monetary loss, boosts business performance and enhances their competitive edge (Mihaylov & Zurbruegg, 2021). Informal RM approaches are common in family businesses as they use social capital and close stakeholder bonds to buffer uncertainty. This can be in the form of decision-making taken with stakeholders, and shared understanding and trust within the family (Mitter et al., 2022). Major shocks, such as the COVID pandemic, have caused a shift to more formalised RM approaches. This has been due to the increasing need to professionalise risk oversight and integrate RM frameworks, including documented policies and role responsibilities (Riepl et al., 2024).

The impact of RM on a family business's success is not a one-size-fits-all approach. Each family business is unique, and the risks are different from one another, as well as the efficiency of RM practices. Implementing RM demands a customised strategy that is in line with the family business's values and goals. Activating RM in family businesses may reduce insecurity, preserve their resources, capitalise on opportunities, and enhance overall performance. All of these contribute to long-term success and sustainability of the family business (Darwiesh et al., 2022; Milanés-Batista et al., 2020; Oliveira & Almeida, 2019). The mismanagement of risk has resulted in severe harm to a family business's reputation, diminished shareholder value and considerable monetary loss (Tan et al., 2021). However, RM solutions frequently fail to provide the desired advantages to the family business (Mitter et al., 2022).

Risk aversion is conceptualised as rejecting unsafe, dangerous, risky outcomes or a preference for stable options following specific values (Sohn, 2019). Despite the variability of family enterprises, family-owned businesses are more risk-averse than non-family businesses due to their unique features (Daspit et al., 2021). Family businesses are risk-averse because they view the business as an intergenerational asset. Furthermore, because families invest significant amounts of private and socio-emotional wealth into the family business, their risk aversion increases (Rojo Ramírez et al., 2022). Agency theory and behavioural family business studies suggest that concentrated family ownership and attachment to the family legacy reinforce conservative risk preferences, limiting pursuits such as research and development or large investments (Cambrea et al., 2022; Sievinen et al., 2020).

Intergenerational dynamics (i.e., between older and younger generations) in family businesses can mitigate risk aversion. Second-generation involvement, particularly when successors bring external experience or innovation orientation, can temper risk aversion and promote balanced decision-making (Sun et al., 2022; Thakur & Sinha, 2023). The next section discusses the research methodology followed in this study.

3. Research Methodology

3.1 Research Design, Approach and Method

Selecting an interpretive qualitative research approach allowed the researchers to explore the RM experiences of family business owners. This study adopted an exploratory research design as it sought to gain insight into a topic, identify practical solutions, and generate innovative ideas (Bryman et al., 2021). This design was appropriate for the study as it aimed to develop a deeper understanding of risk aversion and its impact on family business performance. In-depth semi-structured interviews were used to help the researchers understand the participants' experiences, sentiments, and views (De Ries et al., 2021).

3.2 Sample

The snowball sampling technique was used to select participants for this study, with one family business owner or manager per family business serving as the sample unit. In this sampling technique, the researchers began with one participant who recommended another to participate in the study (Bryman et al., 2021). This procedure continued until the researchers reached 13 family businesses. whose businesses are located in the Eastern Cape. The participants came from a diverse range of industries, from manufacturing and hospitality to consulting and information and communication technology (ICT). The characteristics of the family businesses these 13 participants represent are shown in Table 1.

Table 1 identifies that the participants came from businesses operating in seven different industries, with the highest number (n=4) operating in the hospitality sector. Two businesses operated in each of the following sectors, namely, construction, consulting, and the petroleum industry. The remaining three businesses had a representative from the ICT, manufacturing, and clothing industries. Eight businesses had been operating for 1-30 years, and five for over 30 years. Two businesses had one family member working in the business, two businesses had two family members, four businesses had three family members, and five had four family members employed in the business. The majority of the businesses (n=8) had only one family member as a shareholder. Three businesses had more than 20 non-family members employed in the business, nine had fewer than 20 non-family members employed in the business, and one business did not want to specify the number of non-family members in the business.

Table 1. Characteristics of the participants' family businesses

Pseudonym	Years of Operating	Type of Industry	Number of Family Members Working in the Business	Number of Family Members who are Shareholders	Number of Non-family Members Working in the Business
Company A	34	Construction	3	2	4
Company B	11	ICT	4	1	5
Company C	60	Construction	3	1	30
Company D	38	Petro-chemical	3	1	6
Company E	40	Manufacturing	3	1	24
Company F	4	Consulting	4	4	6
Company G	33	Hospitality	4	4	14
Company H	9	Hospitality	1	1	14
Company I	8	Hospitality	1	1	1
Company J	22	Hospitality	2	2	85
Company K	10	Clothing	2	1	2
Company L	2	Petroleum	4	1	4
Company M	2	Consulting	4	4	Not provided

3.3 Research Instrument and Data Collection

The study used semi-structured interviews to encourage the participants' involvement in the study. An interview schedule was designed that had a preliminary set of questions that aimed to collect information about the participants' attitudes, experiences, and views on the risks, the RM approaches they adopted and the impact of RM on the family business performance (Bryman et al., 2021). There was a peer review of the research instrument to ensure its robustness and reliability. The research instrument consisted of two parts. Part A collected the participant and family business information, whilst Part B contained 18 semi-structured questions.

The researchers conducted the interviews for companies A, C, D and M online via Teams; companies B, E, F, G, H, I, J, and K interviews were conducted face to face, and the interview with Company L was conducted via telephone. The researchers recorded the interviews using a mobile phone and transcribed them afterwards. The researchers also made field notes during and after each interview, as this helps in the data analysis process. The interviews took an estimated 20 minutes, depending on the length of the participant's responses.

3.4 Data Analysis

The researchers used thematic analysis to analyse the data from this study. Thematic analysis is a data analysis procedure used to detect and organise meaning patterns in a dataset (Purssell & Gould, 2021). It enables researchers to comprehend shared meanings and experiences rather than distinct ones discovered inside a single data item (Braun & Clarke, 2019). Using thematic analysis allowed the researchers to focus on meaning across the entire dataset and allowed for patterns and themes to be drawn out from this dataset.

Initially, the codes were identified manually using a red and green pen as a highlighter. During the highlighting of the codes phase, notes were also made on the transcribed papers. After the researchers recognised the first codes, they gathered and manually selected themes by organising the codes with another pen. The themes found represented only a part of the codes. The codes discovered led to the creation of both main and sub-themes from the collected data. These main themes are discussed in the findings section.

3.5 Data Reliability and Validity

Reliability is a crucial aspect of research quality, especially in qualitative research, as it ensures the consistency, trustworthiness, stability, and repetition of informants' stories (Bryman et al., 2021). To ensure reliability, a pilot was conducted with a family business manager to test the research instrument questions. The researchers interpreted the data based on transcribed interviews and built a trust relationship with the participants, interviewed some of the participants multiple times, and compared results with other evidence.

Validity is the degree to which the results genuinely measure what they claim to measure. Examining how well the results match accepted ideas and other measures of the same concept. A valid measurement is generally trustworthy: it should be reproducible if a test yields accurate results (Coleman, 2022). The researchers ensured the data-collection method was valid by conducting a pilot test. The researchers also ensured that the discussion of the data and conclusions drawn were valid by providing detailed discussions of the participants' transcribed data. The study ensured validity by developing an interview schedule using questions from previous studies, which means the questions are valid, and by drawing out the data to answer the research objectives (Coleman, 2022). The following section outlines the ethical considerations that the researchers used to protect the participants.

4. Results

4.1 Identified Themes and Sub-themes

Six core themes were identified from the data, each with sub-themes. There are 16 sub-themes in total. These results are shown in Table 2.

Table 2. Identified themes and sub-themes

#	Theme	Sub-themes
1	Types of risks experienced	Operational risks Financial and cash flow risks Security and crime risks Technological risks Succession and continuity risks
2	Perception of risks	Risk aversion Intergenerational views
3	Risk management strategies and approaches	Informal approaches Formal approaches Learning from experience
4	Family dynamics and decision-making	Resistance to risk Emotional vs logic
5	Impact of risk management on business performance	Business continuity Competitive advantage
6	Learning and adaptation	Knowledge transfer Ongoing adjustment

The first theme has five sub-themes, which are discussed in the next subsection.

4.2 Theme 1: Types of Risks Experienced

The data showed that the family businesses are exposed to various forms of risk. The five sub-themes explore these vulnerabilities in more detail as operational,

financial, security and crime, digital and technological risks, and succession and continuity issues.

4.2.1 Operational Risks

Many family businesses suffered during and after the COVID-19 pandemic. From the comments made by participants, this occurred across industries.

“COVID affected us big time; it really did. That was a huge risk we were not aware that was even coming” (Company L, Petroleum).

“COVID was major for my little business because there was no money coming in for three months at least. Then when it did stop a little bit limited money did start coming in which did not help with my overheads”(Company I, Hospitality).

“The impact of COVID on our small business was significant” (Company C, Construction).

In terms of the risks posed by operating costs, the participants highlighted two primary areas, namely, raw materials and late payments by debtors. These aspects are highlighted by the next quotes.

“So, the cost of our raw material has been a major risk factor for us because we aren't able to just charge a lot more for our panels. And the cost of that material has increased rapidly” (Company D, Petro-chemical).

“Debtors, people not paying it, is a big one. So, people that are not making payments or paying late. And it's a very expensive business to run there are lots of expenses, the expenses are endless” (Company G, Hospitality).

Some participants indicated that the only power they had with regard to operating costs was to keep them as low as possible. That was perceived as the only mechanism for preventing the business from being negatively impacted by this form of risk.

“The only control we have is basic keeping up costs or keeping running cost low. Those are the only ways we can prevent the business obviously being affected when it comes to above risk for reducing cost low” (Company C, Construction).

The family businesses sampled in this study commented on a wide range of safety issues that they were exposed to and needed to ensure they followed regulations in order to comply with safety protocols. The comments made by the participants indicate that this form of risk occurred across the industries.

“We are exposed to safety risks daily as the business is a very, very high-risk kind of work. So, safety risk is a daily high risk” (Company A, Construction).

“It is a quite a big risk to work on the petrol chemical sites because you are working in an area where there is a lot of fumes for instance. So, safety is very big for us. You got to follow the very strict safety protocol and the companies are very strict with safety” (Company D, Petro-chemical).

“Yes well if you're talking about that we've got a health and safety department because there are risks, so the risk that the guys get injured on duty and things like that.” (Company E, Manufacturing).

“We are exposed to fire that is hazardous risks and we are exposed to compliance on health issues since we work with gases.” (Company L, Petroleum).

Another operational risk category commonly experienced by the participants was the impact of load-shedding.

“Load-shedding is our biggest operational nightmare. We've lost stock and clients because we couldn't deliver on time” (Company E, Manufacturing).

“Our business runs on power—no electricity, no business. We had to spend hundreds of thousands on backup systems just to survive” (Company J, Hospitality).

Besides the operational risks to which the family businesses were susceptible, they also faced financial and cash flow vulnerabilities that complicated their RM strategies. These are discussed in the next sub-section.

4.2.2 Financial and Cash Flow Risks

The family businesses provided a range of responses to the impact that financial unpredictability was having on their business. For some, the impact of the financial risk posed to their family business was manageable. The business had backup and supporting systems and was therefore prepared for financial challenges. Implementing some method to assist in effectively managing the risks was a key theme in the participants' responses.

“The financial risks have not been too bad. We are a well-established company so we do have good backup and support” (Company A, Construction).

“Financial risk in the business there is, there always is in any business but if you're smart and you buy the right products and you sell the right stuff and you offer good service and good warranty, you should not have to worry” (Company B, ICT).

For other participants, specifically the smaller ones, a high level of vulnerability to market fluctuations was expressed. Internal family business funds are limited, and/or there is no support and financing from external parties, making the business more vulnerable.

“Because we are a small business operating on small finances, we do not have corporate backing, so the subtle changes in the markets impact cash flow” (Company C, Construction).

“The first one is the financial risk, given the tough times which we are facing or which South Africa is facing. It is difficult for us to actually have the capital to be able to be operational and be able to pay all our employees on time. Sometimes we do consultation on credit without being paid in due time, then that affects the day-to-day running of the business” (Company F, Consulting).

“Finance is definitely a blockage, because if I could solve everything, I would need a lot of money to do that. But we have managed to stay on top of everything” (Company H, Hospitality).

“We don’t always qualify for bank loans because we mix family and business finances. That limits how we can grow going forward.” (Company K, Clothing).

Cash flow risk was also a critical factor for several participants.

“Cash flow is always tight, especially after month-end payroll. One late payment from a client can put everything on hold” (Company L, Petroleum).

“Our income is seasonal, but our expenses aren’t. In the off-season, we rely on personal savings to keep the business afloat” (Company I, Hospitality).

“We offer credit to long-standing customers out of loyalty, but when they delay payments, it puts pressure on everything, like salaries and rent.” (Company G, Hospitality).

4.2.3 Security and Crime Risks

For several of the family businesses, their main risk concerns were of a criminal nature, including theft, break-ins, and robberies.

“So, we have had a lot of stealing in terms of copper pipes, so we constantly have to do maintenance. In terms of risk management, it is difficult because you don’t want to affect the guests, but it does happen” (Company G, Hospitality).

“At the moment, crime, theft, break-ins, robberies, that’s basically our biggest fear other than that. What else?” (Company B, ICT).

“We are exposed to theft” (Company L, Petroleum).

“We’ve had multiple break-ins. The cost of security is now part of our monthly planning. It’s not optional” (Company I, Hospitality).

4.2.4 Technological Risks

In terms of the risks posed by the digital and technological aspects of the business, the participants highlighted two main areas, namely, the need for and resistance to becoming more digital in their operation. This was highlighted through the following comments:

"We know we need to digitise, but we don't have the skills or money to do it properly. That's a big risk now" (Company D, Petro-chemical).

"We still use a lot of manual systems. If our one computer crashes, we would lose a lot. We don't even have proper backups" (Company K, Clothing).

"The younger generation wants to move everything online, but some of us older folks are scared of change. It creates a bit of a divide in our decision-making" (Company F, Consulting).

Another digital risk made clear by the participants centred around cybersecurity and the risks posed by being on and using various digital platforms.

"Cybersecurity is a growing threat. We don't know how protected we really are, and we really can't afford a data breach" (Company C, Consulting).

"We got scammed through a fake supplier email. It looked real, and we paid thousands to the wrong account. Since then, we've realised how exposed we really are" (Company H, Hospitality).

4.2.5 Succession and Continuity Risks

An additional major concern area was the continuity of the business. The participants consistently noted that who in the family would take over the leadership of the business in the future was an anxiety-provoking issue.

"There's no clear plan for who takes over if something happens to my dad. Everyone just assumes he'll be around forever" (Company E, Manufacturing).

"The next generation isn't always interested, and even when they are, they want to change everything overnight. That's risky" (Company F, Consulting).

"No one wants to talk about succession because it feels like preparing for someone's funeral. But avoiding it is the real danger" (Company K, Clothing).

In the next sub-section, the second theme is discussed. This theme had two sub-themes.

4.3 Theme 2: Perception of Risks

The second theme, which documents the perception of the participants on the risks they are experiencing, had two sub-themes. The first clarifies the high propensity for risk aversion amongst the participants, and the second sub-theme details the intergenerational conflicts that are often experienced in dealing with the risks the business faces.

4.3.1 Risk Aversion

In terms of the perception of the majority of the participants, a large number indicated that risk aversion was a standard approach to the experience and presence of risk in their family business.

“In our family, risk is seen more as a threat than an opportunity. We’ve worked too hard to build this from nothing to gamble it away” (Company L, Petroleum).

“We’d rather grow slowly and safely than take on debt and end up overexposed” (Company F, Consulting).

“We’d rather miss out on an opportunity than make a mistake we can’t recover from. Playing it safe has kept us alive so far” (Company E, Manufacturing).

4.3.2 Intergenerational Views

Several of the businesses had multiple generations working in the business. Sometimes this aided their ability to work together, as reflected in the next statements made by the participants.

“My father brings wisdom from years of experience, and I bring fresh ideas. Together, we weigh the risks better than either of us could alone” (Company E, Manufacturing).

“Having both the old-school caution and the younger generation’s appetite for innovation helps us strike a balance. It’s made our business more adaptable and resilient” (Company F, Consulting).

However, for other participants, this multiple generational aspect of the business was a source of conflict and frustration.

“My father believes that if you trust your gut, you don’t need fancy risk models. But I think times have changed—we need data” (Company I, Hospitality).

“My son wants to bring in consultants, but I feel they complicate what used to be simple” (Company B, ICT).

The first two themes identified the types of risks that the family businesses were experiencing and the common perceptions of the participants regarding these risks. Theme three explains the RM approaches adopted by these family businesses to mitigate these risks.

4.4 Theme 3: Risk Management Strategies and Approaches

Various RM approaches are adopted by family businesses to assist them in coping with the multitude of risks they are exposed to in the normal course of business. Three sub-themes were identified, namely, informal approaches, formal approaches, and the role of learning from experience. These sub-themes are discussed in the sub-sections that follow.

4.4.1 Informal Approaches

Many of the family businesses used an informal approach in terms of their RM plan and in their discussion, examination, and determination of what mitigation plans exist. This is made clear in several of the statements made by the participants.

"All done verbally, we will make plans and then we will just implement them, majority of the time as informal will do some sort of very brief letters or emails to staff to inform our decisions being made. But there is no actual plan that is talking on or going to look at or see what the mitigation plans are. It is more developed amongst the management" (Company C, Construction).

"Verbally mutually agreed upon" (Company F, Consulting).

"It would not be a formal plan as such, not formal at all. We speak as a group, it is not written down" (Company H, Hospitality).

"I would say it is more informal, so it is very staff driven. We have empowered our staff and a lot of the strategy and implementation is done by them" (Company J, Hospitality).

"Not really, we do not have like the formal writing risk management plan. We chat to our customers and suppliers and work from there" (Company L, Petroleum).

4.4.2 Formal Approaches

For others, the need for a formal and documented RM plan was critical. This written plan fulfilled several purposes for the businesses. This is made clear through the statements made by the participants.

"Yes, we have formal one in place which is shared with all of our customers. It is written" (Company A, Construction).

"It is formal...written" (Company B, ICT).

"We have our policy in place. I'm pretty sure that's got all the risks listed down there" (Company G, Hospitality).

"Yes, safety guys have a baseline risk assessment that they start off with, then get work from that depending on the job. It is written, you cannot have it just verbally" (Company D, Petro-chemical).

"Yes, so there are formal plans in place that is in terms of health and safety files, and we are also 9001 compliant. So, there is a formal check of all that we are doing. It is a formal written down certification" (Company E, Manufacturing).

4.4.3 Learning from Experience

Due to the small size of some of the family businesses, they did not have specialised departments to assist with some of their risk areas, such as human resource departments or similar structures to create mitigation plans, so they handle risk issues internally. This may involve experimenting, making mistakes, and relying on their background and qualifications.

"Honesty, there is nothing on paper. We have not had HR departments and those types of things to come up with mitigation plans. We as a small business we make small decisions among ourselves. So, we make them pretty quickly, there is no such mitigation plan or we do not sit down and develop a plan, we make decisions on the fly" (Company C, Construction).

"I think everything's trial and error so you'll go along and you'll try certain things, you learn as you go" (Company G, Hospitality).

"Well, I think through years of experience, so over time different things have happened on a smaller level and I gain experience through that. We also have meetings with our management to try to strategise and mitigate risks" (Company J, Hospitality).

"It was through realizing the challenges we were facing and also due to our experience and some of us come from a business management background so we do understand the challenges or the risks that can be encountered in a business so that is how we ended up saying, Okay, we need to have sort of working plan in order to mitigate the risks we may face" (Company M, Consulting).

In the next subsection, the fourth theme is explored, which has two sub-themes.

4.5 Theme 4: Family Dynamics and Decision-making

This fourth theme investigates how the family dynamics impacted the decision-making within that family business. This theme has two sub-themes, namely, resistance to risk and emotional vs logic.

4.5.1 Resistance to Risk

For some of the family businesses, the existing family dynamics and the level of risk aversion have had and are continuing to have a negative impact on the business and the decisions that are being made.

"My uncle is very risk averse. He blocks most of our suggestions for growth" (Company L, Petroleum).

"We've missed several opportunities because the older generation doesn't want to try anything new" (Company E, Manufacturing).

"My family in the business say, 'we know this business works, why fix what's not broken?' They see new ideas as risky. It can be quite frustrating because the market is changing" (Company M, Consulting).

4.5.2 Emotional vs Logic

Several of the family businesses indicated that decision-making in the business was often negatively impacted by the emotions that existed due to the family members working together. This is expressed in the following statements:

"In family meetings, emotions often take over. It can be real bad" (Company H, Hospitality).

"It's difficult to say 'no' to your mother when she's also your boss. Even when she's wrong" (Company J, Hospitality).

"When tensions are high at home, it spills over into the business. Some decisions get delayed for weeks because no one wants to talk to each other" (Company K, Clothing).

"Family fights don't stay at the dinner table. They follow us into board meetings. Sometimes we make choices based on who we're siding with, not what's best for the business" (Company D, Petro-chemical).

For others, working as a family helped improve their approach to running the family business. They conducted business as partners, prioritising their professional relationships over the business's familial ones. The family business members approach business with a focus on its professional aspects rather than personal ones. Therefore, the business handles business matters with a business-oriented mindset. This was explained in the following statements:

"It is us sitting down as business partners and when we are doing business we do not see each other as family members, but we see each other as business partners. So, as business needs to be treated as a business, not as a family, we treat business as a business" (Company M, Consulting).

“So what has helped us, I think it's a matter of discipline that we want to see ourselves succeed and we go for that specifically go on how best so everyone else is putting or channelling his or her and energy towards achieving the goal which you want. So, I think I can say discipline, expertise, and professional standards, which we then keep as family that we know the do's and the don'ts” (Company F, Consulting).

In the next sub-section, the fifth theme is expounded. His theme unpacks the impact of RM on the family business's performance.

4.6 Theme 5: Impact of Risk Management on Business Performance

This fifth theme has two sub-themes, namely, the impact on business continuity and competitive advantage.

4.6.1 Business Continuity

For many of the participants, having a more proactive approach to RM has had a significant and positive impact on the performance of the business. This has helped the business to survive and continue despite setbacks.

“We nearly lost everything in 2015 due to a supplier default. Since then, we've put proper contracts and checks in place” (Company B, ICT).

“We used to be reactive, but now we plan ahead. That has helped us stabilise cash flow” (Company F, Consulting).

“Since we started taking risk management seriously, we've been able to survive disruptions that wiped out some of our competitors. It's not luck. It's planning” (Company H, Hospitality).

“We used to treat crises as one-offs, but now we prepare for them. Having a contingency plan gave us the confidence to keep operating during tough times” (Company K, Clothing).

4.6.2 Competitive Advantage

Taking a proactive stance has improved business performance and the competitive advantage of the family business. This is explained in the statements that follow.

“In this industry, a lot of it is preparation, so understanding or like trying to identify what the risks might be ahead of time. And then if that risk occurs, we have a plan in place or some experience in place on how to deal with it. But I would say 90% preparation, anticipating and trying to predict what the risks might be” (Company J, Hospitality).

“Risk management helped us survive load-shedding. We invested in solar early, and now we're ahead of competitors” (Company C, Construction).

“Because we plan for worst-case scenarios, we were able to expand when others closed” (Company L, Petroleum).

In the next sub-section, the final theme on learning and adaptation in RM is considered.

4.7 Theme 6: Learning and Adaptation

This sixth theme has two sub-themes, namely, knowledge transfer and ongoing adjustment.

4.7.1 Knowledge Transfer

For some of the family businesses, the family members operate as a consistent unit, working together to establish effective measures to address any potential risks. The process is time-intensive but allows for continuous improvement. It also allows for one family member to share knowledge and expertise with others in the business. The comments below illustrate this point.

“We run the business with the different disciplines which will bring to the table. For example, my one brother is from the development studies, the other one is from the management, and two of us are from marketing. So, it's like we then come in from different angles. The person with expertise in that particular field or risk then leads the team” (Company F, Consulting).

“We work together as a family. Some people have their strengths and weaknesses. So together we can put the systems in place to combat any sort of risk that might arise, but it takes time and years of experience to get it right” (Company B, ICT).

“We've learned the hard way. Every crisis has been a lesson. The key is to write it down and make sure the next generation understands it” (Company K, Clothing).

Some of the family businesses leveraged external resources to establish the appropriate systems and effectively deal with RM.

“In our business, we need to use clever people. We just don't have all the expertise in the family members. So, I use resources like friends, lawyers, accountants, and they help me put in the right systems” (Company B, ICT).

4.7.2 Ongoing Adjustment

Many participants indicated that internal conflict often emerged due to a lack of clarity in role distribution and conflicting expectations among family members.

“In some instances, you realise that some family members might go beyond each other's backs and say I think I might be doing more or I think someone is not doing enough so those are the kind of things we face” (Company M, Consulting).

To deal with this conflict, several participants explained that maintaining open communication and staying actively engaged in the business was critical. This aspect is highlighted by the next quotes.

“Just communication, I suppose, is a big thing, and keeping everyone in the loop on the decisions we make” (Company C, Construction).

“At the end of the day as a family business you still have a structure in place. You still have your CEO, everybody that got a job so it does not matter if it is a family business. I believe that you still got to follow procedures. You cannot just because it is a family business decide that let’s not do this, let’s not do that. Your whole business must be structured otherwise I do not think it can be successful, because every person is important in your business” (Company D, Peto-chemical).

“What I can say has assisted us is being transparent within the business. With this shared vision, we then strictly adhere to rules and to our ambitions, want to want, to see ourselves going forward” (Company F, Consulting).

Other participants highlighted that continuous improvement and flexibility are needed to be able to deal effectively with RM.

“We revisit our risk plan every quarter. Load-shedding, theft, and customer shifts force us to adapt” (Company E, Manufacturing).

“Risk management isn’t a one-time thing. It’s something we adapt every year based on what gets thrown at us” (Company C, Construction).

The six themes and 16 sub-themes have been outlined, with the comments made by the 13 participants explaining these themes. In the next section, these themes are discussed in more detail.

5. Discussion

This study sought to explore the various types of risks encountered by family businesses, how these risks are perceived, and the role that RM plays in shaping decision-making and business performance. It also aimed to examine the strategies family businesses are using to manage and reduce risk in order to enhance their overall performance. This study confirmed existing research, which indicates that family businesses are exposed to a wide spectrum of risks, such as financial instability, continuity and succession uncertainty, operational disruptions, and market volatility, exacerbated in emerging contexts by regulatory and cyber threats (Baltazar et al., 2023; Tan et al., 2021; Thakur & Sinha, 2023). This study also found support for literature that indicates that internal family dynamics, including emotional attachments, risk aversion, and generational conflict, often intensify these risks, especially affecting succession planning and strategic decision-making (Baltazar et al., 2023; Martinez-Romero et al., 2020).

The findings revealed a strong tendency toward risk aversion within South African family businesses, aligning with recent research showing that family

businesses often avoid uncertainty to protect socioemotional wealth and long-term control. This is consistent with agency theory and behavioural family business studies (Cambrea et al., 2022; Sievinen et al., 2020). The study therefore demonstrates that agency theory conflicts do arise in family businesses in small, developing economies. Conversely, the intergenerational dynamic in our findings showed that collaboration between older and younger generations can mitigate excessive caution. This supports emerging literature indicating that generational complementarity, combining the founder's experience with successors' fresh perspectives, fosters a more adaptable strategic posture without undermining continuity (Sun et al., 2022; Thakur & Sinha, 2023).

This study's findings revealed that many South African family businesses rely heavily on informal RM approaches, such as intuitive decision-making based on trust, stakeholder relationships, and shared understanding within the family. These informal mechanisms are consistent with findings that family businesses often lack formal risk systems but compensate using social capital and close stakeholder bonds to buffer uncertainty (Mitter et al., 2022). Some businesses, however, adopted formal RM frameworks, including documented policies and role responsibilities. This shift aligns with studies showing that family businesses are professionalising their RM approaches (Riepl et al., 2024). Crucially, across the board, the family businesses emphasised learning from experience, turning crises into structured learning, documenting lessons, and revising practices. This reflects literature suggesting that family involvement and intergenerational learning compensate for formal RM deficits, enabling these family businesses to gradually build resilience through informal yet effective knowledge transfer (Mihaylov & Zurbruegg, 2021; Mitter et al., 2022; Tan et al., 2021).

This study confirmed that resistance to risk is common in family businesses, especially where older generations hold strong control over decisions. This aligns with recent research demonstrating how socioemotional wealth preservation often results in conservative risk-taking and reluctance to innovate, as family members attempt to protect legacy and emotional capital (Cambrea et al., 2022; Sievinen et al., 2020). Regarding emotional versus logical decision-making, this study revealed that emotions often override objective analysis. Family conflict, loyalty, or attachment influenced business choices. At times, this biased the outcomes in favour of personal relationships rather than rationale. This finding complements behavioural strategy literature (Alderson, 2015; Brundin et al., 2022; Maharajh et al., 2024; Treffers et al., 2020). The significance of well-defined responsibilities within the family company for efficient RM is well documented (Oliveira & Almeida, 2019; Tan et al., 2021). The study elaborates on this by examining how job clarity affects overall business performance, and RM can cause conflict if not in place.

The study's findings also underline the necessity of RM in guaranteeing the long-term viability and success of family companies. This research also emphasises the necessity of adaptation and creativity, especially during crises, as well as regulating family relations to avoid internal disputes. Overall, the study supports the notion that good RM is an important component of a family business's

success, and that family businesses that can blend tradition with innovation, formalisation with flexibility, have a higher chance of effectively managing risk issues (Calabrò et al., 2019; Eddleston et al., 2019).

6. Implications and Recommendations for Future Study

The findings of this study offer several important implications for both practitioners and scholars interested in the sustainability and performance of family businesses. One of the central insights is the need for family businesses to acknowledge and manage the emotional undercurrents that often influence strategic decision-making. Resistance to risk, particularly by older generations seeking to preserve legacy and socioemotional wealth, can inhibit innovation and responsiveness to market shifts. Developing structured decision-making processes that balance emotional considerations with data-driven logic may help mitigate this tension and promote more effective governance.

The presence of multiple generations within the family business was found to be both a potential source of conflict and a strength. When managed well, intergenerational collaboration can result in more balanced risk perceptions, where the cautious approach of older family members is complemented by the forward-thinking and technologically attuned perspectives of younger members. This reinforces the need for leadership development and succession planning interventions that foster mutual respect and structured communication between generations, particularly in the South African context, where family cohesion is deeply valued.

In terms of RM practices, the study highlights that many family businesses rely heavily on informal strategies and experiential learning. While this can be effective in the short term, especially in smaller businesses, it also exposes the business to significant vulnerabilities, particularly in periods of economic uncertainty or technological disruption. The findings suggest a strong case for supporting family businesses in adopting more formal RM systems, such as scenario planning, digital risk assessment tools, and clearly articulated governance roles, without undermining the relational dynamics that underpin their culture.

Finally, policymakers and support agencies have a role to play in developing training, mentorship, and knowledge-sharing platforms tailored to the unique needs of family businesses. These should address not only technical RM skills but also the emotional and relational competencies required to navigate conflict and build resilience across generations. In this way, family businesses, many of which are significant contributors to local economies in South Africa, can be better positioned to sustain performance and continuity in an increasingly complex business environment.

The study was limited to 13 family-owned businesses from diverse industries in the Eastern Cape. While it gave useful understandings, the sample size was small, and the conclusions may not be applicable to other family businesses. Larger research would be required to corroborate the findings across more

different geographic locations and sectors. The study focused only on family-owned businesses in the Eastern Cape, which may limit our understanding of how RM plans work in other types of businesses and locations. The study is limited to a single location, and cultural, legal, or economic issues unique to that region may influence the RM plan. As a result, the findings may not be applicable to family businesses in other countries with different regulatory environments or market conditions.

The study relied on qualitative interviews, which are vulnerable to the participants' subjective beliefs. The data's accuracy and reliability are determined by the interviewers' honesty and self-awareness, which may create favouritism. The study focused on qualitative data from interviews rather than quantitative performance indicators. Future studies might benefit from using financial data or performance measures in order to give a more solid picture of how the RM plan affects family business success. Future research should look at how RM plans differ between family-owned and non-family businesses. This would give a more comprehensive knowledge of how family dynamics influence RM and performance than other business systems. Longitudinal research that follows family businesses over time would give further insight into how the RM plan evolves as they grow, pass down generations, or adapt to external economic developments. Given the importance of family dynamics in RM plans, future studies must also focus on family conflict resolution strategies and how they can be included in RM plans to improve family businesses' performance.

7. Conclusion

This research affirms the vital role of RM in securing the success and longevity of family-owned businesses. The study indicates that family businesses incorporating formal RM strategies tend to demonstrate greater resilience in handling various types of risks. However, many family businesses still rely on informal approaches to RM, especially those in smaller or less regulated industries. The study also emphasises the significance of adaptability and innovation in addressing crises, as demonstrated during the COVID-19 pandemic. Businesses that displayed flexibility in their operations were better equipped to overcome challenges posed by external disruptions.

The influence of family dynamics on shaping RM strategies cannot be overstated. The research reveals that clearly defined roles among family members and effective communication are pivotal in preventing internal conflicts and ensuring the smooth operation of the business. Overall, this study contributes to the expanding knowledge base on RM in family businesses, providing practical insights into how family businesses can effectively navigate the complex risks they encounter to enhance performance and ensure long-term sustainability.

Ethical Approval and Consent

All ethical considerations were adhered to during this study. Each participant was required to sign the consent form, as participation was voluntary and privacy was

respected. Ethical approval was obtained from the University of Fort Hare Inter-Faculty Human Research Ethics Committee, with the ethical approval number being 2020016066-ZM-JT.

Conference Disclaimer

Some part of this manuscript was previously presented in the conference: International Conference on Business and Management Dynamics (ICBMD) 2025, dated 29th October, 2025 in Cape Town, South Africa, Web Link of the proceeding: <https://www.icbmd.org.za>

Disclaimer (Artificial Intelligence)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of this manuscript.

Competing Interests

Authors have declared that no competing interests exist.

References

- Abdelhour, J., & El-Farr, H. (2023). The agency theory. SAGE Publications, Inc. <https://doi.org/10.4135/9781071923924>
- Adomako, S., Frimpong, K., Amankwah-Amoah, J., Donbesuur, F., & Opoku, R. A. (2021). Strategic decision speed and international performance: The roles of competitive intensity, resource flexibility, and structural organicity. *Management International Review*, 61(1), 27–55. <https://doi.org/10.1007/s11575-021-00439-w>
- Alderson, K. (2015). Conflict management and resolution in family-owned businesses: A practitioner focused review. *Journal of Family Business Management*, 5(2), 140–156. <https://doi.org/10.1108/JFBM-08-2015-0030>
- Aldrich, H. E., Brumana, M., Campopiano, G., & Minola, T. (2021). Embedded but not asleep: Entrepreneurship and family business research in the 21st century. *Journal of Family Business Strategy*, 12(1), 1–19. <https://doi.org/10.1016/j.jfbs.2020.100390>
- Azizi, M., Bidgoli, M. S., & Taheri, A. (2021). The effect of ownership and management structure on family businesses performance. *Cogent Business & Management*, 8(1), 1872888. <https://doi.org/10.1080/23311975.2021.1872888>
- Baba Ahmed, A. N., & Megnounif, A. (2020). The impact of risk management on business performance: case of Algerian construction organizations. *Innovative Infrastructure Solutions* <https://doi.org/10.1007/s41062-020-00354-3>

- Baggio, R., & Valeri, M. (2021). Network science and sustainable performance of family businesses in tourism. *Journal of Family Business Management*, 12(2), 200–213. <https://doi.org/10.1108/JFBM-06-2020-0048>
- Baltazar, J. R., Fernandes, C. I., Ramadani, V., & Hughes, M. (2023). Family business succession and innovation: A systematic literature review. *Review of Managerial Science*, 17, 2897–2920. <https://doi.org/10.1007/s11846-022-00607-8>
- Basco, R., Bassetti, T., Dal Maso, L., & Lattanzi, N. (2023). Why and when do family firms invest less in talent management? The suppressor effect of risk aversion. *Journal of Management and Governance*. <https://doi.org/10.1007/s10997-021-09599-1>
- Basheer, M. F., Gupta, S., Raouf, R., & Waemustafa, W. (2021). Revisiting the agency conflicts in family-owned pyramidal business structures: A case of an emerging market. *Cogent Economics & Finance*, 9(1) <https://doi.org/10.1080/23322039.2021.1926617>
- Bernhard, F., Hiepler, M., & Engel, F. X. (2020). Family business sustainability: The intergenerational transfer of social capital and network contacts. In Sustainable innovation: Trends in marketing and management (pp. 101–132). *Springer International Publishing*. https://doi.org/10.1007/978-3-030-30421-8_9
- Berrone, P., Duran, P., Gómez-Mejía, L., Heugens, P. P., Kostova, T., & van Essen, M. (2022). Impact of informal institutions on the prevalence, strategy, and performance of family firms: A meta-analysis. *Journal of International Business Studies*, 53(6), 1153–1177. <https://doi.org/10.1057/s41267-020-00362-6>
- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health* <https://doi.org/10.1080/2159676X.2019.1628806>
- Brundin, E., Liu, F., & Cyron, T. (2022). Emotion in strategic management: A review and future research agenda. *Long Range Planning*, 55(4), 102144. <https://doi.org/10.1016/j.lrp.2021.102144>
- Bryman, A., Bell, E., Harley, B., & Hirschsohn, P. (2021). Research methodology: Business and management contexts. *Oxford University Press Southern Africa (Pty) Ltd*. <https://www.oxford.co.za/book/research-methodology-2e-business-and-management-contexts-9780190747787>
- Buzzao, G., & Rizzi, F. (2020). On the conceptualization and measurement of dynamic capabilities for sustainability: Building theory through a systematic literature review. *Business Strategy and the Environment*, 30(1) <https://doi.org/10.1002/bse.2614>
- Calabrò, A., Vecchiarini, M., Gast, J., Campopiano, G., De Massis, A., & Kraus, S. (2019). Innovation in family firms: A systematic literature review and guidance for future research. *International Journal of Management Reviews*, 21(3). <https://doi.org/10.1111/ijmr.12192>
- Cambrea, D. R., Ponomareva, Y., Pittino, D., & Minichilli, A. (2022). Strings attached: Socioemotional wealth mixed gambles in the cash management choices of family firms. *Journal of Family Business Strategy*, 13(3), 100466. <https://doi.org/10.1016/j.jfbs.2021.100466>

- Carney, M., Zhao, J., & Zhu, L. (2019). Lean innovation: Family firm succession and patenting strategy in a dynamic institutional landscape. *Journal of Family Business Strategy*, 10(4), 100247. <https://doi.org/10.1016/j.jfbs.2018.03.002>
- Coleman, P. (2022). Validity and reliability within qualitative research for the caring sciences. *International Journal of Caring Sciences*, 14(3), 2041–2045. <http://www.internationaljournalofcaringsciences.org/>
- Darwiesh, A., El-Baz, A. H., Tarabia, A. M. K., & Elhoseny, M. (2022). Business intelligence for risk management: A review. *American Journal of Business and Operations Research*, 6(2), 16–27. <https://doi.org/10.54216/AJBOR.060202>
- Daspit, J. J., Chrisman, J. J., Ashton, T., & Evangelopoulos, N. (2021). Family firm heterogeneity: A definition, common themes, scholarly progress, and directions forward. *Family Business Review*, 34(3), 296–322. <https://doi.org/10.1177/08944865211008350>
- De Massis, A., & Rondi, E. (2020). Covid-19 and the future of family business research. *Journal of Management Studies*, 57(8) <https://doi.org/10.1111/joms.12632>
- De Ries, K. E., Schaap, H., van Loon, A. M. M. J. A., Kral, M. M. H., & Meijer, P. C. (2021). A literature review of open-ended concept maps as a research instrument to study knowledge and learning. *Quality & Quantity* <https://doi.org/10.1007/s11135-021-01113-x>
- Eckey, M., & Memmel, S. (2023). Impact of COVID-19 on family business performance: Evidence from listed companies in Germany. *Journal of Family Business Management*. <https://doi.org/10.1108/JFBM-11-2021-0143>
- Eddleston, K. A. G., Kellermanns, F. W., & Collier, G. (2019). Research on family firm innovation: What do family firms actually think and do? *Journal of Family Business Strategy*, 10(4), 100308. <https://doi.org/10.1016/j.jfbs.2019.100308>
- Erdogan, I., Rondi, E., & De Massis, A. (2020). Managing the tradition and innovation paradox in family firms: A family imprinting perspective. *Entrepreneurship Theory and Practice*, 44(1), 20–54. <https://doi.org/10.1177/1042258719839712>
- Gherghina, S. C., Botezatu, M. A., Hosszu, A., & Simionescu, L. N. (2020). Small and medium-sized enterprises (SMEs): The engine of economic growth through investments and innovation. *Sustainability* <https://doi.org/10.3390/su12010347>
- Gjergji, R., Lazzarotti, V., Visconti, F., & García-Marco, T. (2019). Open innovation in family firms: A systematic literature review. *Management Research: Journal of the Iberoamerican Academy of Management*, 17(3), 304–332. <https://doi.org/10.1108/MRJAM-03-2019-0913>
- Gurtu, A., & Johny, J. (2021). Supply chain risk management: Literature review. *Risks*, 9(1), 16. <https://doi.org/10.3390/risks9010016>

- Hernández-Perlines, F., Araya-Castillo, L., Millán-Toledo, C., & Cisneros, M. A. I. (2023). Socioemotional wealth: A systematic literature review from a family business perspective. *European Research on Management and Business Economics*, 29(2), 100218. <https://doi.org/10.1016/j.iedeen.2023.100218>
- Ibáñez, M. J. (2021). Inter-firm marketing collaboration in family businesses: The role of risk aversion. *Journal of Small Business Strategy*, 31(2), 53–61. <https://jsbs.scholasticahq.com/article/26343-inter-firm-marketing-collaboration-in-family-businesses-the-role-of-risk-aversion>
- Köhr, C. K., Corsi, A. M., Capitello, R., & Szolnoki, G. (2019). Family culture and organisational systems as antecedents of market orientation and performance among family wineries. *International Journal of Wine Business Research*, 31(2), 180–202. <https://doi.org/10.1108/IJWBR-09-2017-0054>
- Maharajh, R., Dhliwayo, S., & Chebo, A. K. (2024). The influence of family dynamics on business performance: Does effective leadership matter? *Journal of Family Business Management*, 14(3), 515–533. <https://doi.org/10.1108/JFBM-04-2023-0058>
- Mahto, R. V., Vora, G., McDowell, W. C., & Khanin, D. (2020). Family member commitment, the opportunity costs of staying, and turnover intentions. *Journal of Business Research*, 108, 9–19. <https://doi.org/10.1016/j.jbusres.2019.10.013>
- Martínez-Romero, M. J., Martínez-Alonso, R., & Casado-Belmonte, M. P. (2020). The influence of socio-emotional wealth on firm financial performance: Evidence from small and medium privately held family businesses. *International Journal of Entrepreneurship and Small Business*, 40(1), 7–31. <https://doi.org/10.1504/IJESB.2020.106930>
- Masita, I., & Yuhertiana, I. (2022). Analysis of risk management implementation in the internal audit unit (SPI) Politeknik Pelayaran Surabaya using ISO 31000:2018. *International Journal of Multidisciplinary: Applied Business and Education Research*, 3(10), 2096–2105. <https://doi.org/10.11594/ijmaber.03.10.21>
- Massa, R. M., Partyka, R. B., & Lana, J. (2020). Behavioral agency research and theory: A review and research agenda. *Cadernos EBAPE.BR*, 18(2), 220–236. <https://doi.org/10.1590/1679-395177017x>
- Mihaylov, G., & Zurbrugg, R. (2020). The relationship between financial risk management and succession planning in family businesses. *International Journal of Managerial Finance*, 17(3), 438–454. <https://doi.org/10.1108/IJMF-12-2019-0466>
- Milanés-Batista, C., Tamayo-Yero, H., de Oliveira, D., & Nuñez-Alvarez, J. R. (2020). Application of business intelligence in studies management of hazard, vulnerability and risk in Cuba. *IOP Conference Series: Materials Science and Engineering*, 844, 012033. <https://doi.org/10.1088/1757-899X/844/1/012033>
- Mitnick, B. M. (2013). Origin of the theory of agency: An account by one of the theory's originators. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1020378>

- Mitter, C., Postlmayr, M., & Kuttner, M. (2022). Risk management in small family firms: Insights into a paradox. *Journal of Family Business Management*, 12(2), 237–250. <https://doi.org/10.1108/JFBM-06-2020-0051>
- Ng, P. Y., Dayan, M., & Di Benedetto, A. (2019). Performance in family firm: Influences of socioemotional wealth and managerial capabilities. *Journal of Business Research*, 102, 178–190. <https://doi.org/10.1016/j.jbusres.2019.05.026>
- Nnabuife, K. N., Ezimma, O., Okoli, I. E., & Arachie, A. E. (2018). Cultural dynamics and performance of family-owned businesses in Anambra State. *Asian Journal of Economics, Business and Accounting*, 8(4), 1–12. <https://doi.org/10.9734/AJEBA/2018/43948>
- Nuradhi, M., & Kristanti, L. (2020). Opportunity recognition: Gender and family business background comparison. *International Journal of Family Business Practices*, 3(2), 18–32. <https://doi.org/10.33021/ijfbp.v3i2.1333>
- Nwekpa, K. C., & Wabara, S. T. (2022). Creativity and the performance of family business: A study of ABC Transport Plc., Nigeria. *International Journal of Development and Management Review*, 17(1), 66–86. <https://doi.org/10.4314/ijdmr.v17i1.5>
- Oliveira, A., & Almeida, J. R. (2019). Business intelligence application for multidimensional analysis of risks in complex projects. *IT Professional*, 21(6), 33–39. <https://doi.org/10.1109/MITP.2018.2876931>
- Pike-Bowles, A. P., Puchert-Townes, J. I., & Chinyamurindi, W. (2022). A bibliometric analysis of South African family business research between 1994 and 2022. In L. Louw & B. Tweedie (Eds.), *Proceedings of the 2022 SAIMS Conference* (pp. 619–628). Southern Africa Institute of Management Scientists. https://www.researchgate.net/publication/379190000_A_bibliometric_analysis_of_South_African_family_business_research_between_1994_and_2022
- Pike-Bowles, A. P., Townes, J., & Chinyamurindi, W. (2024). The role of strategic flexibility and dynamic capabilities on family business performance. *The Southern African Journal of Entrepreneurship and Small Business Management*, 16(1), 1–11. <https://doi.org/10.4102/sajesbm.v16i1.767>
- Purssell, E., & Gould, D. (2021). Undertaking qualitative reviews in nursing and education: A method of thematic analysis for students and clinicians. *International Journal of Nursing Studies Advances*. <https://doi.org/10.1016/j.ijnsa.2021.100036>
- Razzak, M. R., Abu Bakar, R., & Mustamil, N. (2019). Socioemotional wealth and performance in private family firms. *Journal of Entrepreneurship in Emerging Economies*, 11(3), 392–415. <https://doi.org/10.1108/JEEE-07-2018-0074>
- Riepl, J., Mitter, C., & Kuttner, M. (2024). Risk management during the COVID-19 crisis: Insights from an exploratory case study of medium-sized family businesses. *Journal of Management Control*, 35, 109–135. <https://doi.org/10.1007/s00187-023-00363-0>
- Rojo Ramírez, A. A., Martínez-Victoria, M. C., & Martínez-Romero, M. J. (2022). Analysing the risk–return relationship in privately held firms: The contingent effect of being a family firm. *Academia Revista*

- Latinoamericana de Administración*, 35(4), 482–500.
<https://doi.org/10.1108/ARLA-02-2022-0036>
- Rondi, E., De Massis, A., & Kotlar, J. (2018). Unlocking innovation potential: A typology of family business innovation postures and the critical role of the family system. *Journal of Family Business Strategy*, 10(4).
<https://doi.org/10.1016/j.jfbs.2017.12.001>
- Rovelli, P., Ferasso, M., De Massis, A., & Kraus, S. (2022). Thirty years of research in family business journals: Status quo and future directions. *Journal of Family Business Strategy*, 13(3), 100422.
<https://doi.org/10.1016/j.jfbs.2021.100422>
- Sievinen, H. M., Ikäheimonen, T., & Pihkala, T. (2020). Owners' rule-based decision-making in family firm strategic renewal. *Scandinavian Journal of Management*, 36(3), 101119.
<https://doi.org/10.1016/j.scaman.2020.101119>
- Sohn, K. (2019). Understanding the order effect in eliciting risk aversion. *Finance Research Letters*, 30, 314–317. <https://doi.org/10.1016/j.frl.2018.10.014>
- Sreih, J. F., Lussier, R. N., & Sonfield, M. C. (2019). Differences in management styles, levels of profitability, and performance across generations, and the development of the family business success model. *Journal of Organizational Change Management*, 32(1), 32–50.
<https://doi.org/10.1108/JOCM-01-2018-0030>
- Sun, K., Wickramasekera, R., & Tan, A. (2022). Exploring the relationship between family involvement and innovative capability in Chinese family SMEs: The role of HR redundancy. *SAGE Open*, 12(2).
<https://doi.org/10.1177/21582440221099531>
- Syrová, L., & Špička, J. (2022). Exploring the indirect links between enterprise risk management and the financial performance of SMEs. *Risk Management*. <https://doi.org/10.1057/s41283-022-00107-9>
- Tan, J. D., Sugiarto, S., & Budhijono, F. (2021). Family business and risk management: Perspectives of SMEs entrepreneurs in Indonesia. *The Journal of Asian Finance, Economics, and Business*.
<https://doi.org/10.13106/jafeb.2021.vol8.no5.0851>
- Tekin, H., & Polat, A. Y. (2020). Agency theory: A review in finance. *Anemon Muş Alparslan Üniversitesi Sosyal Bilimler Dergisi*, 8(4), 1323–1329.
<https://doi.org/10.18506/anemon.712351>
- Thakur, V., & Sinha, S. (2023). Family governance structures in family businesses: A systematic literature review and future research agenda. *Journal of Small Business Management*, 62(6), 3016–3052.
<https://doi.org/10.1080/00472778.2023.2284930>
- Tiberius, V., Stiller, L., & Dabić, M. (2021). Sustainability beyond economic prosperity: Social microfoundations of dynamic capabilities in family businesses. *Technological Forecasting and Social Change*, 173, 121093.
<https://www.sciencedirect.com/science/article/pii/S0040162521005266>
- Treffers, T., Klamer, P., & Huy, Q. N. (2020). Emotions, time, and strategy: The effects of happiness and sadness on strategic decision-making under time constraints. *Long Range Planning*, 53(5), 101954.
<https://doi.org/10.1016/j.lrp.2019.101954>

- Urban, B., & Nonkwelo, R. P. (2021). Intra-family dynamics and succession planning in family businesses in South Africa: The daughter as a potential successor. *Journal of Family Business Management*, 12(2), 266–279. <https://doi.org/10.1108/JFBM-08-2020-0084>
- Yiu, L. M. D., Yeung, A. C. L., & Cheng, T. C. E. (2020). The impact of business intelligence systems on profitability and risks of firms. *International Journal of Production Research*. <https://doi.org/10.1080/00207543.2020.1756506>

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Peer-Review History:

This chapter was reviewed by following the Advanced Open Peer Review policy. This chapter was thoroughly checked to prevent plagiarism. As per editorial policy, a minimum of two peer-reviewers reviewed the manuscript. After review and revision of the manuscript, the Book Editor approved the manuscript for final publication. Peer review comments, comments of the editor(s), etc. are available here: <https://peerreviewarchive.com/review-history/6771.1>

The Effects of Humane Entrepreneurship on Small, Medium and Micro Enterprises' Performance

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DOI: <https://doi.org/10.9734/bpi/mono/978-81-998711-1-3/CH2>

Peer-Review History:

This chapter was reviewed by following the Advanced Open Peer Review policy. This chapter was thoroughly checked to prevent plagiarism. As per editorial policy, a minimum of two peer-reviewers reviewed the manuscript. After review and revision of the manuscript, the Book Editor approved the manuscript for final publication. Peer review comments, comments of the editor(s), etc. are available here: <https://peerreviewarchive.com/review-history/6771.2>

Abstract

Worldwide, small, medium, and micro enterprises (SMMEs) are recognised as the fundamental building blocks for developing countries economically. The concept of humane entrepreneurship is a new field of study in entrepreneurship, and yet, the concept of humane entrepreneurship is central to economic productivity and human development. The aim of this chapter is to determine the relationship between humane entrepreneurship strategies, namely, entrepreneurship orientation, sustainability orientation, and human resource orientation, and their effects on business performance. The study adopted a quantitative research method based on the positivist paradigm to investigate the relationship between entrepreneurial orientation, sustainability orientation, and humane resource orientation in relation to the performance of small, medium, and micro enterprises. A descriptive research design was adopted, and the Spearman correlation analysis was employed for the study. Data was collected using a questionnaire from a sample of 158 participants selected through convenience sampling within Region One of the City of Tshwane Municipality, and we received a 100% response rate. The study findings revealed that the Spearman correlation analysis indicated a strong and significant correlation between sustainability orientation ($r=0.69$) and human resources orientation ($r=0.63$) with business performance.

This study offers a new entrepreneurial paradigm that combines three entrepreneurial principles, entrepreneurship, sustainability, and human resource orientations, into a single concept known as humane entrepreneurship. This study is highly pertinent to small, medium, and micro enterprises (SMMEs) in South Africa, a sector that frequently faces challenges related to performance and sustainability. Moreover, this study enhances the paradigm of entrepreneurial orientation by integrating strategic considerations with environmental, social, and

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human resources. It offers statistical information about how humane entrepreneurship practices may improve the performance of SMMEs, which is crucial for promoting sustainable and equitable economic development. The results indicate that both sustainability and human resource orientation are strongly correlated with SMMEs' performance, which may help guide future research and development of entrepreneurial orientation.

Keywords: Entrepreneurial orientation; sustainability orientation; humane resource orientation; performance; SMMEs.

1. Introduction

Small, medium, and micro enterprises remain essential to the economic and social development of communities in both developing and developed nations (Jadhav, Gaikwad, & Bapat, 2023:76). These enterprises provide employment, foster innovation, cultivate local entrepreneurship, and strengthen economic resilience (Rankhumise, Letsoalo, & Muzanenhamo, 2025:18). They [SMMEs] contribute to the general quality of life by delivering important goods and services to their communities. Considering numerous strategies for SMMEs, humane entrepreneurship (HumEnt) is seen as an appropriate paradigm for attaining favourable results (Rosales & Silveyra, 2024:76). According to scholars such as Aboalhood, Alzubi, and Iyiola, (2024:4), Kim, ElTarabishy, and Bae (2018:10), and Le (2022:1), HumEnt aims to enhance the quality of life through creating employment while focusing on employee development and positive social and environmental effects (Kim *et al.*, 2018:11). Moreover, De Angelis & Vesci (2024:153) describe HumEnt as the degree to which owners and management are prone to prioritising the company's competitiveness, human resources, and community responsibilities, as well as environmental sustainability.

Learning about the effects of humane entrepreneurship on the performance of SMMEs is essential for promoting sustainable and equitable economic growth (Rosales & Silveyra, 2024:79). HumEnt aims to assess any enterprise that, either independently or in response to the many calls for innovative entrepreneurship in recent decades, have attempted to align their entrepreneurial strategies with environmental, social, or human resource considerations (De Angelis & Vesci, 2025:149). Furthermore, the framework indeed broadens the scope of entrepreneurial orientation theory, incorporating the strategic decisions related to environmental, social, and human resources made by the entrepreneur (De Angelis & Vesci, 2024:149).

The purpose of this study is to investigate the effects of humane entrepreneurship on SMME performance (BP). Furthermore, we analyse whether the SMME that has applied the three strategies of HumEnt is performing better than the one that has not. The inquiry is prompted by the high rate of SMME failures in South Africa within their first three to seven years of existence (Matekenya & Moyo, 2022:453).

2. Research Problem

SMMEs encounter a multitude of obstacles that result in a high failure rate. In South Africa, businesses tend to collapse during the first seven years of operation, as noted by Bruwer *et al.* (2020:2) and Matekenya and Moyo (2022:453). One of the significant obstacles to the execution of sustainable business performance pertains to the alteration of business perspectives toward novel sustainability practices, technologies, and business models (Rosati & Faria, 2019:588), and the pursuit of quality job creation (Vesci *et al.* 2024b:90). Given this background above, this study sought to assess the effects of HumEnt on SMMEs' performance.

3. Literature Review

Over the years, entrepreneurship has been examined by numerous scholars through diverse frameworks, which include entrepreneurship education, corporate entrepreneurship, and social entrepreneurship (Aboalhoon, Alzubi, & Iyiola, 2024:3). This examination of entrepreneurship emphasises its multifaceted nature and highlights the significance of context for understanding entrepreneurial behaviour. Recently developed HumEnt proposes an improved paradigm for entrepreneurship (Landowska, Della Piana, & Feola, 2020:5). This paradigm expands the conventional focus on trade and profit in business operations, known as entrepreneurial orientation, by highlighting the importance of human resources within the organisation as well as the external environment and society (Landowska *et al.*, 2020:5). Moreover, Rankhumise *et al.* (2025:1050) claims that "human capital" or "brainpower" is a pivotal element influencing an organisation's growth, ultimately determining its efficacy or downfall.

As proposed by Parente *et al.* (2018:30), HumEnt integrates three entrepreneurship strategies, namely, entrepreneurial, sustainability, and human resource orientations. The strategies, as mentioned above, foster innovation and employee engagement while enhancing competitiveness and financial performance (Bjelic, Schmitt, Baldegger, & Bou Nader, 2024:3). The EO strategy aims to equip entrepreneurs with the essential skills and knowledge to identify and exploit emerging business opportunities; in contrast, the SO and HRO strategies focus on enabling companies to ensure that entrepreneurial goals yield a beneficial and practical impact on society and individuals within the business environment (Khurana *et al.*, 2021:252).

3.1 The Humane Entrepreneurship Strategies

3.1.1 The Entrepreneurial Orientation Strategy

The entrepreneurial orientation strategy has been integral to the business's competitive advantage, expansion, and overall performance (Meekaewkunchorn *et al.*, 2021:295; Vesci, Botti, & Parente, 2024b:90). According to Fan *et al.* (2021:2), SMMEs exhibiting an extensive entrepreneurial orientation (EO) possess a distinct advantage in achieving higher performance. Researchers have put

forward that entrepreneurial orientation encompasses elements such as market share, sales volume, and profit growth (Stevenson and Jarillo, 1990, as cited by Meekaewkunchorn *et al.*, 2021:295; Fan *et al.*, 2021:2). In addition, EO has dimensions that are aligned with the company's performance, namely innovation, risk-taking, and proactiveness (Wahyuni & Sara, 2020:42; Meekaewkunchorn *et al.*, 2021:295).

An entrepreneurial mindset encourages the adoption of new technology and a proactive reaction to changing trends; as a result, organisations with a higher level of entrepreneurial orientation are better positioned to compete in the industries they represent (Fan *et al.*, 2021:2). In addition, Vesci, Botti, and Parente (2024b:90) contended that an entrepreneur must exercise caution regarding nascent opportunities and have the requisite skill to identify, create and explore them. However, Covin and Slevin (1991), as referenced by Vesci *et al.* (2024b:90), provide valuable insights into understanding the entrepreneurial orientation strategy, "emphasising behaviour as the core and pivotal component in the entrepreneurial process."

3.1.2 The Sustainability Orientation Strategy

The business's quest for a competitive advantage is also measured by the extent of sustainable activities (Khizar, Iqbal, Khalid, & Adomako, 2022:718). Sustainability has emerged as a core value of entrepreneurship in the 21st century. Sustainability orientation signifies a commitment to social advancement towards a more equal and affluent society, with the natural environment and cultural legacy preserved for future generations (Vesci *et al.*, 2024b:92). Moreover, Vesci, Botti, and Parente (2024a:108) have identified the social aspects of sustainability, assessing it as the expansion of social wealth and the consideration of social demands. However, the theory of sustainable orientation is underpinned by corporate social responsibility (CSR). CSR is defined by Aguinis (2011) as organisational actions and policies that consider stakeholder expectations and the triple bottom line encompassing economic, social, and environmental performance (Vesci *et al.*, 2024b:92). In addition, CSR is a concept in which businesses voluntarily adopt social and environmental issues into their operations and engagement with stakeholders (Vesci *et al.*, 2024b:92).

3.1.3 The Human Resource Orientation Strategy

Human resource orientation (HRO) refers to the extent to which entrepreneurial strategic behaviour emphasises the cultivation of positive relationships with employees and executives to mitigate discrimination, maximise workforce potential and ideas (for instance, by allowing autonomy in work methods and encouraging innovative thinking for organisational growth), and ensure suitable employment conditions (Vesci *et al.*, 2024a:108; Parente *et al.*, 2021:519; Parente *et al.*, 2018:37). Investing in HR indicates a strategic commitment to HR practices and policies aimed at acquiring, developing, and retaining talented human resources, thus enhancing competitive advantage (Parente *et al.*, 2021:519). Furthermore, Parente *et al.* (2021:519) define HRO as the decisions made within different

organisational contexts regarding policies and practices that affect the employment relationship, specifically aimed at achieving individual employee, organisational, and socioeconomic objectives.

Parente *et al.* (2021:520) outline diverse HR practices, including information dissemination, participatory engagement and empowerment, training and skills enhancement, cross-utilisation and cross-training, self-managed teams, employee ownership, job security and selective recruitment, increased wages and incentive compensation, wage compression, internal promotion, and symbolic fairness. Furthermore, Parente *et al.* (2021:522) include the four main human resource management dimensions to HRO, which are empathy, equity, enablement, and empowerment. These dimensions are formulated as behaviourist constructs, with their evaluation based on the actions performed by managers and entrepreneurs who execute each dimension (Parente *et al.*, 2021:522). In addition, the HRO strategy facilitates workforce empowerment, enhances workforce engagement, and serves as a crucial method for revitalising organisational competencies (Parente *et al.*, 2018:38).

3.2 Humane Entrepreneurship on SMME Performance

The HumEnt literature examines the performance of SMMEs through the lenses of "employee engagement," "satisfaction," and "organisational commitment" (Bjelic *et al.*, 2024:3). The emerging entrepreneurship paradigm is crucial for achieving positive company performance and long-term sustainability. Parente *et al.* (2018:41) state that one may assess company performance by examining the company's growth dimensions and profitability. However, profitability is measured by return on investment, equity, sales growth, and market share growth (Parente *et al.*, 2018:41). Moreover, they (Parente *et al.*, 2018:41) state that a company's performance may serve as a rationale for, or against, the adoption of a paradigm applied in the business. According to El Tarabishy *et al.* (2022:7), companies that perform well focus on the dissemination of value and competitiveness among their employees. Furthermore, El Tarabishy *et al.* (2022:8) assert that the transformational leadership style within an organisation, facilitated by its leaders, encourages employee motivation to innovate for the collective benefit of the organisation rather than for individual economic gain.

Parente *et al.* (2021:519) assert that the strategic investment in human resource practices and policies is designed to attract, develop, and retain skilled personnel, which fosters a competitive advantage. However, Parente *et al.* (2018:42) propose propositions concerning HumEnt strategies and organisational performance. They believe a competitive advantage moderates the relationship between EO and business performance (Parente *et al.*, 2018:42). Although SO directly impacts company performance, it is crucial to analyse its implications on revenue growth and overall profitability (Parente *et al.*, 2018:42). Lastly, the implementation of HRO positively influences the competitive advantage of the business, thereby enhancing its overall performance (Parente *et al.*, 2018:42).

3.3 The importance of Humane Entrepreneurship

Researchers are now exploring a nascent framework of entrepreneurship that illustrates contemporary developments in the business realm, described as "humane entrepreneurship" (Vesci, Botti, & Parente, 2024b:89). HumEnt supports the idea that businesses should make money while also focusing on treating people well, viewing such action as not just the right thing to do but also a smart business move that can give them an edge over competitors. Moreover, HumEnt is a business strategy that emphasises that business owners must prioritise the company's competitiveness and its employees, as well as significant social concerns, including those associated with environmental sustainability (De Angelis & Vesci, 2024:153; Kim et al., 2018:23). HumEnt shows that people are becoming more interested in making businesses more ethical and socially responsible. This emerging field examines various aspects of humane entrepreneurship. Furthermore, humane entrepreneurship has the potential to enhance human development, eliminate poverty, and advance social justice and its efficacy.

4. Methodology

The researcher adopted a quantitative research method grounded in the positivist paradigm. This method assisted in investigating the relationship between humane entrepreneurship strategies (EO, SO, and HRO) and SMMEs' performance. A descriptive design was adopted for this study. Data was collected from SMME owners and managers from Ga-Rankuwa, Mabopane, and Soshanguve township, which are within Region One of the City of Tshwane Municipality. The data collection was done by visiting the SMMEs' business premises and attending a business exhibition that was held in the region. However, establishing the appropriate sample size for non-probability sampling and populations that are unknown presents a significant challenge in effectively estimating the overall population. Convenience sampling was used due to the lack of accurate statistics of SMMEs in and around the City of Tshwane Municipality. 158 questionnaires were distributed among the SMMEs in the three townships in Region One. Of the 158 participants, 47 were managers, and 111 were owners.

The data analysis was done using STATA 17. Descriptive and inferential statistics were used to analyse the data. The participants were categorised by their demographic details, position in the business, gender, age group, location of the business, highest academic qualification, business size, how long the business has been in operation, and the turnover of the business. We tested discriminant and convergent validity by comparing the average variance extracted (AVE) and the correlation between the strategies. However, a correlation of 0.85 or more in value represents poor discriminant validity, while convergent validity requires a positive correlation between different tests that measure the same thing.

5. Findings and Discussion of the Study

The study results are presented in three sections. The first section deals with the demographic information of participants. The second section deals with descriptive statistics on the response of participants to humane entrepreneurship strategies

and business performance, and the third section deals with the correlation analysis.

5.1 Demographic Information of Participants

The descriptive statistics indicated that 111 of the 158 participants are business owners, which gives us a viewpoint that business owners prefer to run their daily activities in their own business, and only 47 participants were managers, which represented 29.75% of the participants. Regarding the gender distribution among participants, females comprised 56.33% of the total, equating to 89 individuals, while males accounted for the remaining 43.67%, equating to 69 individuals. Furthermore, questions about age revealed that the majority, 67.09% (n=106), belonged to the 18-34 years age demographic. The second highest proportion was 29.75% (n=29.75) for the age group of 35-49 years, and the lowest was 3.16% (n=5) for the age group of 50-64 years.

In terms of the business's location, Soshanguve emerged as the most predominant location, accounting for 42.41% (n=67) of the total. Following this, Mabopane represented 31.65% (n=50), while Ga-Rankuwa comprised 25.95% (n=41). The results additionally illuminated the educational background of the participants; the majority possess diplomas, accounting for 30.38% (n=48), followed by those with degrees at 27.85% (n=44), honours at 18.99% (n=30), Grade 12 at 14.56% (n=23), master's degrees at 4.43% (n=7), certificates at 2.53% (n=4), and doctoral degrees at 1.27% (n=2). Micro enterprises were the majority at 79.11% (n=125), followed by small businesses at 18.25% (n=29), and medium businesses at 2.53% (n=4).

Additionally, we examine the operating duration of the businesses; the majority of the businesses that participated functioned for 1-3 years at 44.94% (n=71), followed by 4-6 years at 22.15% (n=35), less than one year at 20.89% (n=33), and above 7 years at the lowest rate of 12.03% (n=19). The turnover assessment revealed that the majority of businesses, 86.71% (n=137), reported a turnover of less than 2 million, followed by 10.76% (n=17) with turnovers between 2.1 and 15 million, 1.90% (n=3) with turnovers between 15.1 and 50 million, and the least, 0.63% (n=1), with turnovers over 50 million. These demographic findings analyse the types of SMMEs involved in the study.

5.2 Descriptive Statistics on Humane Entrepreneurship Strategies and Business Performance

This section presents the participants' responses to the questionnaire statements using a 5-point Likert scale. The researcher decided to bundle the study outcomes "Strong Disagree" with "Disagree," represented as "Disagree" in the presentation, and "Strongly Agree" with "Agree," represented as "Agree" in the presentation. The "Neutral" choice in the data presentation will be labelled as "Unsure."

Table 2 presents the SMME owners and managers' responses to the entrepreneurial orientation strategy. The distribution of responses indicates that

the majority of respondents concurred with the posed questions. The research revealed that 68.35% (n=108) of participants concurred with the assertion that businesses exhibit a significant interest in projects offering the potential for very high returns. A total of 60.76% (n=96) reported that businesses generally adopt an aggressive stance to enhance the likelihood of capitalising on potential opportunities. Furthermore, 52.53% (n=83) concurred with the assertion that, in interactions with other businesses, individuals frequently adopt proactive strategies that provoke subsequent reactions from competitors.

On the other hand, 36.08% (n=57) of respondents indicated uncertainty about the claim that their company often pioneers the launch of new products compared to its competitors. Also, 34.18% (n=54) of respondents indicated uncertainty about the claim that their company often pioneers the launch of innovative services compared to its competitors.

Table 3 presents the analysis of the responses, indicating that a notable 75.9% (n=120) reported that their organisations had allocated considerable resources to advancing fair trade practices with both suppliers and consumers. Additionally, 74.1% (n=117) of the participants reported that they regularly interacted with company concepts that highlight not just profit generation but also broader contributions. A total of 72.8% (n=115) of respondents reported that their firms had taken substantial measures to protect the natural environment. Furthermore, 72.1% (n = 114) reported that their organisations chose concepts focused on enhancing community development. Moreover, 71.5% (n=113) of the participants expressed their commitment to generating employment opportunities. A total of 70.9% (n=112) of participants were engaged in generating concepts aimed at improving the world. 70.2% (n=110) of participants have identified a solution to both the current problem and that of the community. Finally, considering their dependence on the community for profit, an impressive 69% (n=109) of respondents are committed to giving back to the community.

Table 4 can be deduced from the participants' replies that the majority of them agreed with the questions that pertained to human resources. It was claimed by a sizeable 81.02% of owners and managers (n=128) stated that their companies provide an atmosphere that is favourable to the growth of individuals' knowledge. 81% of respondents (n=128) said that their companies treated people in an equitable manner. In addition, 77.21% of respondents (n=122) said that their companies guaranteed that people were treated fairly. In addition, 75.95% of respondents (n=120) said that their organisation fosters an environment in which every employee has the opportunity to improve their knowledge and abilities. 74.68% (n=118) said that their company delegated responsibility from higher-level managers to lower-level workers, especially with regard to the capacities of the employees to make decisions. In addition, 68.99% of respondents (n=109) said that their organisation kept its staff informed of pertinent information.

Table 1. Participants' information

Variable	Description	Frequency	Percentage	Cumulative
Position in the business	Owner	111	70.25	70.25
	Manager	47	29.75	100.00
Gender	Male	69	43.67	43.67
	Female	89	56.33	100.00
Age	18-34	106	67.09	67.09
	35-49	47	29.75	96.84
	50-64	5	3.16	100.00
Business Location	Ga-Rankuwa	41	25.95	25.95
	Mabopane	50	31.65	57.59
	Soshanguve	67	42.41	100.00
Educational Level	Grade 12	23	14.56	14.56
	Certificate	4	2.53	17.09
	Diploma	48	30.38	47.47
	Degree	44	27.85	75.32
	Honours	30	18.99	94.30
	Masters	7	4.43	98.73
	Doctorate	2	1.27	100.00
Size of business in terms of the number of employees	Micro	125	79.11	79.11
	Small	29	18.35	97.47
	Medium	4	2.53	100.00
Duration of business operations	<1 year	33	20.89	20.89
	1-3 years	71	44.94	65.82
	4-6 years	35	22.15	87.97
	>= 7 years	19	12.03	100.00

Variable	Description	Frequency	Percentage	Cumulative
Annual Turnover	<2 million	137	86.71	86.71
	2.1-15 million	17	10.76	97.47
	15.1-50 million	3	1.90	99.37
	>50 million	1	0.63	100.00

Table 2. Entrepreneurship orientation analysis

Code	Entrepreneurship Orientation	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
EO1	My business strongly emphasises Research & Development	14.6%	6.3%	31%	25.9%	22.2%
EO2	My business has marketed new services in the past 5 years.	15.8%	18.4%	25.3%	20.3%	20.3%
EO3	My business has marketed new products in the past 5 years	12.7%	13.3%	27.8%	27.2%	19%
EO4	When dealing with other businesses, my business often takes proactive measures that elicit subsequent responses from these competitors	3.8%	1.8%	32.9%	32.3%	20.3%
EO5	In dealing with its competitors, my company is very often the first business to introduce new products	9.5%	13.9%	31.6%	26.6%	18.4%
EO6	In dealing with its competitors, my company is very often the first business to introduce new services	7%	12%	36.1%	24.1%	20.9%
EO7	In general, the top management of my business has a strong tendency to be ahead of other competitors in introducing new products	5.1%	11.4%	32.9%	27.8%	22.8%
EO8	In general, the top management of my business has a strong tendency to be ahead of other competitors in introducing new services	4.4%	9.5%	34.2%	29.1%	22.8%
EO9	In general, my business has a strong appetite for projects with chances of very high returns.	3.8%	7%	20.9%	35.4%	32.9%
EO10	My business typically adopts an aggressive posture to maximise the probability of exploiting potential opportunities.	4.4%	7%	27.8%	32.9%	27.8%

Table 3. Sustainable Orientation Analysis

Code	Sustainability Orientation	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
SO1	I am able to find solutions to current challenges	3.8%	6.3%	19.6%	31.6%	38.6%
SO2	I regularly come up with new business ideas for creating a better world	4.4%	7%	17.7%	36.1%	34.8%
SO3	I am constantly seeking business ideas with the potential of making contributions beyond making money.	3.2%	5.7%	17.1%	38%	36.1%
SO4	I strongly believe in my business's power in solving many of the problems we have as a community	3.2%	5.1%	21.5%	33.5%	36.7%
SO5	My business has to give back to the community since it derives its profits from the community	4.4%	5.1%	21.5%	27.2%	41.8%
SO6	My business has devoted significant effort to establishing fair trading with suppliers and customers	4.4%	3.2%	16.5%	34.8%	41.1%
SO7	When I have to choose between ideas I have in mind, I always choose the one that contributes to building a better community	1.3%	7.6%	19%	31%	41.1%
SO8	My business has devoted significant effort to creating employment opportunities	3.8%	7.6%	17.1%	30.4%	41.1%
SO9	My business has devoted significant effort to protecting the natural environment	5.1%	7.6%	14.6%	30.4%	42.4%

Table 4. Human Resources Orientation Analysis

Code	Human Resource Orientation	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
HRO1	This company communicates information to its staff members.	5.06%	5.06%	20.89%	26.58%	42.41%
HRO2	This company engages with people fairly.	3.16%	3.16%	16.46%	15.82%	61.39%
HRO3	This company treats individuals equitably.	1.90%	3.80%	13.29%	20.25%	60.76%
HRO4	This business delegates authority from upper management to lower-level workers, particularly concerning decision-making capabilities.	2.53%	5.70%	17.09%	22.78%	51.90%
HRO5	This business creates an atmosphere in which each employee may expand their knowledge.	2.53%	3.16%	13.29%	29.75%	51.27%
HRO6	This business fosters an environment that is conducive to the development of each employee's skills.	2.53%	3.80%	17.72%	27.85%	48.10%

Table 5. Business performance analysis

Code	Business Performance	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
BP1	This business has a strong reputation for client satisfaction.	1.27%	2.53%	10.13%	27.85%	58.23%
BP2	This business has a strong competitive stance in the market.	0.63%	6.96%	19.62%	32.28%	40.51%
BP3	This business has a commendable history of client retention to date.	0.63%	5.06%	12.66%	34.18%	47.47%
BP4	This business has achieved commendable revenue growth.	0.63%	10.13%	19.62%	31.65%	37.97%
BP5	This business I represent yields a reasonable return on investment.	0.63%	6.96%	23.42%	34.18%	34.81%
BP6	This business has responded at a rapid rate to market demand.	0.63%	5.06%	20.89%	34.18%	39.24%
BP7	This business provides immediate confirmations for consumer orders.	2.53%	3.16%	14.56%	27.22%	52.53%

Table 5 represents the analysis of the responses, indicating that a notable 86.08% (n=136) indicated their businesses uphold a robust reputation for customer satisfaction. A total of 81.65% (n=129) indicated that their businesses have successfully upheld a robust customer retention history to date. Furthermore, 79.75% (n=126) agreed with the statement that their businesses offered immediate confirmations for customer orders. A total of 73.42% (n=116) indicated their agreement on the significance of a rapid response time to the market. Furthermore, 72.79% (n=115) indicated that their business maintained a competitive stance within the market in which they functioned. A total of 69.62% (n=110) indicated that their business saw a commendable revenue growth. Furthermore, 68.99% (n=109) indicated that their business yields a reasonable return on investment.

5.3 Correlation Analysis

The analysis of correlation established the relationship between the variables. The Spearman correlation technique was used to analyse the relationships among the constructs, with results exhibited in Table 6.

Table 6. Spearman Correlation

	BP	HRO	SO	EO
BP	1.00	0.6372	0.6929	0.4704
HRO	0.6372	1.00	0.6897	0.5197
SO	0.6929	0.6897	1.00	0.5919
EO	0.4704	0.5197	0.5919	1.00

Table 6 presents the Spearman correlation coefficients. The research exclusively assessed the correlation coefficients for proposed relationships. The heat map displays a spectrum from gold, indicating a high positive correlation, to purple, representing a low positive correlation. The correlation coefficient varies between -1 and 1, with the diagonal elements of the correlation matrix equal to 1, representing the correlation of each variable with itself. The findings demonstrate that all proposed relationships were significant at the 0.05 level, indicating a 95% confidence in the results. The sustainability orientation variable showed a strong correlation with business performance, with a correlation coefficient of 0.69. The humane resource orientation also exhibited a strong correlation with business performance, quantified at 0.63, while the entrepreneurial orientation variable demonstrated a moderate correlation, recorded at 0.47. The correlation analysis revealed significant relationships between the independent and dependent variables. All proposed correlations exceeded a value of 0.4, signifying strong associations.

6. Conclusion

This chapter aims to assess the effects of humane entrepreneurship on the performance of SMMEs. This was done by identifying how humane entrepreneurship factors could influence the business performance of SMMEs within the City of Tshwane Region One. The study was conducted in the City of

Tshwane Region One Townships, which limits the generalisability of the findings to the region at large. Furthermore, the research was a descriptive analysis conducted at a particular point in time, as opposed to a longitudinal study spanning an extended period. It can be concluded that sustainability orientation showed a strong correlation with business performance. Furthermore, the human resource orientation has a strong correlation with business performance. The entrepreneurial orientation displayed a moderate correlation with business performance. The study reveals that humane entrepreneurship has a positive effect on SMMEs' performance, which is fundamental for the sustainability of the businesses. The results further suggest that humane entrepreneurship can lead to increased employee productivity, retention, and engagement. It can further be noted from the findings that SMEs that adopt humane entrepreneurship practices, such as environmental sustainability, take care of employees (well-being), tend to experience improved business performance characterised by enhanced reputation and improved financial performance. The study findings have important implications for SMMEs and policymakers. Importantly, the adoption of humane entrepreneurship practices can be seen as a fundamental driver of SMME performance, specifically with improved performance and reputation enhancement. The policymakers can support SMEs through the creation of a conducive environment that encourages humane entrepreneurship practices. As regards practical implications, it is recommended that SMMEs should prioritise humane entrepreneurship practices, for instance, (i) investing in the development of employees, (ii) implementing sustainable practices that preserve and reduce the environmental impact, and (iii) engaging in social responsibility practices that could benefit the community.

Conference Disclaimer

Some part of this manuscript was previously presented in the conference: International Conference on Business and Management Dynamics (ICBMD) 2025, dated 29th October, 2025 in Cape Town, South Africa, Web Link of the proceeding: <https://www.icbmd.org.za>

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Competing Interests

Authors have declared that no competing interests exist.

References

Abosalhool, T., Alzubi, A., & Iyiola, K. (2024). Humane entrepreneurship in the circular economy: The role of green market orientation and green

- technology turbulence for sustainable corporate performance. *Sustainability*, 16(6), 2517. <https://doi.org/10.3390/su16062517>
- Bjelic, Z., Schmitt, C., Baldegger, R., & Bou Nader, R. (2024). Examining the impact of humane entrepreneurship on overall firm performance: An empirical investigation of SMEs. *Journal of the International Council for Small Business*, 6(4), 579–592. <https://doi.org/10.1080/26437015.2024.2417010>
- Bruwer, J. P., Hattingh, C. and Perold, I. (2020). Probable measures to aid South African Small Medium and Micro Enterprises' sustainability, post-COVID-19: A literature review. *Post-COVID-19: A Literature Review* (June 12, 2020). <https://dx.doi.org/10.2139/ssrn.3625552>
- De Angelis, R., & Vesci, M. (2024). Circular economy business models, value creation and humane entrepreneurship: A micro-sized and social enterprise perspective. *Circular Economy and Sustainability*, 5(1), 147–160. <https://doi.org/10.1007/s43615-024-00419-w>
- El Tarabishy, A., Hwang, W. S., Enriquez, J. L., & Kim, K. C. (2022). The empirical performance of humane entrepreneurship. *Journal of the International Council for Small Business*, 3(1), 7–23. <https://doi.org/10.1080/26437015.2021.1940374>
- Fan, M., Qalati, S. A., Khan, M. A. S., Shah, S. M. M., Ramzan, M., & Khan, R. S. (2021). Effects of entrepreneurial orientation on social media adoption and SME performance: The moderating role of innovation capabilities. *PLOS One*, 16(4), 0247320. <https://doi.org/10.1371/journal.pone.0247320>
- Jadhav, G. G., Gaikwad, S. V., & Bapat, D. (2023). A systematic literature review: Digital marketing and its impact on SMEs. *Journal of Indian Business Research*, 15(1), 76–91. <https://doi.org/10.1108/JIBR-05-2022-0129>
- Khizar, H. M. U., Iqbal, M. J., Khalid, J., & Adomako, S. (2022). Addressing the conceptualization and measurement challenges of sustainability orientation: A systematic review and research agenda. *Journal of Business Research*, 142, 718–743. <https://doi.org/10.1016/j.jbusres.2022.01.029>
- Khurana, I., Ghura, A. S., & Dutta, D. K. (2021). Religion and humane entrepreneurship: Insights for research, policy, and practice. *Journal of the International Council for Small Business*, 2(3), 250–259. <https://doi.org/10.1080/26437015.2021.1906186>
- Kim, K. C., Bae, Z. T., Enriquez, J. L., & Song, C. S. (2018). International comparison of humane entrepreneurship: Status, typology and policy implications. *The Journal of Small Business Innovation*, 20(4), 23–32. <https://koreascience.kr/article/JAKO201822262290547.page>
- Kim, K. C., El Tarabishy, A., & Bae, Z. T. (2018). Humane entrepreneurship: How focusing on people can drive a new era of wealth and quality job creation in a sustainable world. *Journal of Small Business Management*, 56, 10–29. <https://doi.org/10.1111/jsbm.12431>
- Landowska, A. M., Della Piana, B., & Feola, R. (2020). Humane entrepreneurship model: Does morality of entrepreneurs matter? *Journal of the International Council for Small Business*, 1(3–4), 177–198. <https://doi.org/10.1080/26437015.2020.1850156>

- Le, T. T. (2022). How humane entrepreneurship fosters sustainable supply chain management for a circular economy moving towards sustainable corporate performance. *Journal of Cleaner Production*, 368, 133178. <https://doi.org/10.1016/j.jclepro.2022.133178>
- Matekenya, W., & Moyo, C. (2022). Innovation as a driver of SMME performance in South Africa: A quantile regression approach. *African Journal of Economic and Management Studies*. <https://doi.org/10.1108/AJEMS-06-2021-0306>
- Meekaewkunchorn, N., Szczepańska-Woszczyna, K., Muangmee, C., Kassakorn, N., & Khalid, B. (2021). Entrepreneurial orientation and SME performance: The mediating role of learning orientation. *Economics & Sociology*, 14(2), 294–312. <https://doi.org/10.14254/2071-789X.2021/14-2/16>
- Parente, R., El Tarabishy, A., Botti, A., Vesci, M., & Feola, R. (2021). Humane entrepreneurship: Some steps in the development of a measurement scale. *Journal of Small Business Management*, 59(3), 509–533. <https://www.tandfonline.com/doi/epdf/10.1080/00472778.2020.1717292?needAccess=true&role=button>
- Parente, R., El Tarabishy, A., Vesci, M., & Botti, A. (2018). The epistemology of humane entrepreneurship: Theory and proposal for future research agenda. *Journal of Small Business Management*, 56(sup1), 30–52. <https://doi.org/10.1111/jsbm.12432>
- Rankhumise, E. M., Letsoalo, M. E., & Muzanenhamo, A. (2025). Entrepreneurship education and its role in building entrepreneurial self-efficacy: Insights from South African universities. *Language, Literature and Education: Research Updates*, 3, 17–28. <https://doi.org/10.9734/bpi/lleru/v3/4278>
- Rankhumise, E. M., Tladi, P. M., & Muzanenhamo, A. (2025). Support of small and medium-sized enterprises: Owner-managers perspective. *Social Science International Research Conference*, 1049–1058.
- Rosales, O., & Silveyra, G. (2024). Entrepreneurial archetypes: Spiritual well-being as a catalyst for humane entrepreneurship and performance. *Journal of the International Council for Small Business*, 6(1), 76–85. <https://doi.org/10.1080/26437015.2024.2393684>
- Rosati, F. and Faria, L.G.D., (2019). Business contribution to the Sustainable Development Agenda: Organizational factors related to early adoption of SDG reporting. *Corporate social responsibility and environmental management*, 26(3), 588-597. <https://doi.org/10.1002/csr.1705>
- Vesci, M., Botti, A., & Parente, R. (2024). Humane entrepreneurial orientation as strategic posture: A proposal for measurement and enterprise classification. In *Humane entrepreneurship and innovation: An alternative way to promote sustainable development* (pp. 105–131). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-83797-374-320241007>
- Vesci, M., Botti, A., & Parente, R. (2024). The humane entrepreneurship framework. In *Humane entrepreneurship and innovation: An alternative way to promote sustainable development* (pp. 89–103). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-83797-374-320241006>

Wahyuni, N. M., & Sara, I. M. (2020). The effect of entrepreneurial orientation variables on business performance in the SME industry context. *Journal of Workplace Learning*, 32(1), 35-62. <https://doi.org/10.1108/JWL-03-2019-0033>.

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Peer-Review History:

This chapter was reviewed by following the Advanced Open Peer Review policy. This chapter was thoroughly checked to prevent plagiarism. As per editorial policy, a minimum of two peer-reviewers reviewed the manuscript. After review and revision of the manuscript, the Book Editor approved the manuscript for final publication. Peer review comments, comments of the editor(s), etc. are available here: <https://peerreviewarchive.com/review-history/6771.2>

Effectiveness of Post-Consumer Metal Packaging Recovery Practices in South Africa

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DOI: <https://doi.org/10.9734/bpi/mono/978-81-998711-1-3/CH3>

Peer-Review History:

This chapter was reviewed by following the Advanced Open Peer Review policy. This chapter was thoroughly checked to prevent plagiarism. As per editorial policy, a minimum of two peer-reviewers reviewed the manuscript. After review and revision of the manuscript, the Book Editor approved the manuscript for final publication. Peer review comments, comments of the editor(s), etc. are available here: <https://peerreviewarchive.com/review-history/6771.3>

Abstract

The South African packaging industry's economic trends, together with the 184,000 tons of metal packaging placed on the market in 2022, highlight major socio-economic and socio-political challenges in the collection, recovery, and recycling of post-consumer metal packaging. A Circular Economy approach shifts from the linear "take-make-use-throw" model toward one that minimises environmental impact and keeps aluminium and ferrous materials circulating within the economy. In 2022, South Africa recovered 53.48% (98,403 tons) of post-consumer metal packaging, falling 5.52% below the Department of Forestry, Fisheries and the Environment target, with projections suggesting the gap may widen to 9.19%. Continued underperformance may lead to penalties that threaten business sustainability within the metal packaging value chain.

The study used qualitative interviews with converters, brand owners, and recyclers to evaluate South Africa's post-consumer metal packaging recovery system, revealing key challenges, opportunities, and industry perspectives through thematic analysis.

Results show that inefficiencies in collection and recycling systems, inadequate infrastructure, weak policy support, and limited incentives for informal collectors continue to constrain recovery performance. The study recommends a harmonised recovery model, including legislative refinements to integrate buy-back centres, recyclers, and re-melters into the EPR framework, supported by advanced technologies, deposit return schemes, and consumer awareness initiatives to strengthen recovery rates and data accuracy.

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Keywords: Post-consumer metal packaging; green economy; extended producer responsibility; stakeholder collaboration.

1. Introduction

Following the gazetting of the Extended Producer Responsibility (EPR) legislation by the Department of Forestry, Fisheries & Environment (DFFE) on 5 November 2021, the South African packaging industry was required to show continual, year-on-year improvements in the recovery and reuse of post-consumer packaging materials (Packaging SA, 2023: para. 1 line 2; Modise, 2023). The DFFE set a target recovery rate for post-consumer metal packaging of 59% for 2022, with a planned increase to 67% by 2026 (South Africa Department of Forestry, Fisheries & Environment, 2023). For comparison, the 2022 DFFE target of 59% was notably lower than the 2021 European benchmark of 78.5% (Rivers, 2023).

Although metal possesses intrinsic value due to its high recyclability without degradation of its properties, as highlighted by Deshwal & Panjagari (2020), the recovery rate of post-consumer metal packaging in South Africa has stagnated over the past two decades, with little to no growth projected (Braithwaite et al., 2019; Loven et al., 2023). This trend implies that South Africa's metal packaging recovery rate lagged significantly behind that of Europe, and based on the current post-consumer metal packaging recovery systems in South Africa, the DFFE's recovery targets are unlikely to be met unless strong and effective interventions are implemented to bridge the projected shortfall of 9.19%.

South Africa's current post-consumer metal packaging recovery system relies heavily on unemployed, informal waste pickers, a dependence that renders the system unsustainable (Council for Scientific and Industrial Research, 2017; Packaging, 2017). Comparative studies from developing economies, including Mozambique, Ghana, and Tanzania, emphasise the vital role of informal waste pickers, the necessity for improved waste management infrastructure, and the importance of addressing legislative gaps to advance circular economy models (Ferrari et al., 2016; Ofori, 2023; Onesmo et al., 2023). This suggests that the metal packaging industry benefits from the unpaid labour of informal waste pickers, raising concerns about its neglect of social responsibility.

The study aimed to propose a model that will improve the recovery and recycling rates, as well as the data reporting integrity, of post-consumer metal packaging in SA, enhancing the metal packaging circular economy, aligning with global sustainable development principles and South African legislation. The following are the key objectives of the study:

- i. To evaluate the current South African post-consumer metal packaging recovery model against global best practice models by deploying two qualitative surveys.
- ii. To determine the reliability of the current South African post-consumer metal packaging data acquisition and reporting systems by deploying two qualitative surveys.

The following are the research questions that stemmed from the research objectives:

- i. How effective is the post-consumer metal packaging recovery model in SA?
- ii. How accurate and reliable are the South African post-consumer metal packaging data acquisition and reporting systems?

2. Literature Review

According to the 2022 South African packaging statistics report by Braithwaite & Musingadi (2022), the metal packaging industry saw a 12.3% increase in volume in 2021, primarily driven by strong demand for beverage cans, staple food cans, and other metal packaging. Meanwhile, the industry's value rose by 61.7%, due to sharp increases in raw material costs. These price hikes, however, limited margin growth across both raw material suppliers and converters, as passing on the added costs throughout the value chain proved challenging.

In 2022, the metal packaging industry experienced a slight volume decline of 0.7% but a 3.9% increase in value. The drop in volume was mainly attributed to supply constraints in the drum sector, though this was partially offset by steady sales in the cans sector, supported by a continued recovery in the food services industry and sustained demand for both alcoholic and non-alcoholic beverages (Braithwaite & Musingadi, 2023). Fig. 1 illustrates the SA packaging market growth trend from 2012, estimated to 2023.

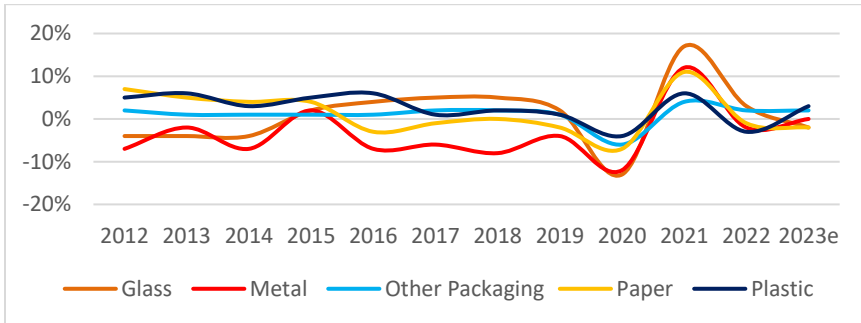


Fig. 1. Year-on-year SA packaging market trend
(Source: Adapted from Braithwaite & Musingadi, 2023)

Fig. 1 illustrates the slow yet steady growth of glass, metal, paper, and plastic packaging in South Africa over the past decade, up to the estimated figures for 2023. The only exception was in 2020, when all packaging substrates experienced negative growth due to the impact of COVID-19 lockdown restrictions (Braithwaite & Musingadi, 2023). This pattern underscores the need for a robust and sustainable post-consumer metal packaging recovery model, despite anticipated challenges that will affect multiple stakeholders across the South African metal packaging value chain, including raw material suppliers, converters, brand owners, and the retail sector.

The South African packaging industry relies heavily on the intricate interdependence between raw material suppliers, converters, brand owners, and retail groups across its multiple supply chains. This interconnectedness is crucial both upstream and downstream to ensure the efficient movement of packaged products and related information, ultimately fulfilling the needs of the South African consumer. Converters are synonymous with manufacturers and refer to entities that transform raw materials into consumer and industrial packaging, while brand-owners are individuals or organisations that own and manage a specific brand or trademark, directing its strategy, marketing, and overall identity (Board Committee, 2023). Fig. 2's bar chart illustrates the growth trajectory of the South African packaging sector from 2012 to 2022, showing a consistent upward trend that was only disrupted in 2020 due to the economic slowdown caused by COVID-19 trade restrictions. This data highlights the industry's year-on-year growth and underscores its expected contribution to the South African economy in terms of transformation and job creation, as detailed in the Council for Scientific and Industrial Research (2017) report.

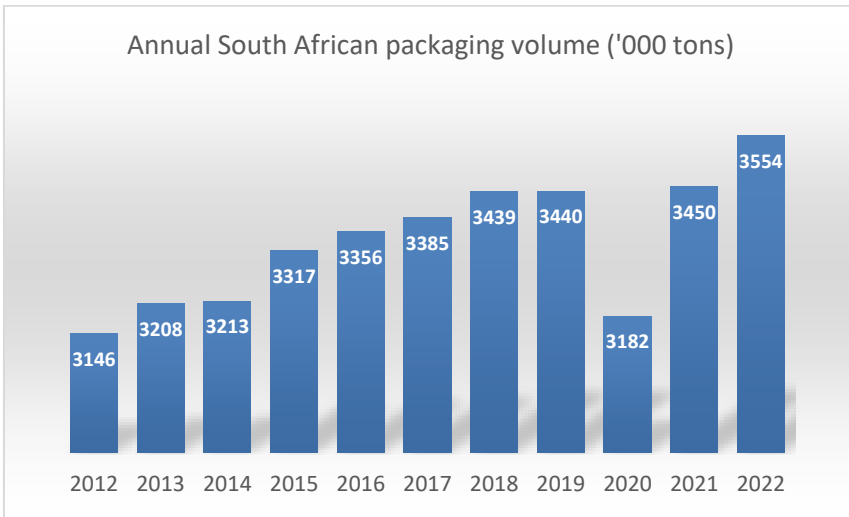


Fig. 2. Growth of the SA packaging industry

(Source: Adapted from Braithwaite et al., 2021; Braithwaite & Musingadi, 2023)

Based on historical trends and South Africa's growing population, packaging volumes are expected to continue increasing annually, indicating a need to strengthen post-consumer packaging recovery infrastructure to accommodate the increasing volume effectively.

Fig. 3 illustrates the correlation between South Africa's packaging GDP and the national GDP, with graphical trends indicating a strong positive relationship.

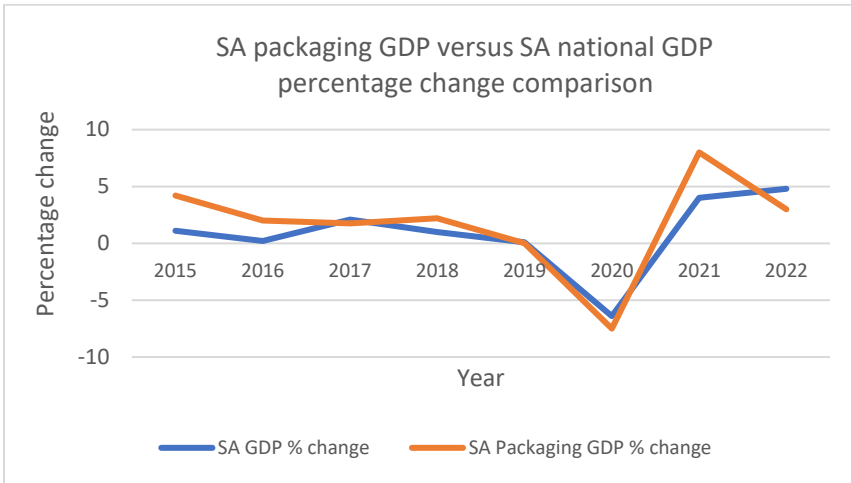


Fig. 3. Correlation between year-on-year changes in SA packaging GDP and SA economic GDP

(Source: Adapted from Braithwaite & Musingadi, 2023)

Fig. 3 correlation suggests that the packaging GDP serves as a reliable indicator of the overall strength of the South African economy.

Table 1 reflects points that are pertinent to the recent challenges facing the packaging industry in SA.

As evident in Table 1, despite the challenging trading conditions during and after the COVID-19 pandemic, as well as the ongoing Russia-Ukraine and Israel-Palestine conflicts, the packaging industry has shown remarkable resilience, sustaining supply chains, maintaining the lifestyles of South Africans, and continuing to contribute to the national GDP.

In 2017, the Department of Forestry, Fisheries, and the Environment (DFFE) implemented Section 28 of the National Environmental Management: Waste Act (NEMWA), known as the "duty of care" provision, which mandates the prevention of environmental pollution across South Africa (Muller, 2018). This was followed by the enforcement of Section 18 in May 2021, focusing on Extended Producer Responsibility (EPR) within the South African packaging industry (Modise, 2023). EPR is a regulatory approach that shifts the responsibility for recovering post-consumer packaging materials from the government to the producers of those materials (Gadnis, 2023). These producers, which include packaging converters, brand-owners, and retailers, are thereby held accountable for managing the entire lifecycle of their packaging, including collection, recycling, waste management, and proper disposal (Gadnis, 2023).

Table 1. Challenges in the SA Packaging industry

No.	Challenges	Citation
1	The South African economy suffered a major setback due to the mid-2021 riots in KwaZulu-Natal and Gauteng, which disrupted local industries and caused lasting damage to infrastructure and operating businesses, recovery from which is expected to take years. Additionally, the multiple COVID-19 lockdowns imposed significant emotional strain on the population, leading to reduced productivity and widespread job losses, which in turn adversely affected the packaging industry.	Africanews (2021)
2	South Africa's unemployment rate rose from 2021 to 2022, reaching 31.9% in the second quarter of 2023, reflecting ongoing instability within the service and manufacturing sectors.	Trading Economics (2023)
3	The 2022 international conflict between Russia and Ukraine has impeded South Africa's economic progress, with adverse effects particularly felt in the energy sector due to Russia's role in the natural gas market, and further exacerbated by global shortages of fertiliser components, maize, and wheat.	Braithwaite and Musingadi (2023)
4	The ongoing Israel-Palestine conflict is expected to impact the South African economy due to the resulting rise in crude oil prices.	Watson (2023)
5	The packaging industry, due to the recent EPR legislation, will be paying EPR fees based on the tonnage of packaging placed in the South African economy. Brand-owners must select materials and design packaging that facilitate easier recovery and recycling, reducing their EPR liability; this is referred to as an "eco-modulated" approach to EPR fee determination.	Modise (2023)

Source: Researcher's own construction

Together, Sections 28 and 18 require packaging producers and brand-owners to take responsibility for the recovery and reuse of post-consumer packaging, aiming to reduce pollution in public spaces such as parks, gardens, streets, rivers, oceans, and landfills (Muller, 2018). This responsibility includes establishing Material Recovery Facilities and developing business infrastructures to support nationwide recycling efforts. The recovered materials and energy are then reintegrated into manufacturing processes, contributing to circular economy models and aligning with sustainable development goals (Didenko et al., 2018).

The legislative pressure led to the establishment of substrate-specific, non-profit packaging Producer Responsibility Organisations (PROs), funded by members operating within their respective packaging stream value chains to fulfil the compliance requirements of the EPR legislation (Packaging SA, 2023). Under the new EPR regulations in South Africa, all packaging producers with an annual production volume exceeding 10 tons are classified as “obliged industries” and must either join an existing PRO or develop an individual EPR scheme for their products (South Africa Department of Forestry, Fisheries & Environment 2020).

Packaging SA serves as an umbrella organisation representing packaging converters, brand-owners, PROs, and other stakeholders within South Africa (Packaging SA, 2023). The creation of material-specific PROs has focused efforts on managing post-consumer packaging recovery and recycling in South Africa (Muller, 2018). These PROs are actively driven by their respective packaging industry sectors and are responsible for maximising the recovery and reuse of specific packaging materials, either by returning them to their original manufacturing processes or redirecting them into alternative production paths. Ultimately, their goal is to divert used packaging materials from landfill sites, as emphasised by the Council for Scientific and Industrial Research (2017).

The implementation of EPR regulations in South Africa, along with the establishment of PROs, represents a major step toward a circular economy by holding producers accountable for managing their packaging waste, thereby reducing the collection and disposal costs that were previously borne by the public (Howells, 2022). The National Environmental Management: Waste Act 59 of 2008, together with its 2013 list of waste management activities, requires obtaining a waste management license for re-use, recycling, or recovery operations involving significant quantities of general or hazardous waste (Rapson & Novotny, 2021). This requirement may have important implications for major producers or PROs regulated under the EPR framework and sector notices, yet the packaging industry has not yet addressed these potential consequences (Rapson & Novotny, 2021).

According to Muller (2018), the PROs are tasked with responsibilities including close collaboration with municipalities to enhance post-consumer material recovery and the development of packaging recovery infrastructure across key regions in South Africa. Muller (2018) further notes that these organisations have actively worked in recent years to promote and sustain circular economy models within the South African packaging industry, engaging a broad range of stakeholders such as material suppliers, converters, brand-owners, retailers,

informal waste pickers, buy-back centres, recyclers, foundries, and consumers. These PROs operate under the umbrella of Packaging South Africa (PSA), which represents the entire packaging industry in the country (Packaging SA, 2023).

The EPR scheme outlined in Government Gazette 43879 specifies the full statutory obligations of a PRO, including the following key responsibilities (South African Department of Forestry, Fisheries & Environment 2020):

- i. Ensuring compliance with EPR legislation,
- ii. Managing material data and reporting to the DFFE on the annual percentage of packaging material recovered, percentage recycled, recycled content, waste-to-energy statistics, data source verification reports, internal audit reports, and EPR fee calculations.
- iii. Implementing waste minimisation or avoidance strategies,
- iv. Engaging with municipalities to develop packaging recovery infrastructure,
- v. Increasing demand for recyclables,
- vi. Conducting packaging material flow analyses and Life Cycle Assessments (LCA),
- vii. Paying waste picker service fees for identified products.

To address the shared challenges arising from Section 18 of NEMWA and the accompanying EPR regulations that define the legislative responsibilities of PROs, a collective decision was made by the PROs to collaborate and leverage the advantages of joint effort and economies of scale; this led to the establishment of the Paper and Packaging PRO Alliance, a non-profit organisation (Modise 2023; Packaging SA, 2023).

According to the minutes of MetPac-SA's fourth Annual General Meeting (AGM) held on 31 August 2023, MetPac-SA is a Producer Responsibility Organisation (PRO) registered with the Department of Forestry, Fisheries & the Environment (DFFE) under EPR registration number 19/7/5/P/PRO/20210720/005, and operates as a non-profit company as per Section 21 of the Companies Act No. 71 of 2008, with CIPC registration number 2017/216419/08 (Board Committee 2023). Representing the metal packaging value chain in South Africa, MetPac-SA serves 67 members, ranging from raw material suppliers and converters to brand-owners and retailers, by defining metal material flow paths and reporting to the DFFE on post-consumer metal packaging recovery, recycling, imports/exports, and waste-to-energy initiatives (Board Committee 2023). Its primary objectives include fulfilling EPR obligations on behalf of its members, promoting industry-wide metal packaging recycling and re-use, ensuring stakeholder alignment, operating as a self-regulating and self-funding entity, managing communications and data, and advancing environmental sustainability. Additionally, through the Paper and Packaging PRO Alliance, MetPac-SA collaborates with other packaging PROs to implement a unified, sustainable EPR strategy aligned with national development goals (Modise, 2023).

Table 2. Post-consumer metal packaging material recovery statistics from 2020 to 2022, estimated for 2023, and forecast to 2024

Metal packaging in SA	2020	2021	2022	2023 estimated	2024 forecast
Tons are placed in the market	152 391	180 165	184 000	183 046	186 920
Post-consumer recovery in tons	100 349	111 036	98 403	96 986	98 712
DFFE Target in tons	Not available	Not available	108 560	111 658	115 890
Post-consumer recovery rate%	65.85%	61.63%	53.48%	52.98%	52.81%
DFFE Target	Not available	Not available	59.00%	61.00%	62.00%
Gap	Not applicable	Not applicable	5.52%	8.02%	9.19%

Source: Adapted from Braithwaite & Musingadi (2023) and (South Africa. Department of Environmental, Forestry & Fisheries, 2023)

The data in Table 2 demonstrates actual post-consumer metal packaging material recovery statistics from 2020 to 2022, estimated for 2023, and forecast to 2024.

Table 2 highlights that post-consumer metal packaging recovery rates in South Africa are currently falling short of the Department of Forestry, Fisheries and the Environment (DFFE) targets, indicating that the metal packaging industry will require urgent and robust interventions to meet these targets within the next three years. Notably, the 2021 recovery rate of 61.63%, as shown in Table 2, is significantly lower than the European benchmark of 78.5% for the same year (Rivers, 2023). Consequently, the South African metal packaging industry must adopt global best practices and intensify efforts to maximise recovery and re-use to improve performance and align with international standards.

Fig. 4 illustrates the diverging trends between the volumes of metal packaging placed onto the South African market, the actual post-consumer metal packaging recovery rates, and the Department of Forestry, Fisheries and the Environment (DFFE) recovery targets, as projected through to 2024.

The extrapolated trendlines in Fig. 4 show a declining trajectory in the post-consumer metal packaging recovery rate, which is expected to significantly diverge from both the projected growth in metal packaging volumes and the DFFE recovery targets set in Government Gazette 48527, resulting in an anticipated 9.19% gap by 2024, as shown in Table 2. This scenario underscores the inadequacy of the current recovery system and points to the urgent need for incentivised post-consumer metal packaging initiatives that not only improve recovery rates but also promote transformation, job creation, human dignity, and social equity, addressing exploitation within the informal waste-picking sector.

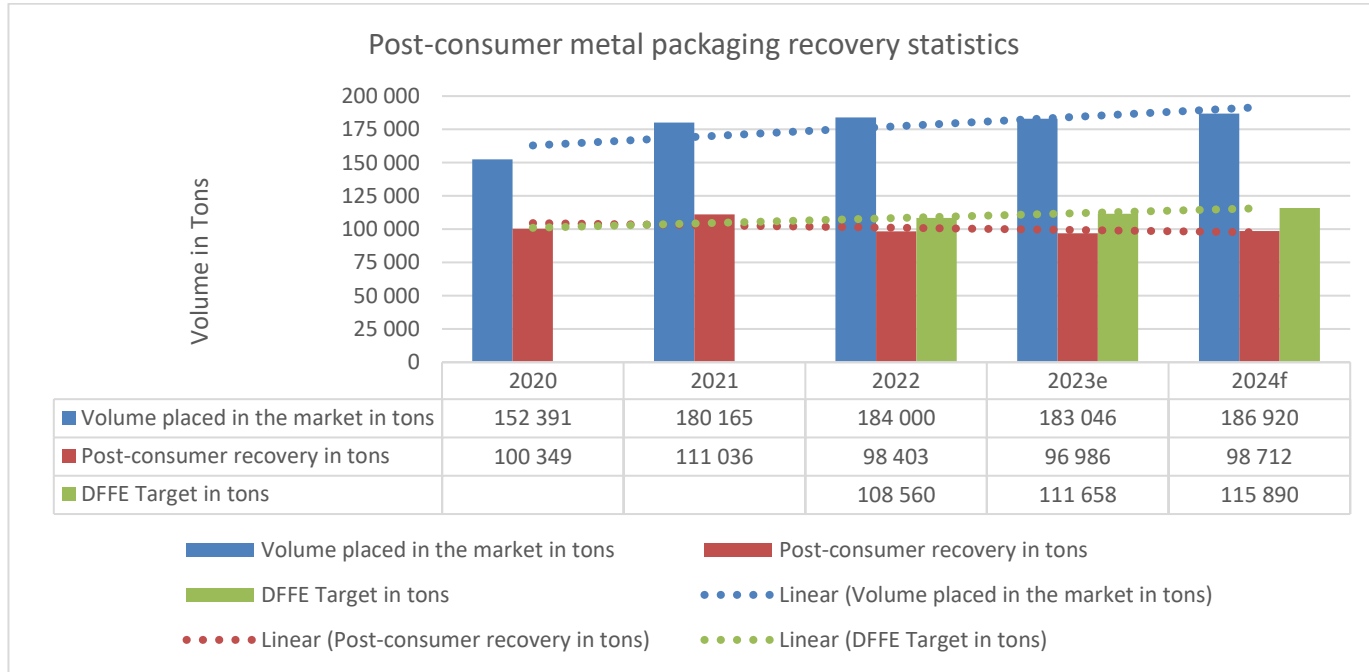


Fig. 4. Post-consumer metal packaging recovery
 (Source: Braithwaite & Musingadi, 2023; South African. Department of Environmental, Forestry & Fisheries, 2023)

Increasing the diversion of packaging waste from landfills toward reuse, recycling, and recovery is key to unlocking the potential of a circular economy. Such a shift not only supports environmental sustainability but also drives job creation and business growth across the value chain (Godfrey, 2021). The Ellen MacArthur Foundation, a leading organisation in advancing circular economy principles, promotes transitioning to a circular economy to reduce waste, improve resource efficiency, and address global environmental challenges while supporting sustainable development goals (Webster, 2017). The UN Environment Programme, a global authority on environmental issues, also promotes transitioning to a circular economy to reduce waste, improve resource efficiency, and address global environmental challenges while supporting sustainable development goals (Maricut et al., 2022). Despite this potential, forecasts suggest a decline in post-consumer metal packaging recovery by 2024 (Braithwaite & Musingadi, 2022), highlighting an opportunity for South Africa to enhance recovery rates in line with DFFE targets. Addressing this gap could create significant economic value: recovering an additional 2 million tons of packaging material is estimated to generate R712.5 million upstream of recyclers and R2.53 billion downstream in manufacturing industries supporting a circular economy (Council for Scientific and Industrial Research, 2017). Unlike the linear economy, the circular economy (CE) aims to create a sustainable, closed-loop system by recovering, reusing, and recycling finite resources, thereby reducing waste, environmental impact, and reliance on raw materials (Lederer et al., 2022). Design for recovery is a proactive strategy that prioritises the creation of metal packaging to enable efficient, safe, and easy recovery, reuse, and recycling of materials post-consumer usage, supporting the circular economy philosophy (Horani, 2023). Effective post-consumer metal packaging recovery is vital to realising the goals of the circular economy, but its full potential depends on the complete integration and coordination of all stakeholders involved in the recovery system (Lederer et al., 2022).

According to Calza et al. (2023), enhancing post-consumer metal packaging recovery is vital for environmental sustainability and improving corporate environmental performance, yet organisations still face significant challenges in effectively executing these strategies. Battle & Hobley (2020) express that aluminium and steel are the two metal packaging substrates, and both are infinitely recyclable without losing their chemical properties. Around one-third of the global aluminium that is used comes from recycled sources (Sulaiman et al., 2022). According to the Metal Packaging Manufacturers Association UK (2023) and earlier findings by Olivieri et al. (2006), recycling recovered aluminium saves up to 95% of the energy required to produce aluminium from primary bauxite ore. According to the Aluminium Bottle Report (Ball Corporation, 2022), aluminium is a permanent material that can be endlessly recycled without quality loss, with 75% of all aluminium ever produced still in use today; its recycling saves 95% of the energy compared to virgin production and ensures the highest material recycling yield benefits that are fully dependent on effective recovery systems.

According to the Metal Packaging Manufacturers Association UK (2023), recycling steel saves around 70% of the energy required to produce steel from primary ore, a benefit that relies heavily on efficient and consistent recovery efforts. The use of magnetic retrieval for steel, combined with tailored metal recovery strategies adapted to local conditions, ensures efficient sorting, recovery, and recycling, advancing a sustainable and integrated waste management approach (Wolper, 2019). Sulaiman et al. (2022) express that steel packaging, thanks to its magnetic properties, is easily and cost-effectively recovered from mixed waste and is fully recyclable, with new products often containing recycled steel content.

Wagner (2013) identifies the following key factors that influence effective recovery and recycling rates:

- i. Individuals must invest time to gain knowledge about material types, segregation requirements, collection schedules, and drop-off procedures.
- ii. Proximity to recycling sites significantly affects participation, as greater distances reduce convenience,
- iii. providing more flexible drop-off times, such as evenings and weekends, increases accessibility,
- iv. appealing and strategically located sites reduce the need for special trips, enhancing convenience,
- v. simplifying the recycling process encourages participation by minimising required time and effort; and
- vi. The amount of effort needed for sorting and separating materials can discourage potential recyclers if perceived as too burdensome.

Responsible packaging manufacturers worldwide play a vital role in promoting the use and reuse of existing materials through Extended Producer Responsibility (EPR), a sustainable development approach that requires producers and brand owners to take financial and operational responsibility for managing products at the end of their life cycle, a concept highlighted by Lovins & Braungart (2014) and more recently supported by Batista et al. (2019) and (Greenblue, 2021). Although manufacturers and importers of metal cans do not directly handle the collection and sorting of scrap metal, legislation requires them to meet recovery targets by paying an EPR fee, calculated based on production or import tonnage to their Producer Responsibility Organisation (PRO), which oversees the recovery and recycling of metal packaging (Park, 2021).

According to Patorska & Paca (2019), deposit return schemes that compensate for the recovery of post-consumer metal packaging have been shown to deliver a range of benefits in countries where they are implemented, including increased post-consumer packaging recovery, greater availability of secondary raw materials, and improved environmental awareness. Kim & Hong (2019) argue that Unmanned Aerial Vehicles (UAVs), or advanced heavy-duty drones capable of lifting over 250 kg, can significantly support packaging recovery in remote areas lacking buy-back centres and materials recovery facilities (MRFs).

3. Research Method

This study utilised a qualitative research methodology that entailed gathering data through semi-structured, in-depth interviews and recording the verbal expressions of prominent SA packaging industry converters, brand-owners, and metal recyclers. According to Denny & Weckesser (2018), this approach provides valuable insights into individuals' experiences, helping to identify barriers, inform interventions, and support the effective implementation of improvements. The research instrument used for the converter/brand-owner interviews comprised 21 items: 6 related to biometric data in Section A and 15 open-ended questions in Section B (Appendix 1). The research instrument used for the metal recycler interviews consisted of 14 items: 6 pertaining to biometric data in Section A and 8 open-ended questions in Section B (Appendix 2). Both sets of open-ended questions were aligned with the study's research questions to ensure objectivity and were specifically designed to elicit participants' perspectives on the success and integrity of metal packaging recovery in South Africa. The open-ended interview questions addressed key aspects of the packaging industry, ranging from global trends in sustainable development and the circular economy to specific challenges within the South African packaging sector, all in alignment with the research questions. During the interview sessions, participants responded to a fixed set of open-ended discussion questions, with the researcher recording their responses on a laptop, aiming to capture their exact words as accurately as possible.

For qualitative studies, a minimum of 18–20 interviews is generally recommended to achieve comparative and saturation adequacy (Given, 2008; Leavy, 2017). Accordingly, a sample size of 18 interviews for each of the two qualitative studies, stratified across South Africa's main provinces, was deemed satisfactory and manageable within the given time frame and budget. The inclusion criteria comprised individuals employed in senior or decision-making roles within converter or brand-owner organisations, as well as those working in metal recycling companies. Metal packaging stakeholders representing less than 20% of the total packaging volume placed on the South African market annually were excluded from the study, as they constitute a minor portion of the industry and fall outside its focus on the 80% "critical mass. All non-packaging metal recovery and recycling operations were also excluded, as these do not qualify as "identified products" under the Department of Forestry, Fisheries and the Environment (DFFE) definition.

Pilot testing of the research instruments was conducted to test potential concerns and participant fatigue. The two qualitative studies gathered responses through personal interviews with key converters, brand-owners, and metal recyclers in South Africa's packaging and metal recycling industries to assess their commitment to metal packaging recovery, the circular economy, and sustainable development principles. Pilot testing of the research instruments was conducted to test potential concerns and participant fatigue. The pilot testing identified potential issues with the research instruments, such as unclear questions and participant fatigue. Based on these findings, the instruments were refined to

improve clarity, reduce burden, and ensure reliable data collection. The recruitment and interview process involved obtaining gatekeeper permissions and individual participant consent via email, with confidentiality maintained in accordance with the Protection of Personal Information Act (POPIA). Structured questionnaires guided the interviews, which were conducted in English either via Zoom or in person, depending on participant preference; participants were informed of their right to withdraw at any time without providing a reason, thereby ensuring informed consent.

To assess language clarity, interview length, and potential ambiguities, a pre-interview was conducted with a subject expert using the draft questionnaire. Based on this feedback, the questionnaire was revised to improve language, reduce duration, eliminate ambiguity, and clarify confusing items. Responses from the pre-interview were excluded from the final analysis. Pre-testing helps identify errors to ensure the questionnaire functions effectively as a research tool (Ruel et al., 2015). To ensure the reliability of this research, consistent data collection procedures were applied beyond the analysis phase, transparent coding schemes and decision rules were established for replicability, pilot testing addressed potential issues and participant fatigue, and NVivo V12 software was utilised to maintain consistency, collectively enhancing the credibility and trustworthiness of the study and supporting the validity of its findings.

The analysis and interpretation approach, based on qualitative research methods, supported by Creswell & Creswell (2018), involves transforming collected qualitative data to clarify, understand, and interpret individuals and situations studied. "Qualitative" refers specifically to words and observations, aiming to interpret and present the data meaningfully (Creswell & Creswell, 2018). Thematic nodes and sub-nodes were identified and analysed descriptively to detect trends using NVivo version 12 software.

Reliability was ensured through consistent data collection procedures, transparent and well-defined coding schemes, pilot testing of research instruments, and the use of NVivo software to maintain analytical consistency.

Trustworthiness in this study was ensured through multiple strategies. Credibility was achieved by confirming interpretations with participants, while transferability was supported through thick descriptions of the research context and participating organisations. Dependability was ensured by maintaining a detailed audit trail of raw data, field notes, transcripts, and the reflexive journal, allowing independent verification of the research process. Confirmability was strengthened through independent expert review of the research plan, data analysis, and findings to ensure interpretations were grounded in the data rather than the researcher's assumptions. To further safeguard the integrity of the data, potential social desirability bias was mitigated by assuring participants of confidentiality, reinforcing the voluntary nature of participation, and emphasising the importance of candid, reflective responses. These measures helped reduce the likelihood of participants tailoring their input to align with perceived expectations or social norms, thereby enhancing the authenticity and reliability of the findings.

4. Results and Discussion

4.1 Introduction

A total of 36 semi-structured interviews were conducted in South Africa, 18 with converter/brand-owners and 18 with metal recyclers, achieving a 100% response rate relative to the targeted sample size. As illustrated in Fig. 5, participants were selected from key provinces, namely Gauteng, KwaZulu-Natal, Mpumalanga, Western Cape, and Free State.

Section A, Biometric information

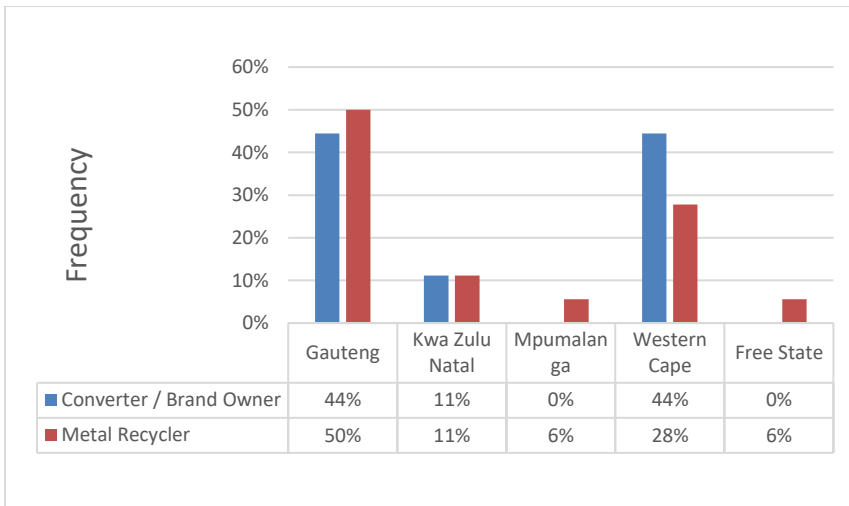


Fig. 5. Participant graphical location

(Source: Researcher's own construction)

Of the total interviews, 88% of the converter/brand-owners and 78% of the metal recyclers were based in the Western Cape and Gauteng. Both converter/brand-owners and metal recyclers are predominantly located in the Western Cape, Gauteng, and KwaZulu-Natal, reflecting the concentration of business activity in these economic hubs. However, metal recyclers are more widely distributed across the provinces due to the broader geographic demand for metal collection and re-melting services. Overall, the interviews reflected the distribution patterns of metal packaging across South Africa and were reasonably stratified to capture insights from key industry role-players in regions with higher industry density.

Fig. 6 illustrates the gender profile of the participants.

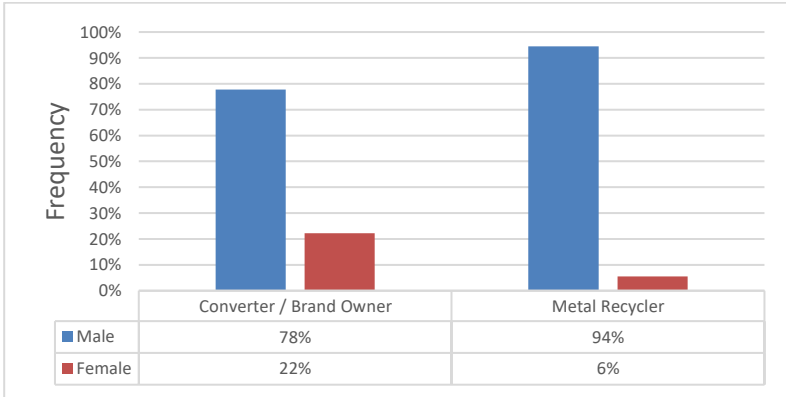


Fig. 6. Participant gender profile
 (Source: Researcher's own construction)

Among the converter/brand-owner interviews conducted, 22% of respondents were female, while 78% were male. In contrast, only 6% of the metal recycler interviewees were female, with 94% being male. These figures clearly indicate that both sectors are male-dominated, with the metal recycling sector showing an even greater gender imbalance. Nonetheless, it is important to emphasise that the interviews focused on converter/brand-owners and metal recyclers who handle a significant volume of metal in South Africa, irrespective of gender.

The job designation profile of the participants is illustrated in Fig. 7.

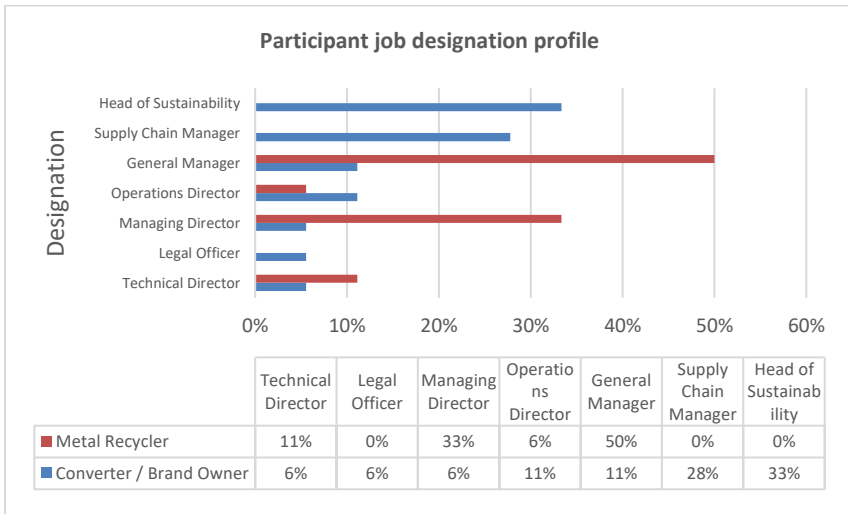


Fig. 7. Participant designation profile
 (Source: Researcher's own construction)

Fig. 7 illustrates the rank and leadership positions of the individuals selected for interviews conducted in this study. These senior-level participants represent the leadership of both the packaging and metal recycling industries in South Africa, making them well-positioned to provide a comprehensive perspective on the research questions. Notably, roles related to supply chain management and sustainability are less common within the metal recycling sector compared to the converter/brand-owner segment of the metal packaging industry. This discrepancy may be linked to the fact that converter/brand-owner companies are largely global corporate entities, influenced by international markets and supply chains, which necessitate dedicated functions in sustainability and supply chain management (Bag et al., 2022).

Fig. 8 illustrates the experience profile of the participants.

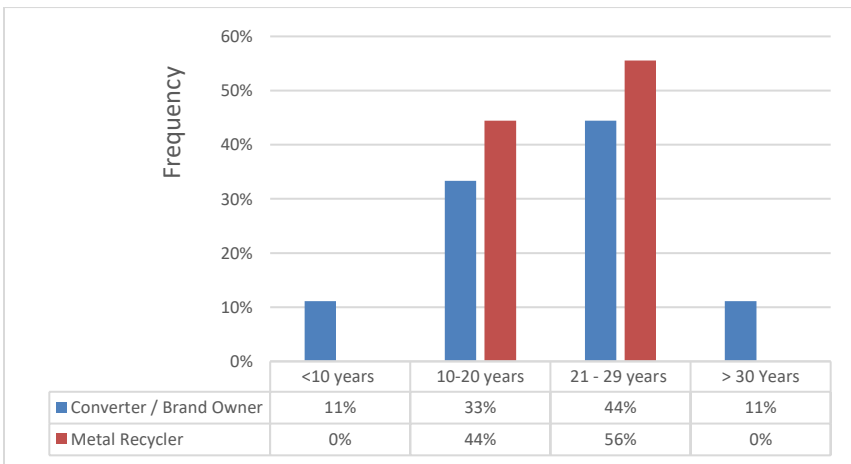


Fig. 8. Participant experience profile
(Source: Researcher's own construction)

Fig. 8 illustrates that over 50% of both converter/brand-owner and metal recycler participants have more than 20 years of experience in their respective fields highlights the industry's reliance on seasoned professionals. This distribution of experience provides valuable insight into the workforce composition and expertise across both sectors. The concentration of highly experienced individuals suggests that the metal packaging and recycling industries in South Africa are supported by a mature and knowledgeable workforce.

Section B: Results of the interview questions

Fig. 9 reflects the keywords, by frequency, arising from the interviews with the converter/brand-owners.



Fig. 9. Word cloud - converter/brand-owner
(Source: NVivo version 12)

Fig. 10 reflects the keywords, by frequency, arising from the interviews with the metal recyclers.



Fig. 10. Word cloud - metal recyclers
(Source: NVivo version 12)

An analysis of the word clouds generated from the converter/brand-owner and metal recycler interviews reveals several key themes:

- i. For the converter/brand-owner group, the most prominent terms included metal, packaging, recovery model, consumer, circular, waste, recycling, collection, sustainability, model, and brand.
- ii. In contrast, the dominant terms from the metal recycler interviews were metal recovery, energy management, operations, efficiency, processing, environmental compliance, waste, and recycling.

These findings indicate a shared focus on metal recovery and recycling across both sectors, reinforcing their mutual commitment to advancing a circular economy within the metal packaging value chain. These observations created a platform for the thematic analysis reflected in Table 3.

Thematic nodes and sub-nodes were identified and analysed using NVivo version 12. All 36 interview transcripts were collated, and participants’ responses were coded against the research questions. NVivo helped reveal repetitive trends and phrases, enabling the identification of common themes, with subthemes derived where responses connected to main themes. To enhance validity, a cross-section of responses from individual participants (“common participant – cross section of questions” was examined to ensure consistent theme identification across questions. Additionally, responses were weighted according to participants’ roles and positions within the industry. Inter-coder reliability was ensured through collaborative review and consensus on coding decisions.

Table 3. Thematic analysis

Research Question	Theme number and description	Subtheme number and description
1	Effectiveness of the SA post-consumer metal packaging recovery system	1.1 Recovery mechanism 1.2 Recovery percentage 1.3 Recovery reliability and sustainability
2	Accuracy and reliability of existing post-consumer metal packaging recovery system data	2.1 Data source 2.2 Confidence level 2.3 Challenges

Source: Researcher’s own construction

The effectiveness of South Africa’s post-consumer metal packaging recovery system is underpinned by a combination of critical elements. These include the accessibility and efficiency of collection infrastructure, active involvement of informal waste pickers, public support facilitated through education and awareness campaigns, the use of advanced sorting and separation technologies, and the presence of well-equipped recycling facilities capable of processing recovered materials. Additionally, supportive government policies and regulations, strong stakeholder collaboration, and a robust market demand for recycled metals further contribute to the system’s overall performance (Godfrey, 2021; Council for Scientific and Industrial Research, 2017). Success is measured not only by the volume of metal packaging recovered in South Africa but also by the broader

environmental benefits achieved, such as reduced energy consumption, lower greenhouse gas emissions, and the conservation of natural resources (Godfrey, 2021; Howells, 2022).

Theme 1: Effectiveness of South Africa’s post-consumer metal packaging recovery system

Fig. 11 presents the project map for Theme 01, illustrating the components that influence the effectiveness of South Africa’s post-consumer metal packaging recovery system.

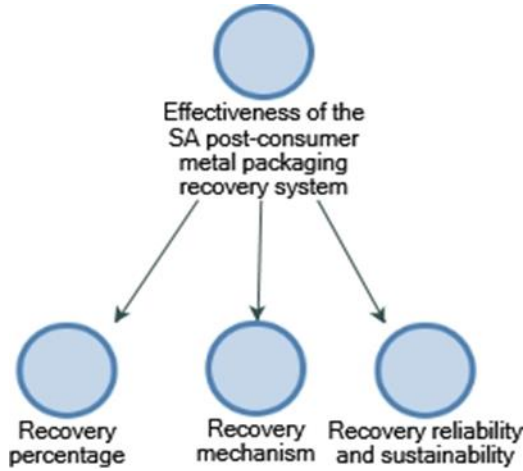


Fig. 11. Theme 01: Effectiveness of the SA post-consumer metal packaging recovery system

(Source: Construction by NVivo version 12)

Fig. 11 presents the cross-tabulation for Theme 01, which explores the effectiveness of South Africa’s post-consumer metal packaging recovery system. It is important to note that the accompanying subtheme bar chart reflects the frequency with which participant responses were coded under each subtheme. This representation should not be interpreted as a ranked perception or level of agreement, as would be the case with a Likert scale.

The following sections examine each of the sub-themes identified under Theme 01, as outlined in the project map (Fig. 12). These sections explore key focus areas, analyse participant perspectives, and incorporate relevant excerpts from the interviews where appropriate, to support and illustrate the insights and inferences drawn.

As illustrated in Fig. 12 (**Recovery Percentage**), there is a notable disparity in the emphasis placed on post-consumer metal packaging recovery statistics between

the two stakeholder groups. Specifically, 94.44% of references to recovery rates originated from converter/brand-owner participants, compared to only 5.56% from metal recyclers. This discrepancy is likely attributable to the implementation of Extended Producer Responsibility (EPR) legislation, gazetted in May 2021, which has placed considerable pressure on the packaging industry. In response, the metal packaging sector has prioritised the measurement of post-consumer recovery rates, primarily through the Producer Responsibility Organisation (PRO), MetPac-SA (Muller, 2018). In contrast, insights from the recycler interviews indicated that metal recyclers in South Africa process all types of used metal, not solely metal packaging, making post-consumer packaging recovery rates a less significant metric within their operations. In contrast, insights from the recycler interviews revealed that metal recyclers process all forms of used metal in South Africa, not just post-consumer metal packaging, making specific recovery rate measurements for packaging less relevant to their operations.

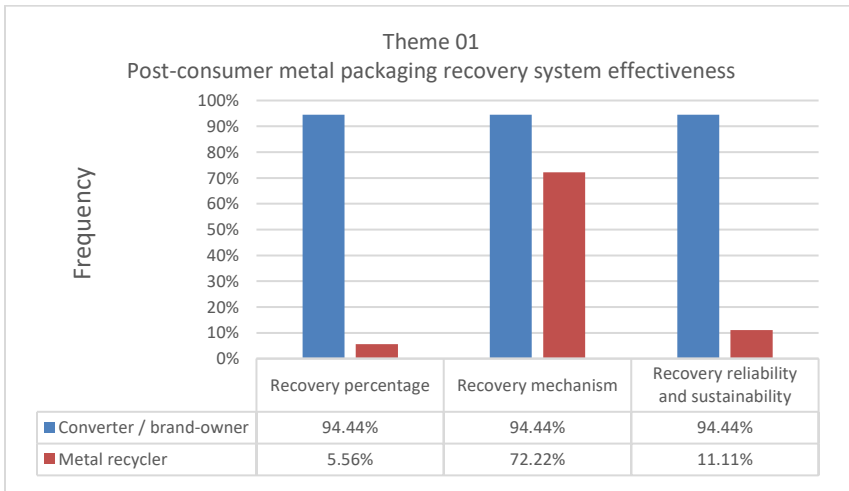


Fig. 12. Theme 01: Cross tabulation
 (Source: Researcher’s own construction)

Metal recovery mechanisms were referenced by 94.44% of converter/brand-owners and 72.22% of metal recyclers, indicating that both groups are invested in recovery systems, albeit from different perspectives. From the converter/brand-owner standpoint, post-consumer metal packaging recovery is primarily driven by the need to comply with Extended Producer Responsibility (EPR) legislation. In contrast, for metal recyclers, metal recovery is central to their operations, serving as the primary input material for remelting and refining processes aimed at producing metals for reuse in various applications. Furthermore, several converter/brand-owner participants highlighted that post-consumer metal packaging recovery in South Africa is heavily dependent on informal waste pickers. This system is largely shaped by high unemployment, the intrinsic value of metal,

and broader economic conditions, rather than by a formal, coordinated framework designed to support efficient recovery of post-consumer metal packaging.

Under the subtheme of **Recovery Data Reliability and Sustainability**, 94.44% of converter/brand-owners expressed views on this topic, compared to only 11.11% of metal recyclers. This disparity likely stems from the differing regulatory obligations faced by the two groups. Converter/brand-owners are required to demonstrate compliance with Extended Producer Responsibility (EPR) legislation specific to metal packaging, making accurate and reliable recovery data essential to their reporting processes. In contrast, metal recyclers are not subject to the same legislative requirements under the metal packaging EPR framework and, as such, are less dependent on system-level recovery data (South Africa Department of Forestry, Fisheries & Environment 2020).

Theme 2: Accuracy of South Africa’s post-consumer metal packaging recovery system

Fig. 13 presents the project map for Theme 02, illustrating the components that influence the accuracy of South Africa’s post-consumer metal packaging recovery system.

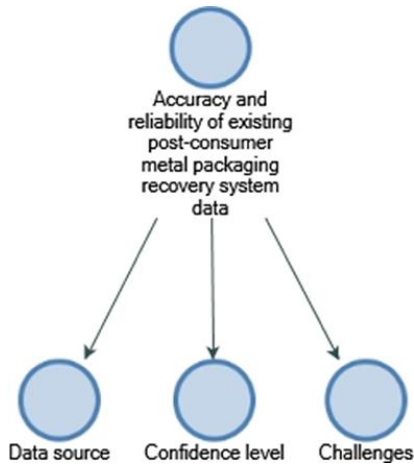


Fig. 13. Accuracy and reliability of existing post-consumer metal packaging recovery system data

(Source: Construction by NVivo version 12)

It is important to note that the following subtheme bar chart represents the frequency with which participant responses were coded under each subtheme. This should not be interpreted as a ranked perception of the subthemes, as would be the case with a Likert scale.

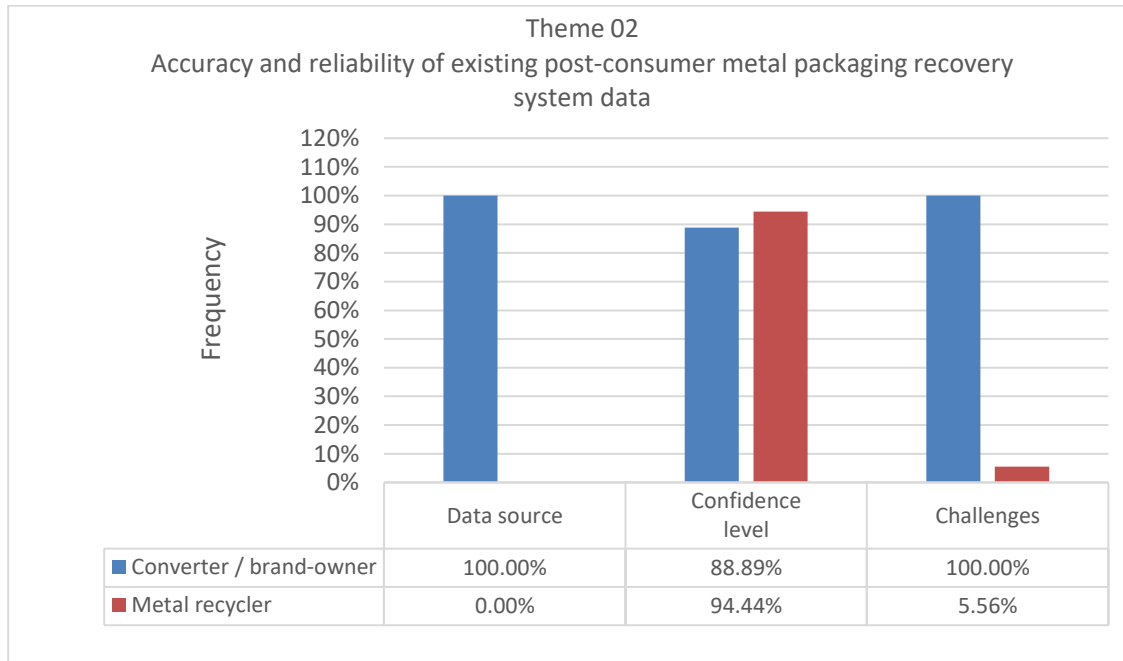


Fig. 14. Theme 02: Cross tabulation
(Source: Researcher's own construction)

The following discussions focus on each of the sub-themes identified within Theme 02, as depicted in the project map, Fig. 14. These sections explored the focal points, delved into the perspectives of the participants, and included, where required, relevant excerpts from the interviews conducted, to underscore inferences.

All participating converters and brand-owners (100%) indicated that their data source for post-consumer metal packaging recovery statistics is either MetPac-SA or BMi Research. The annual post-consumer metal packaging recovery rate is defined as the total tonnage of metal packaging recovered by metal recyclers each year, expressed as a percentage of the total tonnage placed on the South African market by converters and brand-owners (Godfrey, 2021). In light of the Extended Producer Responsibility legislative requirements, it is evident that converters and brand-owners now place increased emphasis on the accuracy and credibility of recovery data and its sources. As metal recyclers serve as the primary providers of this recovery data, their lack of reference to data sources is understandable.

Both metal recyclers and converter/brand-owners expressed low confidence level in South Africa's post-consumer metal packaging recovery statistics, largely due to incomplete data and the risk of double-counting across various stakeholders (e.g. buy-back centres, MRFs, recyclers, and re-melters). Their perspectives diverge: recyclers focus on maximising material yields, optimising the efficiency of collection and processing, while converter/brand-owners prioritise compliance with Extended Producer Responsibility requirements, aiming to meet regulatory and environmental obligations. The study highlights the importance of aligning these differing priorities to promote a sustainable and collaborative recycling ecosystem.

With the introduction of EPR legislation, converter/brand-owners have shown a stronger interest in ensuring data integrity and accurate reporting of post-consumer metal packaging recovery rates. Double-counting within the recovery value chain appears to be an unavoidable issue. Since metal recyclers are the primary source of recovery data, they are less likely to highlight data-related challenges, which may explain their limited concern on this matter.

The qualitative interviews captured insights from both converter/brand-owners and metal recyclers in relation to the research questions, centring around two primary themes.

5. Findings and Recommendations

Tables 4 and 5 summarise the findings and offer recommendations related to the research questions, focusing on the effectiveness of South Africa's post-consumer metal packaging recovery model as reflected in Theme 01 on the "Effectiveness of the SA post-consumer metal packaging recovery" and Theme 02: "Accuracy of South Africa's post-consumer metal packaging recovery system".

Table 4. Theme 1: Effectiveness of the SA post-consumer metal packaging recovery

Sub-Theme	Finding	Recommendations
Recovery percentage	Converter/brand-owners place greater emphasis on post-consumer metal packaging recovery statistics than metal recyclers, likely due to the recent EPR legislation introduced in May 2021, which pressures the packaging industry to track recovery rates. Metal recyclers, however, process all used metal in South Africa, not just packaging, so these specific recovery measurements are less critical for them.	It is recommended that the PRO collect both pre- and post-consumer metal packaging data from the sector. Converters and brand-owners should report the annual tonnage of metal packaging placed on the market, which must be compared with recovered post-consumer tonnage to calculate an overall recovery rate. This metric should be included in PRO performance reports to the DFFE. Recovery rates and data accuracy will improve if EPR legislation is refined to formally include buy-back centres, recyclers, and remelters. Strengthening data reliability through legislative updates is essential for building a fully integrated and effective recovery system.
Recovery mechanism	Post-consumer metal packaging recovery is essential for converters and brand-owners to demonstrate compliance with EPR legislation. For metal recyclers, recovered metal serves as a critical raw material for their re-melting and refining processes, enabling its reuse in various applications.	To improve recovery and recycling efficiency, it is recommended to implement metal compaction prior to remelting to enhance yield. Introducing Deposit Return Schemes (DRS) can further boost the recovery of packaging materials. Additionally, prioritising consumer awareness campaigns around separation-at-source initiatives will help optimise manual sorting and improve overall waste management outcomes.
Recovery data reliability and sustainability	Post-consumer metal packaging recovery is vital for converters and brand-owners to demonstrate compliance with EPR legislation. In contrast, metal recyclers fall outside the scope of metal packaging EPR regulations and thus do not depend on recovery system data specific to metal packaging.	Post-consumer metal packaging recovery is vital for converters and brand-owners to demonstrate compliance with EPR legislation. In contrast, metal recyclers fall outside the scope of metal packaging EPR regulations and thus do not depend on recovery system data specific to metal packaging.

Source: Researcher's own construction

Table 5. Accuracy and reliability of existing post-consumer metal packaging recovery system data

Sub-Theme	Finding	Recommendations
Data source	Post-consumer metal packaging recovery statistics are primarily sourced from MetPac-SA or BMi Research. Since metal recyclers are the original providers of this data, it explains why they do not reference external data sources in discussions about recovery statistics.	The adoption of Fourth Industrial Revolution (4IR) technologies is recommended at the re-melting stage nationwide to enable efficient, real-time data reporting on metal packaging recovery. These technologies play a key role in enhancing data integrity by ensuring accuracy, authenticity, and confidentiality, which are critical for reliable decision-making and effective tracking of recovery performance.
Confidence level	There is low confidence in South Africa's post-consumer metal packaging recovery statistics due to incomplete data and the risk of double-counting by various stakeholders, including buy-back centres, MRFs, recyclers, and re-melters. Metal recyclers shared these concerns, aligning with the views of converters and brand-owners.	To improve coordination and data integrity across the metal packaging recovery value chain, industry-wide partnerships and alliances should be established. It is recommended that clear memoranda of understanding be developed between PROs and key stakeholders, such as buy-back centres, recyclers, re-melters, and waste-to-energy operators, to facilitate data sharing while minimising the risk of double-counting. Additionally, the implementation of rigorous, standardised, and independent auditing processes is essential to ensure the accuracy, reliability, and objectivity of reported recovery data.
Challenges	Due to EPR legislative obligations, converters and brand-owners place a stronger emphasis on data integrity and accurate post-consumer metal packaging recovery rates. However, double-counting within the recovery value chain remains an unavoidable issue. As metal recyclers are the primary source of recovery data, they are less likely to highlight data-related challenges, which explains the limited concern from their side.	To address these challenges, collaborative and synchronised efforts, standardised reporting practices, and greater transparency within the metal packaging recovery ecosystem are essential. It is further recommended that metal re-melters serve as the primary data source for recovered metal packaging, as this would help minimise the risk of double-counting across the value chain.

Source: Researcher's own construction

6. Conclusion

Given the mounting pressures of industrialisation, urbanisation, overpopulation, and the depletion of finite resources, radical and coordinated action is essential to improve post-consumer metal packaging recovery. While converters and brand-owners are increasingly focused on recovery statistics to meet EPR compliance requirements, metal recyclers, who process a broader range of scrap metals, are less dependent on packaging-specific data. This divergence highlights the need for a harmonised, sector-wide approach to recovery data and system design. To support EPR implementation and enable accurate performance reporting, it is recommended that Producer Responsibility Organisations collect comprehensive data on both pre- and post-consumer metal packaging. Converters and brand-owners must consistently report the tonnage of metal packaging placed on the market, which should be compared with recovered volumes to calculate and track recovery rates. Legislative refinements that formally integrate buy-back centres, recyclers, and remelters into the EPR framework will be critical for improving data accuracy and promoting accountability.

However, overcoming key barriers such as inadequate collection infrastructure, low consumer awareness, weak incentives, limited adoption of Fourth Industrial Revolution (4IR) technologies, and fragmented stakeholder collaboration requires more than just regulatory compliance. A sustainable recovery system depends on enforcing EPR obligations, investing in infrastructure upgrades, promoting ISO 14001:2015 environmental management standards, and strengthening market demand for recycled materials. Additionally, enhancing recycling efficiency through measures like metal compaction before remelting, implementing Deposit Return Schemes and expanding consumer education around separation-at-source initiatives will improve both recovery rates and system sustainability. Ultimately, building a truly efficient and resilient post-consumer metal packaging recovery system requires a comprehensive, integrated, and synchronised approach involving all stakeholders from producers and consumers to recyclers and policymakers.

Conference Disclaimer

Some part of this manuscript was previously presented in the conference: International Conference on Business and Management Dynamics (ICBMD) 2025, dated 29th October, 2025 in Cape Town, South Africa, Web Link of the proceeding: <https://www.icbmd.org.za>

Disclaimer (Artificial Intelligence)

The authors hereby declare that generative Large Language Model (LLM) AI technology, specifically ChatGPT (GPT-5.1, OpenAI) was used during the writing and editing of this manuscript. All input prompts provided to the AI, as well as the nature of the assistance received, are disclosed below.

Competing Interests

Authors have declared that no competing interests exist.

References

- Africanews. (2021). South Africa last riots damage worth \$1.7 billion—says state insurance company. Africanews. <https://www.africanews.com/embed/1657952>
- Ball Corporation. (2022). The Aluminum Bottles Report. https://www.ball.com/getmedia/3a47cff3-8f97-4dad-a40f-90e54b014699/Ball_AluminumBottlesReport_2022.pdf
- Batista, L., Gong, Y., Pereira, S., Jia, F., & Bittar, A. (2019). Circular supply chains in emerging economies – A comparative study of packaging recovery ecosystems in China and Brazil. *International Journal of Production Research*, 57(23), 7248–7268. <https://doi.org/10.1080/00207543.2018.1558295>
- Barker of Battle, L., & Hoblely, A. R. (2020). Aluminium can help to build the circular economy. Here's how. *World Economic Forum*. <https://www.weforum.org/agenda/2020/06/aluminium-circular-economy-recycling-sustainability/>
- BMI Research. (2022). Overview of the South African Packaging Industry. Bedfordview, Johannesburg: BMI Research.
- Braithwaite, D. H., Groenewaldt, G., Kruger, K. S., Padgett, J., Scholtz, P. A. & Smith, M. A. 2021. Overview of the South African Packaging Industry. Bedfordview, Johannesburg: BMI Research.
- Braithwaite, D. H., & Musingadi, K. (2022). *South African Packaging Material Recovery Survey*. Bedfordview, Johannesburg: BMI Research.
- Braithwaite, D. H., & Musingadi, K. (2023). *Overview of the South African Packaging Industry*. Bedfordview, Johannesburg: BMI Research.
- Bag, S., Dhamija, P., Bryde, D. J., & Singh, R. K. (2022). Effect of eco-innovation on green supply chain management, circular economy capability, and performance of small and medium enterprises. *Journal of Business Research*, 141, 60–72. <https://doi.org/10.1016/j.jbusres.2021.12.011>
- Calza, F., Sorrentino, A., & Tutore, I. (2023). Combining corporate environmental sustainability and customer experience management to build an integrated model for decision-making. *Management Decision*, 61(1), 54–84. <https://doi.org/10.1108/MD-05-2022-0613>
- Council for Scientific and Industrial Research. (2017). *The economic and employment opportunities from increased paper and packaging recycling in South Africa*. Pretoria, South Africa: CSIR
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Los Angeles: Sage Publications. <https://edge.sagepub.com/creswellresearchdesign5e>
- Denny, E., & Weckesser, A. (2019). Qualitative research: what it is and what it is not: Study design: qualitative research. *BJOG: An International Journal of Obstetrics and Gynaecology*, 126(3), 369. <https://doi.org/10.1111/1471-0528.15198>

- Deshwal, G. K., & Panjagari, N. R. (2020). Review on metal packaging: materials, forms, food applications, safety and recyclability. *Journal of Food Science and Technology*, 57(7), 2377–2392. <https://doi.org/10.1007/s13197-019-04172-z>
- Didenko, N. I., Klochkov, Y. S., & Skripnuk, D. F. (2018). Ecological Criteria for Comparing Linear and Circular Economies. *Resources*, 7(3), 48. <https://doi.org/10.3390/resources7030048>
- Ferrari, K., Gamberini, R., & Rimini, B. (2016). The waste hierarchy: A strategic, tactical and operational approach for developing countries. The case study of Mozambique. *International Journal of Sustainable Development and Planning*, 11(5), 759–770. <https://doi.org/10.2495/SDP-V11-N5-759-770>
- Gadnis, A. (2023). The global extended producer responsibility regulations guide. BanQu. <https://www.banqu.co/blog/global-extended-producer-responsibility-regulations>
- Given, L. M. (2008). The SAGE encyclopedia of qualitative research methods. SAGE Publications, Inc. <https://doi.org/10.4135/9781412963909>
- Godfrey, L. (2021). Quantifying economic activity in the informal recycling sector in South Africa. *South African Journal of Science*, 117(9/10). <https://doi.org/10.17159/sajs.2021/8921>
- GreenBlue. (2021). Introduction to the guide for EPR proposals. Sustainable Packaging Coalition. <https://epr.sustainablepackaging.org/>
- Horani, L. F. (2023). Sustainable design concepts and their definitions: An inductive content-analysis-based literature review. *Technological Sustainability*, 2(3), 225–243. <https://doi.org/10.1108/techs-10-2022-0041>
- Howells, P. (2022). Extended producer responsibility in South Africa. Dataweek. <http://www.dataweek.co.za/17239r>
- Kim, K., & Hong, C. S. (2019). Optimal task-UAV-edge matching for computation offloading in UAV assisted mobile edge computing. *20th Asia-Pacific Network Operations and Management Symposium (APNOMS)*. <https://doi.org/10.23919/APNOMS.2019.8893000>
- Lederer, J. A., Bartl, A., Blasenbauer, D., Breslmayer, G., Gritsch, L., Hofer, S., Lipp, A.-M., & Mühl, J. (2022). A review of recent trends to increase the share of post-consumer packaging waste to recycling in Europe. *Detritus*, 19, 3–17. <https://doi.org/10.31025/2611-4135/2022.15198>
- Leavy, P. 2017. Research design. New York: Guilford Press.
- Lovins, A. & Braungart, M. 2014. A new dynamic - effective business in a circular economy. Cowes, Isle of Wight: Ellen MacArthur Foundation Publishing.
- Lovén, K., Isaxon, C., Ahlberg, E., Bermeo, M., Messing, M. E., Kåredal, M., Hedmer, M., & Rissler, J. (2023). Size-resolved characterization of particles >10 nm emitted to air during metal recycling. *Environment International*, 174, 107874. <https://doi.org/10.1016/j.envint.2023.107874>
- Maricuț, A.-C., Grădinaru, G.-I., & Matei, F.-B. (2022). Waste management: The trigger of circular economy. *Journal of Social and Economic Statistics*, 11(1–2), 84–101. <https://doi.org/10.2478/jses-2022-0005>
- MetPac-SA. (2023). Year 2 Annual Report. January – December 2023. <https://metpacsa.org.za/annual-reports/>

- Metal Packaging Manufacturers Association United Kingdom. (2023). Available: <https://www.mppma.org.uk/sustainability/metal-a-permanently-available-material/> (Accessed: 31 July 2023)
- Muller, C. (2018). Packaging and the environment. In The Institute of Packaging SA (Ed.), *A handbook of packaging technology* (10th ed., pp. 193–210). The Institute of Packaging SA.
- Packaging SA. (2023). Design for recycling. Available. <https://www.packagingsa.co.za/wp-content/uploads/2019/11/PACSA-Recyclability-by-Design-WEB.pdf>. (Accessed: 07 January 2024)
- PRO Alliance. (2023). Extended Producer Responsibility (EPR). <https://www.proalliance.org.za/extended-producer-responsibility-epr/>
- Ofori, P. (2023). Circular economy practices in third world nations: challenges and implications for environmental sustainability. *Environment, Development and Sustainability*. <https://doi.org/10.1007/s10668-023-03939-x>
- Olivieri, G., Romani, A., & Neri, P. (2006). Environmental and economic analysis of aluminium recycling through life cycle assessment. *International Journal of Sustainable Development and World Ecology*, 13(4), 269–276. <https://doi.org/10.1080/13504500609469678>
- Onesmo, C., Mabhuye, E. B., & Ndaki, P. M. (2023). A synergy between sustainable solid waste management and the circular economy in Tanzania cities: A case of scrap metal trade in Arusha City. *Urban Forum*, 1, 47-64. <https://doi.org/10.1007/s12132-023-09493-z>
- Packaging SA. (2017). Design for recycling. <https://www.packagingsa.co.za/wp-content/uploads/2019/11/PACSA-Recyclability-by-Design-WEB.pdf>
- Park, S. (2021). Assessing the recycling performance of extended producer responsibility (EPR) programs: A case study of the steel can packaging recycling system in South Korea. *Journal of the Air and Waste Management Association*, 71(5), 586–596. <https://doi.org/10.1080/10962247.2020.1866120>
- Patorska, J., & Paca, D. (2019). Deposit-Refund System (DRS) facts and myths. Deloitte. https://www2.deloitte.com/content/dam/Deloitte/pl/Documents/Brochures/pl_DRS_Brochure_Deloitte.pdf
- Rapson, G., & Novotny, P. (2021). The extended producer responsibility regulations – Laudable goals, challenging implementation. *Webber Wentzel*, 1–3.
- Rivers, A. (2023). Steel packaging exceeds EU 2025 recycling rate target. CanTech International. <https://cantechonline.com/>
- Ruel, E. E., Wagner III, W. E., & Gillespie, B. J. (2015). Pretesting and pilot testing. In *The practice of survey research: Theory and applications*. <https://doi.org/10.4135/9781483391700>
- South African Department of Forestry, Fisheries and Environment. (2020). National Environmental Management: Waste Act (59/2008): Regulations regarding extended producer responsibility. *Government Gazette*, 43879. https://www.dffe.gov.za/sites/default/files/legislations/nemwa_extendedproducerresponsibilityregulations_g43879gon1184.pdf

- South Africa. Department of Forestry, Fisheries and Environment. 2023. National Environmental Management: Waste Act 59 of 2008. Government Gazette 48527: 05 May. Pretoria: Government Printer.
- Trading Economics. (2023). South Africa GDP. <https://tradingeconomics.com/south-africa/gdp>
- Wagner, T. P. (2013). Examining the concept of convenient collection: An application to extended producer responsibility and product stewardship frameworks. *Waste Management*, 33, 499–507. <https://doi.org/10.1016/j.wasman.2012.06.015>
- Watson, A. (2023). The Citizen: Israel declaring war 'will hurt SA' – expert. Available: <https://www.citizen.co.za/news/israel-declaring-war-will-hurt-sa-expert/> (Accessed: 21 December 2023)
- Webster, K. (2017). *The circular economy: A wealth of flows*. Ellen MacArthur Foundation Publishing. <https://www.ellenmacarthurfoundation.org/resources/books/the-circular-economy-a-wealth-of-flows-2nd-edition>
- Wolper, P. (2019). Steel the sustainable packaging solution. *The Association of European Producers of Steel for Packaging*, 1–29.

Appendices

Appendix 1. Converter/brand-owner research questions and the intent

No.	Interview question	Question intent	Related research question
1	How does your business relate to circular economy principles?	Establishing global best practices	Research question 1
2	Which countries are actively delivering against circular economy principles?		
3	How are you constantly benchmarking with global best practices on post-consumer metal packaging recovery?		
4	How is post-consumer metal packaging recovered in SA?	Determining the effectiveness of current post-consumer metal packaging recovery system	Research question 2
5	How reliable/sustainable is the current post-consumer metal packaging recovery system?		
6	Can you estimate the % of post-consumer metal packaging that is recovered by informal waste pickers and the formal waste collection systems in SA?		
7	What is the source of your statistics (above question)?	Understanding the reliability of post-consumer metal packaging data acquisition and reporting	Research question 3
8	Are you confident that these statistics are an accurate reflection of post-consumer metal packaging recovery in SA?		
9	If not, where do you think lies the challenges in accurate data reporting?		
10	Discuss the level of commitment of your business / brand to a triple bottom line strategy.	Establishing commitment to metal packaging recovery and circularity	Research question 4
11	Are there formal sustainable development goal setting within your business? Discuss measurement and successes achieved. How do you set new targets and timelines? Test for realism and practicality.		
12	How does your brand / business address post-consumer metal packaging recovery and recycling?		

No.	Interview question	Question intent	Related research question
13	How can such a model ensure transformation and job creation?	Understanding how remodelling post-consumer metal packaging recovery may increase recovery volumes through local entrepreneurship.	Research question 5
14	How can community awareness and education campaigns be integrated into the recovery model to promote responsible recycling behaviour?		
15	How would you be able to increase the metal packaging recovery in SA?		

Appendix 2. Recycler research interview questions and the intent

No.	Interview question	Question intent	Related research question
1	How does the metal recovery and processing model in South Africa compare with global best practices?	Establishing global best practices	Research question 1
2	How effective is the SA metal recovery systems in SA?	Determining the effectiveness of current post-consumer metal	Research question 2
3	How do you ensure data accuracy and transparency in your metal supply chain, especially regarding the sources of scrap metal and raw materials?	Understanding the reliability of post-consumer metal packaging data acquisition and reporting	Research question 3
4	How does your facility ensure compliance with EPR legislation and environmental regulations and standards in SA?	Understanding the commitment to legislation and material circularity	Research question 4
5	Are there alternative models to recover and process metal more effectively and more efficiently in SA?	Understanding how re-modelling the metal recovery system can support job creation and transformation	Research question 5
6	What waste management practices do you have in place to minimise the environmental impact of your operations?	Establishing global best practices within the recycling sector	Research question 1

No.	Interview question	Question intent	Related research question
7	Can you share information about any initiatives or technologies implemented to enhance energy efficiency in your metal recycling/foundry processes?	Establishing global best practices within the recycling sector	Research question 1
8	What initiatives or programs do you have in place to engage with and benefit the local community surrounding your facility?	Understanding how re-modelling the packaging recovery system can support job creation and transformation	Research question 5

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Peer-Review History:

This chapter was reviewed by following the Advanced Open Peer Review policy. This chapter was thoroughly checked to prevent plagiarism. As per editorial policy, a minimum of two peer-reviewers reviewed the manuscript. After review and revision of the manuscript, the Book Editor approved the manuscript for final publication. Peer review comments, comments of the editor(s), etc. are available here: <https://peerreviewarchive.com/review-history/6771.3>

Enhancing Entrepreneurial Spirit through Institutionalised Entrepreneurship Education: Insights from South African Educators

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DOI: <https://doi.org/10.9734/bpi/mono/978-81-998711-1-3/CH4>

Peer-Review History:

This chapter was reviewed by following the Advanced Open Peer Review policy. This chapter was thoroughly checked to prevent plagiarism. As per editorial policy, a minimum of two peer-reviewers reviewed the manuscript. After review and revision of the manuscript, the Book Editor approved the manuscript for final publication. Peer review comments, comments of the editor(s), etc. are available here: <https://peerreviewarchive.com/review-history/6771.4>

Abstract

Entrepreneurship education and development (EED) is crucial for youth empowerment and for addressing the socio-economic challenges of unemployment, poverty, crime, and inequality. However, concerns persist regarding its poor implementation at the basic education level, which may negatively affect learners' entrepreneurial spirit. This study gauged perceptions of the institutionalisation of entrepreneurship education to enhance the entrepreneurial spirit in primary and secondary schools in South Africa, focusing on the perspectives of educators and principals in KwaZulu-Natal Province. The study adopted a quantitative approach, using a Likert scale-based questionnaire as the primary means of data collection. A total of 356 educators across 22 schools in KwaZulu-Natal, covering all 10 district municipalities and one metropolitan area, participated in the survey. Participants were selected using a non-probability quota sampling technique. A 5-point Likert scale-based questionnaire was used to collect data from teachers, principals, and school governing bodies (SGB) members. The research instrument comprised 46 items, with measurements categorised as nominal or ordinal. The collected data were analysed with the Statistical Package for Social Sciences (SPSS) version 29.0. The findings reveal that most participants believe that a well-managed entrepreneurship education curriculum has the potential to transform the South African economic landscape. In the investigation, 95.9% respondents either agreed (150, or 44%) or strongly agreed (177, or 51.9%) that EED encourages the founding of new businesses by learners. Additionally, the majority of respondents (94.4%) either agreed (164, or 48.1%) or strongly agreed (158, or

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46.3%) that EED equips learners with critical decision-making skills. Based on the results, the study suggests that the government develop an entrepreneurship education policy that mandates the integration of entrepreneurship teaching from primary to secondary school levels. As the survey was conducted in only one province (KwaZulu-Natal), generalisation of the results should be approached with caution.

Keywords: Perceptions; institutionalisation; entrepreneurship education; entrepreneurial spirit; South Africa.

1. Introduction

“Entrepreneurship education is a novel concept, which is spreading and developing beyond the business sphere. It was initially treated in the academy at the subject level in the late 1970s and early 1980s” (Ajani, 2024). “Fayolle offers a comprehensive definition, characterising entrepreneurship education as any educational program or process designed to cultivate entrepreneurial attitudes and skills” (Fayolle et al., 2006). “The concept has undergone significant growth in recent years, emerging as a crucial tool in fostering entrepreneurial initiatives” (Nabi et al., 2017; Arranz et al., 2017; Miço & Cungu, 2023; Ratten & Jones, 2021). “The purpose of this chapter is to examine perceptions regarding the institutionalisation of entrepreneurship education and development (EED) as a strategic approach to enhancing the entrepreneurial spirit in schools in KwaZulu-Natal (KZN). Entrepreneurship and the cultivation of a vibrant entrepreneurial ethos are essential to the economic and social progress of South Africa” (Nicolaidis, 2011; Ratten & Usmanij, 2020). “At the national level, South Africa has about two million small, micro and medium-sized enterprises (SMMEs), making up 98% of the country’s business landscape (Ratten & Usmanij, 2020; Dube, 2014). At the same time, unemployment is high, at 32.5%” (Stats SA 2020). “One solution to unemployment is to promote entrepreneurship” (Mengesha, 2020). According to Ruskovaara et al. (2015), EED fosters creative abilities, which serve as significant catalysts for progress. Hardie et al. (2020: 401) argue that entrepreneurship education is essential for equipping students with the necessary skills and capabilities to achieve success in uncertain economic landscapes. Falck et al. (2017) concur, stating that “the current emphasis on innovation-driven economic growth poses challenges to education, which must rise to the occasion and develop meaningful entrepreneurial curricula”.

“Africa, with the fastest growing and youngest population among developing regions, faces the imperative of generating millions of jobs each year to match the expansion of its labour force, all amid uncertainties regarding the future of employment” (World Bank, 2015). “Thousands of students graduate annually from various higher education institutions across South Africa, and many are unemployed years after graduation. However, despite the suitability of entrepreneurship as an alternative to traditional employment, entrepreneurial activity is currently low in South Africa” (Fan et al., 2024). “The educational systems of African nations have largely yielded a surplus of job seekers,

frequently lacking sufficient skills, rather than fostering entrepreneurs who generate opportunities for others” (Blimpo & Owusu, 2019). “In view of South Africa’s high unemployment rate, it is imperative to foster early-stage entrepreneurship at the primary and secondary school level”. The inclusion of entrepreneurship education in the curriculum at this level is not merely an academic exercise but a strategic necessity for addressing the structural challenges of unemployment and economic stagnation. Abor (2017) concur that entrepreneurship education provides the foundation for acquiring essential abilities, knowledge, and skills for entrepreneurship. This idea is supported by Akhmetshin et al. (2019: 1), who argue that the acquisition and honing of entrepreneurial skills during secondary school could furnish young individuals with the requisite competencies to foster the development of entrepreneurship in the nation.

Despite policymakers acknowledging the significance of entrepreneurial education, there is a lack of appetite among educators to implement it across all levels of education (European Commission, 2021; Lackéus, 2015, 2017), particularly in primary schools, where entrepreneurial skills are typically introduced. Childhood and adolescence are widely recognised as optimal periods for instilling entrepreneurial competencies and fostering positive attitudes toward initiative and entrepreneurship (Brinckmann, 2007). “However, there is a scarcity of literature on the ways in which early entrepreneurship is fostered among school-aged children” (Filion, 1994; Gasse, 1985). “Despite efforts in South Africa to enhance entrepreneurial activity, a multitude of challenges persist” (Nicolaidis, 2011; Baruch & Holtom, 2008). “The absence of acceptable paradigms or suitable theories regarding curriculum content in entrepreneurial education poses challenges in this domain” (Ratten & Usmanij, 2020).

To address the research questions posed in this article, the discussion begins with an exploration of current entrepreneurial education in South African schools. This is followed by an analysis of the institutionalisation of the entrepreneurship education curriculum and the lack of policy to support this institutionalisation. The article then examines the methodological approaches underpinning this study, leading to a presentation of findings, recommendations, and conclusions.

1.1 Research Questions

This paper intends to answer the following research questions:

- How can the institutionalisation of EED be used to enhance entrepreneurship in selected schools in KZN?
- How can entrepreneurial education foster an entrepreneurial spirit in South African schools?
- How can the institutionalisation of entrepreneurship education within the curriculum enhance its efficacy in developing entrepreneurial skills?
- What are the implications of the lack of a policy for the institutionalisation of entrepreneurship education?

2. Literature Review

2.1 Entrepreneurial Education in Schools

“Despite the vast number of educators working in South Africa, their contribution to fostering an entrepreneurial mindset in the younger generation remains underexploited. Educators serve as a valuable human resource whose involvement can greatly benefit local communities” (Grecu & Denes, 2017: 3). “Engaging in activities such as developing business plans and establishing companies enables students to gain a deeper understanding of finance, economics, accounting, marketing, and other business disciplines. This integrated approach enriches their educational journey and enhances their overall learning experience (Abdullah, 2020: 164). EED encourages students and alumni to venture into entrepreneurship and equips them with essential decision-making skills that enhance their competitiveness in the job market” (Boldureanu et al., 2020). “Moreover, fostering an entrepreneurial mindset facilitates the transfer of technology from learning institutions to the market. This is achieved through initiatives such as developing technology-based business plans and involving students in technology licensing activities. EED also fosters connections between academia and the business sector” (Grecu & Denes, 2017: 3).

“The entrepreneurial spirit, which underpins all real entrepreneurship, may be defined as the motivation to identify opportunities, create employment, and establish new ventures, while entrepreneurial skills encompass a combination of attitudes, beliefs, and competencies, culminating in the establishment of innovative, high-growth entrepreneurial ventures” (Ang & Hong, 2000; Verzat & Bachelet, 2006; Kaijun & Sholihah, 2015). “Some scholars argue that the cultivation of an entrepreneurial mindset and capabilities is best achieved through experiential learning, in which individuals engage in practical entrepreneurship activities and projects” (Egerová et al., 2016: 14).

Developing an entrepreneurial spirit is a team effort that requires the participation of all education stakeholders; according to the European Training Foundation (ETF) (2018: 01), “We must work together to foster innovation and creativity.” Lindner (2019: 5-12) stresses that the world’s future entrepreneurs are in school today, and the nature of their value-oriented education, as well as their motivation to actively participate in business and society in the future, is informed by what they learn today. This author points out that without the achievements of visionaries who actively put ideas into practice, we would be living in a very different world today.

“Entrepreneurial thinking is required everywhere; entrepreneurship is a mental mindset in which people actively contribute to society by identifying what needs to be done and then devising ways to do it. An entrepreneurial mindset must be taught, and it must be taught repeatedly, from generation to generation” (Lindner 2019: 5-12). “This notion echoes that of the EC’s thematic working group (TWG) (2014), which states that developing an entrepreneurial mindset requires

entrepreneurial learning and an environment that supports and fosters entrepreneurship. Therefore, the researcher argues that the teaching and learning of the entrepreneurial spirit and associated entrepreneurial skills must be planned and designed. This would assist in fulfilling the objective of giving young people a start in life that is relevant to the requirements of a rapidly changing world, in which jobs are becoming scarcer. The principles of EED have been proven to encourage students to take their futures into their own hands, as far as possible" (Lindner, 2019: 05).

The European Union (EU) has stressed the cultivation of an "enterprise spirit" among young individuals as a crucial prerequisite for achieving success in employment, growth, competitiveness, and innovation (EU, 2002: 10). Notwithstanding the country's high levels of unemployment and a growing number of discouraged job seekers, entrepreneurial activity offers a potential solution to youth unemployment (Stats SA, 2007: ii; Deng, 2023). Sharma and Madan (2014) predict that the government will only grapple with these challenges when youth unemployment rates surge. Consequently, there is a pressing need for collective efforts from all stakeholders to nurture the entrepreneurial spirit. In the midst of economic difficulties, youth lacking experience, who typically face greater challenges in securing employment than more experienced adults, represent the largest demographic in this market (Sharma & Madan, 2014; Shepherd & Douglas, 1997).

Various factors, both internal and external, can influence the entrepreneurial spirit (Liñán & Fayolle, 2015). Internal factors comprise those that originate within the individual, such as personal motivation or a strong desire to study and become an entrepreneur. Suryana (2006) argue that people with an entrepreneurial spirit and mindset possess the following characteristics: self-confidence, initiative, accomplishment motivation, leadership qualities, and a willingness to take risks. Wei et al. (2020) list six personality characteristics of the successful entrepreneur: a strong desire to succeed; the courage to take risks; innovation; autonomy; an internal locus of control; and self-efficacy.

A study conducted by Yohana (2020: 804-805) in Indonesia highlights the anticipated role of EED in equipping students with knowledge and motivation and fostering independence in their future endeavours. According to the study, promoting entrepreneurial spirit among students is a key aspect, with regulations in Indonesia mandating that school principals possess entrepreneurial skills to effectively oversee and cultivate entrepreneurship in educational institutions (Yohana, 2020). According to Pauceanu et al. (2019: 2), schools are not the only institutions seeking to instil an entrepreneurial spirit in students; an increasing number of government programmes have been launched to assist entrepreneurial endeavours. Entrepreneurs are viewed as a hidden engine that fosters innovation and creativity, produces jobs, and improves society's well-being, in wealthy and poor countries alike. As a result, entrepreneurship is an issue to be tackled not just at the micro level but also at the macro and global levels.

2.2 The Institutionalisation of Entrepreneurship Education

“Considering the prevailing economic difficulties encountered by numerous countries worldwide, fostering increased entrepreneurial activity has emerged as a significant objective for many national administrations” (Cooney, 2012: 1). “South Africa, like many countries in Europe and the Global North, is challenged to support this growth through the development and implementation of appropriate policies and practices”.

In her opening remarks at the third Entrepreneurship Development in Higher Education (EDHE) Executive Leadership Workshop held in Cape Town in 2021, Van Staden (2021) identified “four key areas that were central to the development of entrepreneurship in South Africa: policy, curriculum development, private sector partnership, and teacher development”. The statement has implications for government, education institutions, industry partners, funders, and the entire entrepreneurial ecosystem, as discussed below.

First, Nel-Sanders and Thomas (2022) investigated the influence of government policies on fostering innovation-driven entrepreneurial ecosystems. Their research offers valuable insights for directing managerial and policy strategies as part of the government’s role as the creator of innovation-driven EED policies. O’Connor (2013) argues that government policies worldwide are increasingly geared towards promoting entrepreneurship. Since entrepreneurship is a strong catalyst for sustainable economic and social progress (Hannon, 2005), government policies must prioritise its development. Currently, many students who represent a significant pool of potential entrepreneurs abandon entrepreneurial pursuits owing to limited access to venture capital, financing, and policy backing. This includes a lack of policies and programmes that would promote funding and access to other resources that support entrepreneurship, as well as a generally confusing and unwieldy regulatory environment that fails to support entrepreneurship.

Second, educational institutions in South Africa have an important role to play in providing EED (Nicolaidis, 2011). Nicolaidis stresses that the primary function of educational institutions should be to instil a greater entrepreneurial character among students. This includes developing and delivering entrepreneurship courses and programmes, as well as providing incubation and support services for entrepreneurs.

Third, collaboration with industry partners is crucial for the success of entrepreneurial education in South Africa. This sentiment was expressed at the Academy–Industry Training: Swiss and African Science and Business Innovators Programme (AIT-SASBI) Spring Conference in Gauteng in 2023. University–industry collaboration was emphasised as a key determinant of success in entrepreneurship. At this conference, Oluwatobi (2023) asserted that the world is built on collaboration, not isolation, and that innovation is the most important catalyst for micro and macro-economic growth. He added that industry needs

talent to thrive, and that solutions to its business and market problems need to be validated through research (Higher Education & Training, 2023).

Fourth, access to funding continues to be a major challenge in South Africa. This view was supported by an article in City Press that states that globally, entrepreneurs struggle to gain funding and attract investment to their businesses (Mjadu, 2018). Schools and other institutions can play a role in addressing this challenge by offering curricula that are responsive to these challenges.

Lastly, the development of a strong entrepreneurial ecosystem is essential for the success of EED in South Africa. An entrepreneurial ecosystem refers to the interaction of actors or stakeholders, roles, and environmental aspects that determine how entrepreneurial factors play out within a particular geographic area (Harima, 2020). An entrepreneurial ecosystem consists of a plurality of factors that interact in complex ways, such as leadership, national, regional and business cultures, capital market size, accessibility, and receptive and active consumers (Donaldson, 2021). A well-developed entrepreneurial ecosystem fosters innovation, supports business growth, and contributes to economic development by enabling entrepreneurs to thrive.

Creating networks and partnerships between entrepreneurs, investors, and support organisations, and fostering a culture of innovation and entrepreneurship, is, therefore, critical. The institutional implications of entrepreneurial education in South Africa are significant and require collaboration and cooperation between government, education institutions, industry partners, and other stakeholders. By working together, these institutions can create an environment that supports entrepreneurship growth and development and helps to build a stronger and more resilient economy in South Africa.

2.3 Lack of Entrepreneurship Education Institutionalisation Policy

Dube (2019: 17) points out that South African educational policies and limited access to capital present significant obstacles for both aspiring and established entrepreneurs. According to Maas et al. (2018), institutional factors play a crucial role in determining the effectiveness of EED in Africa. They argue that the presence or absence of these institutional factors significantly influences the ability of EED to foster entrepreneurial skills in learners. Arshed et al. (2014: 639) highlight criticisms directed at entrepreneurship policy for its perceived ineffectiveness. In addition, the sluggish economic growth experienced in many African nations has exacerbated challenges in job creation, particularly for university graduates upon completion of their degrees (Basardien et al., 2016: 68).

Scholars such as Biswas and Verma (2021: 367) and Emami et al. (2022) explore the influence of individual motivations, which encompass factors such as “the desire for achievement, personal attitudes, perceived behavioural control, entrepreneurial spirit, and entrepreneurial orientation”. They argue that there needs to be an “ongoing endeavour to comprehend entrepreneurship” across

various levels of analysis, owing to the diverse impacts of institutional heterogeneity on entrepreneurship, and a dearth of empirical evidence from countries with differing levels of economic development.

Entrepreneurship clearly plays a pivotal role in driving the development of countries and fostering innovation in new products and services (Jenvey, 2015; Sousa, 2018). However, the National Development Plan (NDP): Vision for 2030 highlights that South African schools have not adequately emphasised EED, leading to entrepreneurship hardly being considered as a career path. The NDP 2030 vision also points out that negative perceptions of entrepreneurship are often entrenched during schooling, with many students viewing it as an inferior career choice compared to seeking traditional employment (National Planning Commission (NPC), 2012). The South African government has much work to do in correcting this false narrative, particularly in schools.

Developing units focused on EED has the potential to boost entrepreneurial endeavours and, consequently, foster regional economic growth (Sodiq et al., 2019; Qian, 2018). However, despite significant advancements in defining EED units and assessing their effects in the literature (Audretsch et al. 2024), the significance of formal institutional quality in determining EED outcomes is often relegated to a secondary consideration, posing a challenge to EED progress.

Youssef et al. (2018) point out the value of a sustainability orientation in entrepreneurship education. While a sustainability orientation may not serve as a substitute for the absence of formal institutional development, it could steer entrepreneurship decision-making towards more sustainable ventures (Fuentelsaz et al., 2015), with the aim of fostering better environments and communities. Maponga et al. (2023: 1) focus on entrepreneurship in healthcare, asserting that academic research and training programmes have influenced capacity-building in healthcare systems. However, these authors argue that documented frameworks for capacity-building seldom provide insights into how such programmes can be designed and implemented in a more sustainable manner. Onyekwelu (2023: 1) states that the establishment of entrepreneurship-fostering institutions serves not only sustainability but also addresses the pressing need for access to micro-financing for entrepreneurs. In his view, entrepreneurship institutions should be equipped with the capacity to offer micro-financing for enterprises as a policy measure to ensure their sustainability, productivity, and viability.

However, these discussions overlook the crucial aspect of implementing EED policies at the basic education level. This viewpoint is echoed by Isaacs et al. (2007: 613), who note that experts in entrepreneurship advocate the implementation of EED at the school level, accentuating its potential to significantly enhance the contribution of SMMEs to the country's growth. Entrepreneurship remains an underexplored career path for the country's learners because educational institutions in South Africa have not adequately prioritised it (Basardien et al., 2016: 68). Ramchander (2019: 1) concurs, stating that the South African education system is deficient in this area. Radipere (2012:

11015) states that the education curriculum has not effectively addressed the escalating unemployment rate.

South African policymakers frequently claim that elevated entrepreneurship levels can be achieved through education, particularly in Entrepreneurship Training and Education (ETE) (Radipere 2012). However, governments have not comprehensively designed and implemented EED-related policies, particularly in South African primary and secondary schools.

3. Research Methodology

This study adopted a positivist approach, employing a quantitative methodology to achieve its research objectives. A 5-point Likert scale-based questionnaire was used to collect data from teachers, principals, and school governing bodies (SGBs) members across 22 schools in KwaZulu-Natal, covering all 10 district municipalities and one metropolitan area. The sample size of 396 educators was determined using the Yamane formula, with participants selected through non-probability sampling to ensure representativeness. Their selection was based on their role in teaching entrepreneurship in schools. In addition, principals' experiences were deemed essential, as they play a pivotal role in the implementation of entrepreneurship education policies. The collected data were analysed with the Statistical Package for Social Sciences (SPSS) version 29.0, and presented using descriptive statistics, including graphs, tables, cross-tabulations, and other visual representations. For inferential analysis, p-values were used to interpret correlations, while chi-square tests were applied to assess statistical relationships.

The study adhered to rigorous ethical standards to protect participants' rights and well-being. Ethical approval was obtained from the Institutional Research Ethics Committee (IREC) at DUT, and a gatekeeper's letter was secured from the KZN Basic Education Head Office to ensure compliance with ethical protocols. Participants were fully informed about the study's purpose, procedures, potential risks and benefits, as well as confidentiality measures, before providing voluntary consent. Anonymity and confidentiality were strictly maintained, with participants' identities coded and data used exclusively for research purposes. Secure storage measures were implemented for both hard copies and digital data, with provisions for their destruction after five years. Access to the data was restricted to the researcher only.

4. Results and Discussion

A total of 396 questionnaires were disseminated, with 341 returned, yielding an 86% response rate. The research instrument comprised 46 items, with measurements categorised as nominal or ordinal. The questionnaire was structured into 12 sections, each addressing different themes.

The first question concerned whether entrepreneurship education encouraged the founding of new businesses by learners.

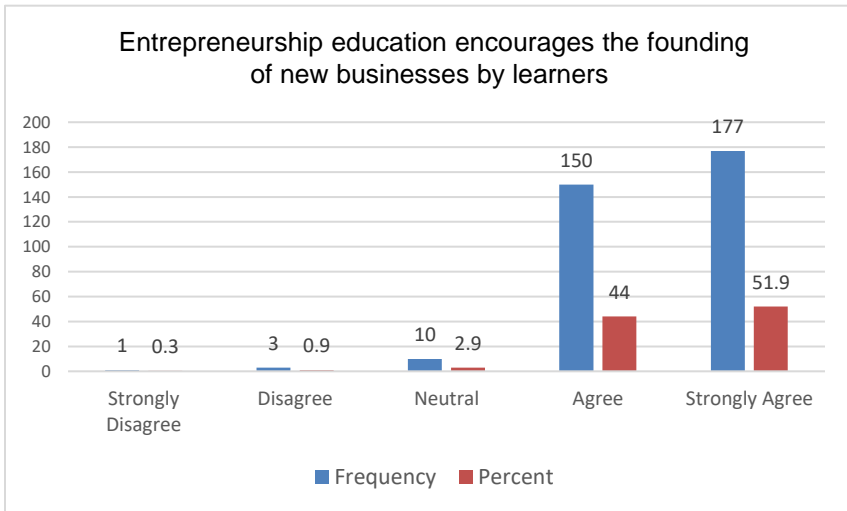


Fig. 1. EED encourages the founding of new businesses by learners

As indicated in Fig. 1, the great majority of respondents (95.9%) either agreed (150, or 44%) or strongly agreed (177, or 51.9%) that EED encourages the founding of new businesses by learners. Tshehla et al. (2021) affirm that entrepreneurial activity plays a crucial role in equipping young individuals with the ability to recognise business opportunities and establish new ventures, ultimately contributing to the reduction of youth unemployment. Similarly, Mani (2018) posits that intrinsic motivational factors, such as the desire for autonomy and the pursuit of personal aspirations, serve as key drivers for young people to embark on entrepreneurial endeavours.

These results are further supported by a Chi-square test, conducted to determine whether EED encourages the founding of new businesses by learners. The results reveal ($X^2=449.894$; $df=4$; $Sign.=0.001$) for this variable, indicating that the introduction of EED in schools can indeed encourage learners to form businesses. This means learners should be encouraged to venture into business at a young age, preferably immediately after matriculation. Very few (1, or 0.3% and 3, or 0.9%) respondents disagreed with this statement, while 10 (2.9%) were neutral in response.

EED is acknowledged as an important element in driving career decision-making in the 21st century (Wei et al., 2019: 1557; Fayolle, 2018). Student comprehension of entrepreneurship and awareness of different career options can be influenced by introducing the notion of entrepreneurship and entrepreneurial practices in education (Jena, 2020: 2).

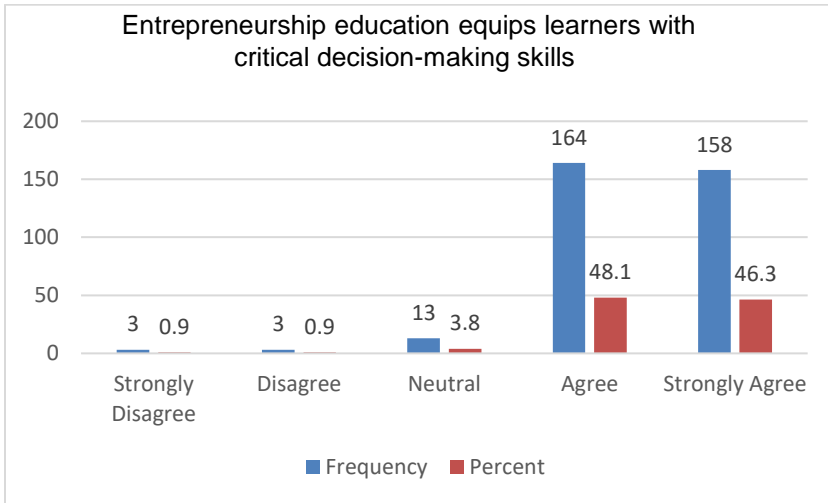


Fig. 2. EED equips learners with critical decision-making skills

Fig. 2 shows that the majority of respondents (94.4%) either agreed (164, or 48.1%) or strongly agreed (158, or 46.3%) that EED equips learners with critical decision-making skills. These results are supported by the Chi-square test ($X^2=422.152$; $df=4$; $Sign.=0.001$). The finding means that learners who undergo EED are likely to possess better decision-making skills than those who do not undergo such training. Only three (0.9%) respondents disagreed with this statement, while 13 (3.8%) were neutral in response.

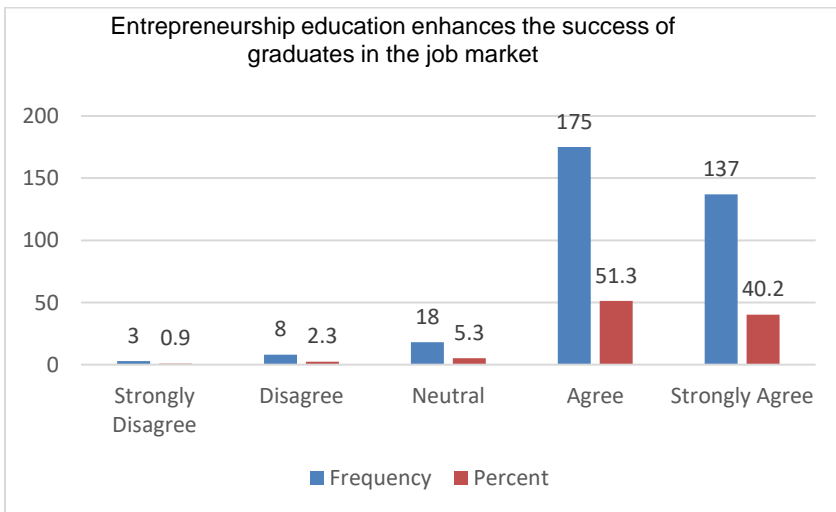


Fig. 3. EED enhances the success of graduates in the job market

The majority of respondents (175, or 51.3% and 137, or 40.2%) respectively, strongly agreed and agreed that EED enhances the success of graduates in the job market. These results are supported by a Chi-square test conducted to determine whether EED enhances the success of graduates in the job market. The results show ($X^2= 389.073$; $df=4$; $Sign.=0.001$) for this variable, indicating that EED has a significant positive impact on the success of graduates in the job market.

These findings are in line with the results of a study conducted by Bans-Akutey et al. (2023), which establishes a direct relationship between EED and graduate employability. Rae (2008) adds that EED can be a promising way of preparing students for a volatile and dynamic labour market. These results indicate that students or learners exposed to EED are likely to thrive in the job market by creating their own opportunities. Three (0.9%) and eight (2.3%) respondents, respectively, strongly disagreed and disagreed with this statement, while 18 (5.3%) were neutral.

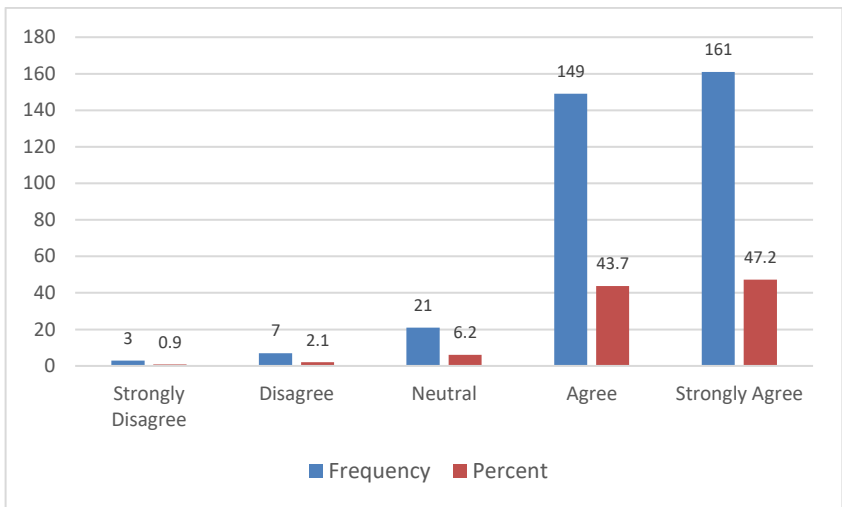


Fig. 4. Developing an entrepreneurial spirit is a team effort that requires everyone's participation

As reflected in Fig. 4, the vast majority of respondents (161, or 47.2% and 149, or 43.7%) either strongly agreed or agreed that developing an entrepreneurial spirit is a team effort that requires everyone's participation. A Chi-square test confirmed this ($X^2= 371.918$; $df=4$; $Sign.=0.001$).

This finding is echoed by the European Training Foundation (2018: 1), which emphasises that developing an entrepreneurial spirit is a collective effort that necessitates the participation of all educational stakeholders. Three (0.9%) and seven (2.1%) respondents respectively strongly disagreed or disagreed with the

statement, while 21 (or 6.2%) were neutral. Therefore, the results reveal that the majority of respondents believed that the development of an entrepreneurial spirit in learners requires the active participation of various stakeholders, including learners, educators, government, and society.

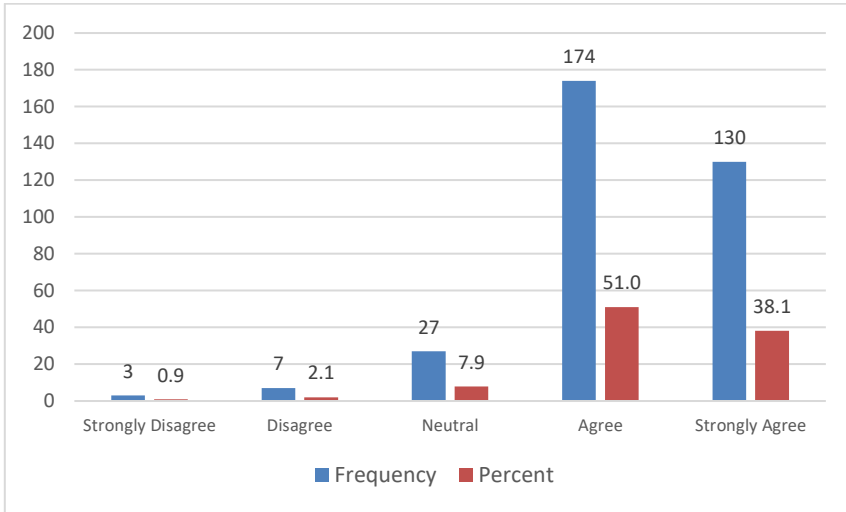


Fig. 5. Learners’ motivation to actively participate in business and society in the future is informed by what they learn in class

The findings in Fig. 5 show that the majority of respondents (174 or 51%, and 130, or 38.1%) strongly agreed and agreed, respectively, with the statement that learners’ motivation to actively participate in business and society in the future is informed by what they learn in class. These results are supported by a Chi-square test for this variable ($X^2= 362.270$; $df=4$; $Sign.=0.001$), which confirms the finding.

This finding is supported by a European Commission (2021) report, which stipulates that students can become highly motivated and engaged by the knowledge they acquire in class, which can fuel deep learning and lead to the creation of value for others. This illustrates the practical relevance of entrepreneurship knowledge for the development of society. Three (0.9%) and seven (2.1%) respondents, respectively, strongly disagreed and disagreed with the statement, while 27 (7.9%) were neutral in response.

Most respondents (177, or 51.9% and 126, or 37%) strongly agreed and agreed that entrepreneurial learning is required for developing an entrepreneurial mindset. These results are supported by the Chi-square test ($X^2= 362.915$; $df=4$; $Sign.=0.001$), which confirms the finding.

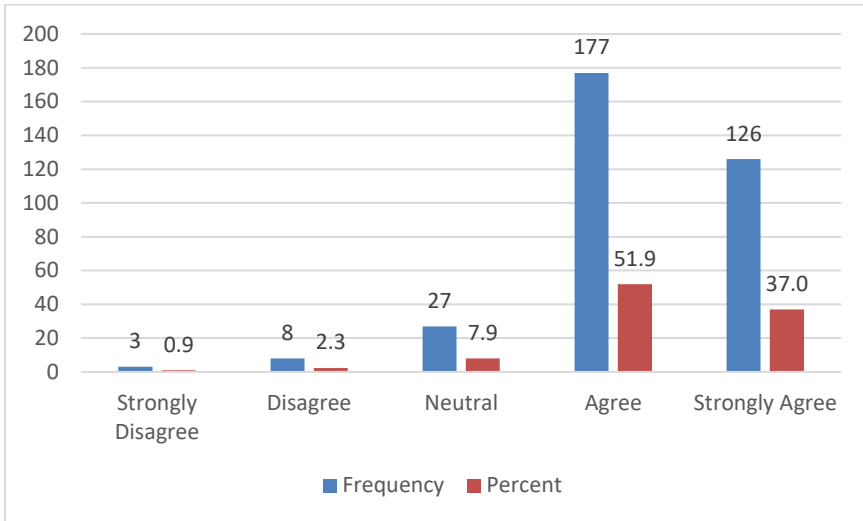


Fig. 6. Developing an entrepreneurial mindset requires entrepreneurial learning

This finding is supported by Lindner (2019: 5-12), who argues that an entrepreneurial mindset must be taught repeatedly, from generation to generation. The European Commission’s thematic working group (2014) also emphasises that developing an entrepreneurial mindset requires entrepreneurial learning and an environment that supports and fosters entrepreneurship. Three (0.9%) and eight (2.3%) participants strongly disagreed and disagreed with the statement, respectively, while 27 (7.9%) were neutral. These findings indicate that the majority of respondents believed that learners should be taught entrepreneurship as early as primary and secondary school in order to develop an entrepreneurial mindset.

According to Pittaway and Cope (2007), environmental supports play a crucial role in facilitating entrepreneurial activities. North (2002) adds that contextual factors within the environment can greatly influence individual economic attitudes and behaviours, including those related to entrepreneurship. Fig. 7 shows that the majority of respondents (183, or 53.7% and 131, or 38.4%) either strongly agreed or agreed that developing an entrepreneurial mindset requires an environment that supports and fosters entrepreneurship. The results are supported by the Chi-square test ($X^2= 408.428$; $df=4$; $Sign.=0.001$), which confirms the finding. Two (0.6%) and four (1.2%) respondents strongly disagreed or disagreed with the statement, while 21 (6.2%) were neutral.

These findings indicate that to cultivate an entrepreneurial mindset, a conducive environment that supports and embraces entrepreneurship is, indeed, necessary.

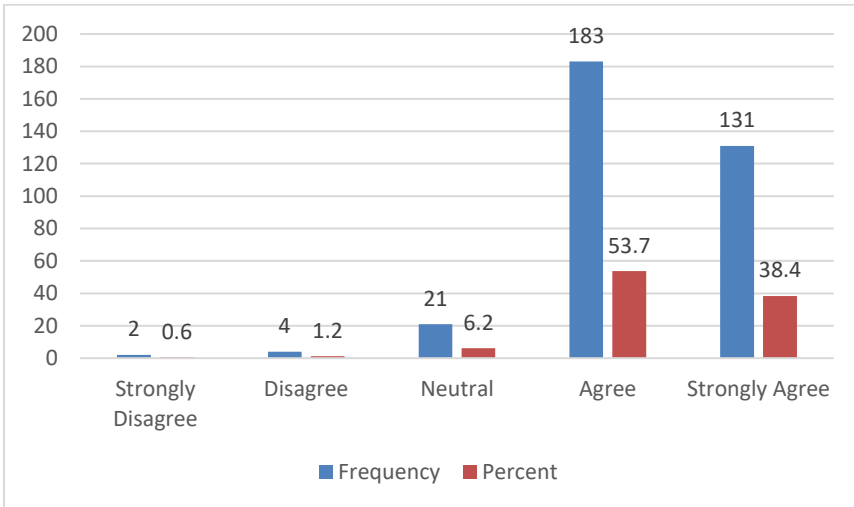


Fig. 7. Developing an entrepreneurial mindset requires an environment that supports and fosters entrepreneurship

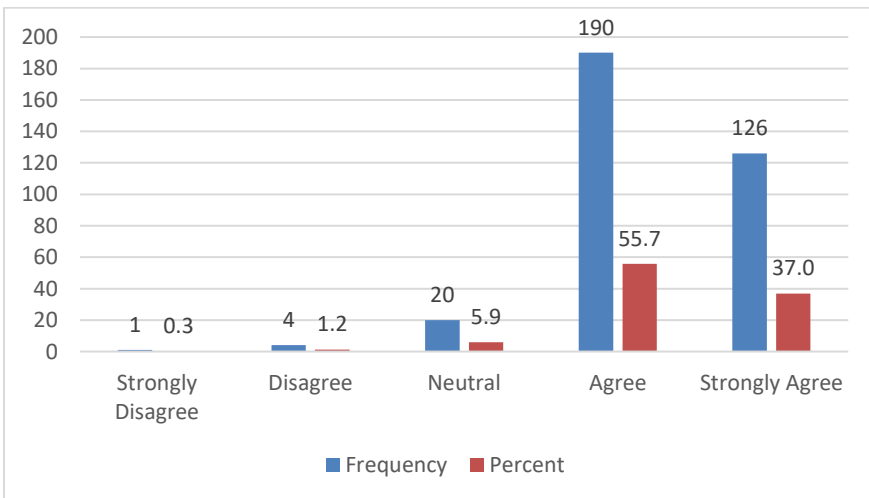


Fig. 8. It is important for all stakeholders to fully commit to the effort of cultivating an entrepreneurial spirit

Governments and other key stakeholders worldwide are increasingly recognising the positive impact that EED, and the subsequent creation of new businesses, can have on employment levels, and the competitive advantages small businesses can bring to the marketplace (Scase, 2000). In total, 190 (55.7%) and

126 (37%) respondents strongly agreed and agreed, respectively, that it is important for all stakeholders to fully commit to the effort of cultivating an entrepreneurial spirit. These results are supported by the Chi-square test for this variable ($X^2= 427.226$; $df=4$; $Sign.=0.001$), indicating that the statement is supported by the data. A small number of the respondents (1, or 0.3% and 4, or 1.2%), respectively, strongly disagreed and disagreed with the statement, while 20 (5.9%) were neutral in response. These results suggest that there is widespread agreement that all stakeholders should be involved in cultivating the entrepreneurial spirit in learners.

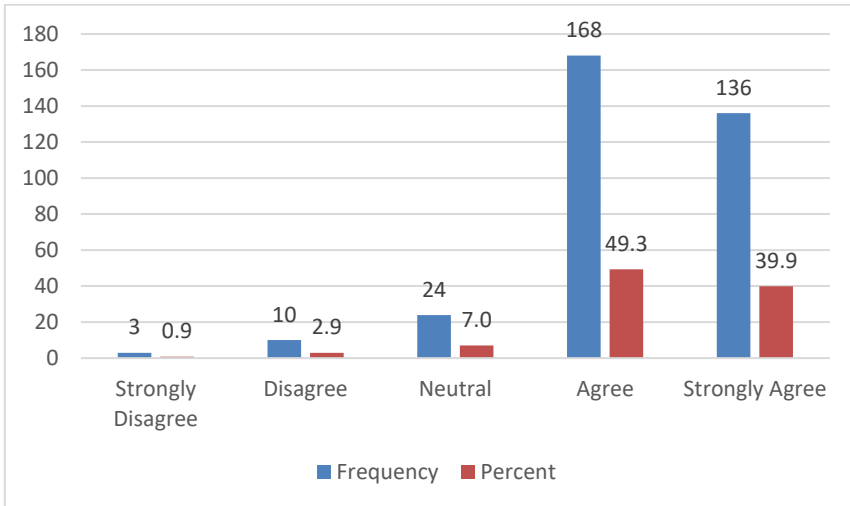


Fig. 9. Learners with an entrepreneurial spirit and mindset are those who have self-confidence and leadership qualities

Morakinyo and Akinsola (2019) state that leadership and entrepreneurial education are crucial for high school students, as it helps align their educational pursuits with leadership and entrepreneurial skills, building their self-confidence. Fig. 9 shows that 168 (49.3%) and 136 (39.9%) respondents strongly agreed and agreed with the statement that learners with an entrepreneurial spirit and mindset are those who have self-confidence and leadership qualities. These results are supported by the Chi-square test ($X^2= 354.088$; $df=4$; $Sign. =0.001$). Three (0.9%) and 10 (2.9%) of respondents strongly disagreed and disagreed, respectively, with the statement, while 24 (7%) remained neutral. These results indicate that there is widespread agreement among respondents that learners with an entrepreneurial mindset indeed possess strong self-confidence and leadership qualities.

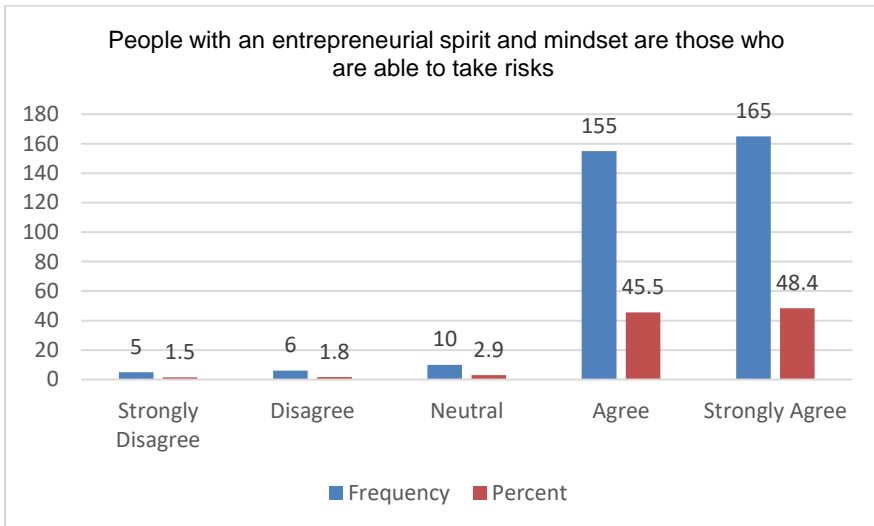


Fig. 10. People with an entrepreneurial spirit and mindset are those able to take risks

As stated by Yi (2021) Entrepreneurs are known for their ability to identify and exploit market gaps and to take risks when necessary. Fig. 10 illustrates that 155 (45.5%) and 165 (48.4%) respondents strongly agreed and agreed with the statement that people with an entrepreneurial spirit and mindset are those who are able to take risks. These results are supported by the Chi-square test ($X^2=412.827$; $df=4$; $Sign.=0.001$). Five (1.5%) and six (1.8%) respondents strongly disagreed and disagreed, respectively, with the statement, while 10 (2.9%) respondents were neutral. Therefore, these findings suggest that successful businesspeople are those who can take risks.

5. Conclusions and Recommendations

The findings reveal that most participants believe that a well-managed entrepreneurship education curriculum has the potential to transform the South African economic landscape. Based on the empirical findings, this paper presents the following recommendations and suggestions.

Schools should encourage learners to engage with the business environment from an early age by inviting successful entrepreneurs, especially former learners, to share their expertise and experiences through workshops. Schools could further promote hands-on learning by creating competitions, entrepreneurship clubs, workshops, and market days, which provide practical experience, boost confidence, and enhance leadership skills. Collaboration with stakeholders, including educators, principals, SGBs, society, government, and the business sector, is essential for the success of these initiatives. Moreover,

schools are encouraged to partner with entrepreneurial incubation centres, such as DUT's Inobiz, to promote entrepreneurship and cater to the entrepreneurial needs of both learners and educators regionally.

The chapter further recommends that the government develop a comprehensive EED policy mandating the teaching of entrepreneurship from primary to secondary school levels, to foster active participation in entrepreneurial activities. It should review the current EED policy, ensuring that it aligns with market and industry needs, by involving industry partners who bring valuable insights into necessary revisions, with a focus on innovation, technology integration, inclusivity, and industry collaboration.

Simultaneously, the Department of Basic Education should organise entrepreneurship workshops and training sessions to equip principals and educators with essential entrepreneurial knowledge, focusing on product knowledge, marketing, and conceptualisation, while fostering networking and collaboration among educators. Partnerships between schools, businesses, and community organisations should be established, as these have the potential to provide learners with real-world experiences, mentorship, and networking opportunities. As far as possible, such partnerships should be integrated into the curriculum through formal agreements or joint initiatives. Lastly, schools are encouraged to collaborate with higher education institutions and established entrepreneurial centres, leveraging their resources to foster entrepreneurial initiatives and cultivate a spirit of innovation among learners.

Consent

As per international standards or university standards, Participants' written consent has been collected and preserved by the author(s).

Ethical Approval

As per international standards or university standards written ethical approval has been collected and preserved by the author(s).

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Some part of this manuscript was previously presented in the conference: International Conference on Business and Management Dynamics (ICBMD) 2025, dated 29th October, 2025 in Cape Town, South Africa, Web Link of the proceeding: <https://www.icbmd.org.za>

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Competing Interests

Authors have declared that no competing interests exist.

References

- Abdullah, R. (2020). Importance and contents of business plan: A case-based approach. *Jurnal Manajemen Indonesia*. <https://doi.org/10.25124/jmi.v20i2.3204>
- Abor, J. Y. (2017). *Entrepreneurial finance for MSMEs: A managerial approach for developing markets*. Palgrave Macmillan. <https://doi.org/10.1007/978-3-319-34021-0>
- Ajani, O. A. (2024). Entrepreneurship education in South Africa's higher education institutions: In pursuit of promoting self-reliance in students. *International Journal of Management, Knowledge and Learning*, 13(1), 29–41. <https://doi.org/10.53615/2232-5697.13.29-41>
- Akhmetshin, E. M., Mueller, J. E., Yumashev, A. V., Kozachek, A. V., Prikhodko, A. N., & Safonova, E. E. (2019). Acquisition of entrepreneurial skills and competences: Curriculum development and evaluation for higher education. *Journal of Entrepreneurship Education*, 22(1), 1–12. <https://www.abacademies.org/articles/Acquisition-of-entrepreneurial-skills-and-competences-1528-2651-22-1-291.pdf>
- Ang, S. H., & Hong, D. G. (2000). Entrepreneurial spirit among East Asian Chinese. *Thunderbird International Business Review*, 42(3), 285–309. [https://doi.org/10.1002/1520-6874\(200005/06\)42:33.0.CO;2-5](https://doi.org/10.1002/1520-6874(200005/06)42:33.0.CO;2-5)
- Arranz, N., Ubierna, F., Arroyabe, M. F., Perez, C., & Fdez. de Arroyabe, J. C. (2017). The effect of curricular and extracurricular activities on university students' entrepreneurial intention and competences. *Studies in Higher Education*, 42(11), 1979–2008. <https://doi.org/10.1080/03075079.2016.1138402>
- Arshed, N., Carter, S., & Mason, C. (2014). The ineffectiveness of entrepreneurship policy: Is policy formulation to blame? *Small Business Economics*, 43(3), 639–659. <https://doi.org/10.1007/s11187-014-9554-8>
- Audretsch, D. B., Belitski, M., Chowdhury, F., & Desai, S. (2024). Regulating entrepreneurship quality and quantity. *Research Policy*, 53(2), 104942. <https://doi.org/10.1016/j.respol.2023.104942>
- Bans-Akutey, A., Sassah, M., Akey-Torku, B., & Afriyie, E. O. (2023). Entrepreneurship education and graduate employability of private tertiary students in Ghana. *African Journal of Innovation and Entrepreneurship (AJIE)*, 2(1), 81–102. <https://doi.org/10.31920/2753-314x/2023/v2n1a4>

- Baruch, Y., & Holtom, B. C. (2008). Survey response rate levels and trends in organizational research. *Human Relations*, 61(8), 1139–1160. <https://doi.org/10.1177/0018726708094863>
- Basardien, F., Friedrich, C., & Twum-Darko, M. (2016). Evidence-based practices of promoting entrepreneurship education in higher education institutions in Africa. *Journal of Economics and Behavioral Studies*. [https://doi.org/10.22610/jeb.v8i5\(J\).1432](https://doi.org/10.22610/jeb.v8i5(J).1432)
- Biswas, A., & Verma, R. K. (2021). Attitude and alertness in personality traits: A pathway to building entrepreneurial intentions among university students. *The Journal of Entrepreneurship*, 30(2), 367–396. <https://doi.org/10.1177/09713557211025656>
- Blimpo, P. M., & Owusu, S. (2019). Human capital. In J. Choi, M. Dutz, & Z. Usman (Eds.), *The future of work in Africa: Harnessing the potential of digital technologies for all* (pp. 72–106). AFD & World Bank Group. <https://doi.org/10.1596/978-1-4648-1445-7>
- Boldureanu, G., Ionescu, A. M., Bercu, A. M., Bedrule-Grigoriuță, M. V., & Boldureanu, D. (2020). Entrepreneurship education through successful entrepreneurial models in higher education institutions. *Sustainability*, 12(3), 1267. <https://doi.org/10.3390/su12031267>
- Brinckmann, J. (2008). *Competence of top management teams and success of new technology-based firms: A theoretical and empirical analysis concerning competencies of entrepreneurial teams and the development of their ventures*. Springer Gabler. <https://doi.org/10.1007/978-3-8350-5503-2>
- Cooney, T. M. (2012). Entrepreneurship skills for growth-orientated businesses. Report for the workshop on “Skills Development for SMEs and Entrepreneurship”, Copenhagen, Denmark. https://www.oecd.org/cfe/leed/cooney_entrepreneurship_skills_HGF.pdf
- Deng, W., & Wang, J. (2023). The effect of entrepreneurship education on the entrepreneurial intention of different college students: Gender, household registration, school type, and poverty status. *PLOS ONE*, 18(7), e0288825. <https://doi.org/10.1371/journal.pone.0288825>
- Donaldson, C. (2021). Culture in the entrepreneurial ecosystem: A conceptual framing. *International Entrepreneurship and Management Journal*. <https://doi.org/10.1007/s11365-020-00692-9>
- Dube, Z. T. A. (2019). *Exploring Business Studies teachers’ perspectives on teaching Grade 12 learners for Entrepreneurship*. <https://core.ac.uk/download/pdf/304374422.pdf>.
- Dube, L., Mhlongo, M., & Ngulube, P. (2014). The ethics of anonymity and confidentiality: Reading from the University of South Africa policy on research ethics. *Indilinga African Journal of Indigenous Knowledge Systems*, 13(2), 201–214. https://journals.co.za/content/ejca-frins/13/2/ejca-frins_v13_n2_a10
- Egerová, D., Ubrežiová, I., Nowiński, W., & Czégledi, C. (Eds.). (2016). *Entrepreneurship education: Opportunities and challenges for universities in Visegrad countries*. Nava.

- EL Van Staden (2021). Entrepreneurship Development Platform And Ecosystem Within The Higher Education Sector 2011 towards 2021. <https://edhe.co.za/wp-content/uploads/Entrepreneurial-Development-in-SA-Universities-2011-towards-2021-Dr-Engela-van-Staden.pdf>
- Emami, A., Ashourizadeh, S., Sheikhi, S., & Rexhepi, G. (2022). Entrepreneurial propensity for market analysis in the time of COVID-19: Benefits from individual entrepreneurial orientation and opportunity confidence. *Review of Managerial Science*, 16(8), 2413–2439. <https://doi.org/10.1007/s11846-021-00499-0>
- European Commission. (2021). *A guide to fostering entrepreneurship education: Five key actions towards a digital, green and resilient Europe*. Publications Office of the European Union. <https://doi.org/10.2826/990680>
- European Training Foundation. (2018). Awakening the entrepreneurial spirit among young vocational students in Tunisia. <https://www.etf.europa.eu/en/news-and-events/news/awakening-entrepreneurial-spirit-among-young-vocational-students-tunisia>
- European Union (EU). (2002). *Final report of the Expert Group on Education for Entrepreneurship. Making progress in promoting entrepreneurial attitudes and skills through Primary and Secondary Education*. <https://ec.europa.eu/docsroom/documents/23144/attachments/1/translatio ns/en/renditions/pdf>.
- Falck, O., Gold, R., & Heblich, S. (2017). Lifting the iron curtain: School-age education and entrepreneurial intentions. *Journal of Economic Geography*, 17(5), 1111–1148. <https://doi.org/10.1093/jeg/lbw026>
- Fan, J., Hu, J., & Wang, J. (2024). How entrepreneurship education affects college students' entrepreneurial intention: Samples from China. *Heliyon*, 10(10). <https://doi.org/10.1016/j.heliyon.2024.e30776>
- Fayolle, A. (2018). Personal views on the future of entrepreneurship education. In A. Fayolle (Ed.), *A research agenda for entrepreneurship education* (pp. 127–138). Edward Elgar Publishing. <https://doi.org/10.4337/9781786432919>
- Fayolle, A., Gailly, B., & Lassas-Clerc, N. (2006). Assessing the impact of entrepreneurship education programmes: A new methodology. *Journal of European Industrial Training*, 30(9), 701–720. <https://doi.org/10.1108/03090590610715022>
- Filion, L. J. (1994). Ten steps to entrepreneurial teaching. *Journal of Small Business & Entrepreneurship*, 11(3), 68–78. <https://doi.org/10.1080/08276331.1994.10600466>
- Fuentelsaz, L., González, C., Maícas, J. P., & Montero, J. (2015). How different formal institutions affect opportunity and necessity entrepreneurship. *BRQ Business Research Quarterly*, 18(4), 246–258. <https://doi.org/10.1016/j.brq.2015.02.001>
- Gasse, Y. (1985). A strategy for the promotion and identification of potential entrepreneurs at the secondary school level. *Frontiers of Entrepreneurship*, 1, 538–559.
- Greco, V., & Denes, C. (2017). Benefits of entrepreneurship education and training for engineering students. *MATEC Web of Conferences*, 121, 12007. <https://doi.org/10.1051/mateconf/201712112007>

- Hannon, P. D. (2005). Philosophies of enterprise and entrepreneurship education and challenges for higher education in the UK. *The International Journal of Entrepreneurship and Innovation*.
<https://doi.org/10.5367/0000000053966876>
- Hardie, B., Highfield, C., & Lee, K. (2020). Entrepreneurship education today for students' unknown futures. *Journal of Pedagogical Research*, 4(3), 401–417. <https://doi.org/10.33902/JPR.2020063022>
- Harima, J. (2020). *Public accelerators in entrepreneurial ecosystems: Resource orchestration in the early ecosystem evolution*. Springer Fachmedien Wiesbaden. <https://doi.org/10.1007/978-3-658-31655-6>
- Higher Education & Training, Republic of South Africa. (2023). Universities-industry collaboration underscored as a major prerequisite for success in entrepreneurship. <https://edhe.co.za/universities-industry-collaboration-underscored-as-a-major-prerequisite-for-success-in-entrepreneurship/>
- Isaacs, E., Visser, K., Friedrich, C., & Brijlal, P. (2007). Entrepreneurship education and training at the Further Education and Training (FET) level in South Africa. *South African Journal of Education*, 27(4), 613–629. <https://doi.org/10.10520/EJC32145>
- Jena, R. K. (2020). Measuring the impact of business management students' attitude towards entrepreneurship education on entrepreneurial intention: A case study. *Computers in Human Behavior*, 107, 106275. <https://doi.org/10.1016/j.chb.2020.106275>
- Jenvey, N. (2015). Calls for entrepreneurship education in universities. In *Proceedings of the Third Annual International Conference on Innovation and Entrepreneurship*.
<http://www.universityworldnews.com/article.php?story=2015032413133496>
- Kaijun, Y., & Sholihah, P. I. (2015). A comparative study of the Indonesia and Chinese educative systems concerning the dominant incentives to entrepreneurial spirit (desire for a new venturing) of business school students. *Journal of Innovation and Entrepreneurship*, 4, 1–16. <https://doi.org/10.1186/s13731-014-0014-0>
- Lackéus, M. (2015). *Entrepreneurship in education: What, why, when, how*. OECD Local Economic and Employment Development (LEED) Papers. <https://doi.org/10.1787/cccac96a-en>
- Lackéus, M. (2017). Does entrepreneurial education trigger more or less neoliberalism in education? *Education & Training*, 59(6), 635–650. <https://doi.org/10.1108/ET-09-2016-0151>
- Liñán, F., & Fayolle, A. (2015). A systematic literature review on entrepreneurial intentions: Citation, thematic analyses, and research agenda. *International Entrepreneurship and Management Journal*, 11(4), 907–933. <https://doi.org/10.1007/s11365-015-0356-5>
- Lindner, J. (2019). Entrepreneurial spirit for the whole school – ways to become an e.e.si-entrepreneurship school. *Discourse and Communication for Sustainable Education*, 10(2), 5–12. <https://doi.org/10.2478/dcse-2019-0013>

- Maas, G., Dobson, S., Jones, P., Newbery, R., Agyapong, D., & Matlay, H. (2018). Guest editorial: Entrepreneurship in Africa, part 2: Entrepreneurial education and eco-systems. *Journal of Small Business and Enterprise Development*, 25(4), 550–553. <https://doi.org/10.1108/JSBED-08-2018-400>
- Mani, M. (2018). Entrepreneurship education in engineering curriculum: Some insights into students' viewpoints. In *Entrepreneurship, collaboration, and innovation in the modern business era* (pp. 243–261). <https://doi.org/10.4018/978-1-5225-5014-3.ch012>
- Maponga, C. C., Mhazo, A. T., & Morse, G. D. (2023). A framework for sustainable capacity-building for collaborative North–South translational health research and training in a resource-constrained setting. *Health Research Policy and Systems*, 21(1), 24. <https://doi.org/10.1186/s12961-023-00972-0>
- Mengesha, B. T. (2020). Determinants of entrepreneurial intention towards self-employment in the case study of Arba Minch University graduating class students. *Management*, 10(1), 23–34. <https://doi.org/10.5923/j.mm.20201001.04>
- Miço, H., & Cungu, J. (2023). Entrepreneurship education, a challenging learning process towards entrepreneurial competence in education. *Administrative Sciences*, 13(1), 22. <https://doi.org/10.3390/admsci13010022>
- Mjadu, G. (2018). How to address common entrepreneurial challenges in SA. *City Press*. <https://www.news24.com/citypress/voices/how-to-address-common-entrepreneurial-challenges-in-sa-20180626>
- Morakinyo, A., & Akinsola, O. (2019). Leadership and entrepreneurship education as a strategy for strengthening youth community engagement in Nigeria: Lessons learnt from jumpstart project. *International Journal of Entrepreneurship*, 23(1Special Issue).
- Nabi, G., Liñán, F., Fayolle, A., Krueger, N., & Walmsley, A. (2017). The impact of entrepreneurship education in higher education: A systematic review and research agenda. *Academy of Management Learning & Education*, 16(2), 277–299. <https://doi.org/10.5465/amle.2015.0026>
- National Planning Commission. (2012). *National Development Plan 2030: Our Future—make it work*. https://www.nationalplanningcommission.org.za/assets/Documents/NDP_Chapters/devplan_ch3_0.pdf
- Nel-Sanders, D., & Thomas, P. (2022). The role of government in promoting innovation-led entrepreneurial ecosystems. *Africa's Public Service Delivery & Performance Review*, 10(1), a640. <https://doi.org/10.4102/apsdpr.v10i1.640>
- Nicolaides, A. (2011). Entrepreneurship – the role of higher education in South Africa. *Educational Research*, 2(4), 1043–1050. <http://www.interestjournals.org/ER>
- North, E. (2002). A decade of entrepreneurship education in South Africa. *South African Journal of Education*, 22(1), 24–27. <https://doi.org/10.4314/saje.v22i1.69200>

- O'Connor, A. (2013). A conceptual framework for entrepreneurship education policy: Meeting government and economic purposes. *Journal of Business Venturing*, 28(4), 546–563. <https://doi.org/10.1016/j.jbusvent.2012.07.003>
- Onyekwelu, P. N., Ibe, G. I., Monyei, F. E., Attamah, J. I., & Ukpere, W. I. (2023). The impact of entrepreneurship institutions on access to micro-financing for sustainable enterprise in an emerging economy. *Sustainability*, 15(9), 7425. <https://doi.org/10.3390/su15097425>
- Pauceanu, A. M., Alpenizde, O., Edu, T., & Zaharia, R. M. (2019). What determinants influence students to start their own business? Empirical evidence from United Arab Emirates universities. *Sustainability*, 11(1), 92. <https://doi.org/10.3390/su11010092>
- Pittaway, L., & Cope, J. (2007). Entrepreneurship education: A systematic review of the evidence. *International small business journal*, 25(5), 479-510. Available: <https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=2815321>.
- Qian, H. (2018). Knowledge-based regional economic development: A synthetic review of knowledge spillovers, entrepreneurship, and entrepreneurial ecosystems. *Economic Development Quarterly*. <https://doi.org/10.1177/0891242418760981>
- Radipere, S. (2012). South African university entrepreneurship education. *African Journal of Business Management*, 6(44), 11015–11022. <https://doi.org/10.5897/AJBM12.410>
- Rae, D. (2008). Riding out the storm: Graduates, enterprise and careers in turbulent economic times. *Education + Training*, 50(8/9), 748–763. <https://doi.org/10.1108/00400910810921029>
- Ramchander, M. (2019). Reconceptualising undergraduate entrepreneurship education at traditional South African universities. *Acta Commercii*, 19(2), 1–9. <https://doi.org/10.4102/ac.v19i2.644>
- Ben Youssef, A., Boubaker, S., & Omri, A. (2018). Entrepreneurship and sustainability: The need for innovative and institutional solutions. *Technological Forecasting and Social Change*. <https://doi.org/10.1016/j.techfore.2017.11.003>
- Ratten, V., & Jones, P. (2020). Entrepreneurship and management education: Exploring trends and gaps. *The International Journal of Management Education*, 19(1), 100431. <https://doi.org/10.1016/j.ijme.2020.100431>
- Ratten, V., & Usmanij, P. (2020). Entrepreneurship education: Time for a change in research direction? *The International Journal of Management Education*, 19(1), 100367. <https://doi.org/10.1016/j.ijme.2020.100367>
- Ruskovaara, E., Pihkala, T., Seikkula-Leino, J., & Järvinen, M. R. (2015). Broadening the resource base for entrepreneurship education through teachers' networking activities. *Teaching and Teacher Education*, 47, 62–70. <https://doi.org/10.1016/J.TATE.2014.12.008>
- Scase, R. (2000). Entrepreneurship and Proprietorship in Transition: Policy Implications for the Smalland Medium-Size Enterprise Sector. Available: <https://ageconsearch.umn.edu/record/295519/>.
- Sharma, L., & Madan, P. (2014). Effect of individual factors on youth entrepreneurship – a study of Uttarakhand state, India. *Journal of Global Entrepreneurship Research*, 2(1), 1–17. <https://doi.org/10.1186/2251-7316-2-3>

- Shepherd, D. A., & Douglas, E. J. (1997, June). Is management education developing, or killing, the entrepreneurial spirit. In *Proceedings of the 1997 USASBE Annual National Conference Entrepreneurship: The Engine of Global Economic Development* (21–24 June), San Francisco, California.
- Sodiq, A., Baloch, A. A., Khan, S. A., Sezer, N., Mahmoud, S., Jama, M., & Abdelaal, A. (2019). Towards modern sustainable cities: Review of sustainability principles and trends. *Journal of Cleaner Production*, 227, 972–1001. <https://doi.org/10.1016/j.jclepro.2019.04.106>
- Sousa, M. J. (2018). Entrepreneurship skills development in higher education courses for teams leaders. *Administrative Sciences*, 8(2), 18. <https://doi.org/10.3390/admsci8020018>
- Statistics South Africa (StatsSA). (2007). *Labour Force Survey September 2007*. (Statistical release, P0210). [http://www.statssa.gov.za/publications/P0210/P0210 September2007.pdf](http://www.statssa.gov.za/publications/P0210/P0210%20September2007.pdf)
- Statistics South Africa (Stats SA). (2020). *Quarterly labour force survey*. <https://www.statssa.gov.za/?p=13196>
- Suryana, D. (2006). *Kewirausahaan: Pedoman praktis: Kiat dan proses menuju sukses*. Salemba Empat. https://library.bsi.ac.id/index.php?p=show_detail&id=210617
- Tshehla, S. S., Chodokufa, K., & Costa, K. (2021). Entrepreneurship education's influence on learner's entrepreneurship intention in South African schools. <https://doi.org/10.31219/osf.io/gpn98>
- TWG. (2014). Thematic working group on entrepreneurship education of the European Commission: European Commission. Available: <https://omk-obrazovanje.gov.rs/wp-content/uploads/2015/02/Final-Report-of-the-Thematic-Working-Group-on-Entrepreneurship-Education.pdf>.
- Verzat, C., & Bachelet, R. (2006). Developing an entrepreneurial spirit among engineering college students: What are the educational factors? In A. Fayolle (Ed.), *International Entrepreneurship Education* (p. 191). Edward Elgar Publishing. <https://www.elgaronline.com/view/1845421795.00019.xml>
- Wei, J., Chen, Y., Zhang, Y., & Zhang, J. (2020). How does entrepreneurial self-efficacy influence innovation behavior? Exploring the mechanism of job satisfaction and Zhongyong thinking. *Frontiers in Psychology*, 11, 708. <https://doi.org/10.3389/fpsyg.2020.00708>
- Wei, X., Liu, X., & Sha, J. (2019). How does the entrepreneurship education influence the students' innovation? Testing on the multiple mediation model. *Frontiers in Psychology*, 10, Article 1557. <https://doi.org/10.3389/fpsyg.2019.01557>
- World Bank. (2015). *World Development Indicators 2015*. <https://doi.org/10.1596/978-1-4648-0440-3>
- Yi, G. (2021). From green entrepreneurial intentions to green entrepreneurial behaviors: The role of university entrepreneurial support and external institutional support. *International entrepreneurship and management journal*, 17(2), 963-979. Available: <https://link.springer.com/article/10.1007/s11365-020-00649-y>

Yohana, C. (2020). Factors influencing the development of entrepreneurship competency in vocational high school students: A case study. *International Journal of Education and Practice*, 8(4), 804–819. <https://doi.org/10.18488/journal.61.2020.84.804.819>

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The Mediating Role of Strategic Planning on the Relationship between Strategic Thinking, Strategic Innovation and Performance of Women-owned Small Businesses

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DOI: <https://doi.org/10.9734/bpi/mono/978-81-998711-1-3/CH5>

Peer-Review History:

This chapter was reviewed by following the Advanced Open Peer Review policy. This chapter was thoroughly checked to prevent plagiarism. As per editorial policy, a minimum of two peer-reviewers reviewed the manuscript. After review and revision of the manuscript, the Book Editor approved the manuscript for final publication. Peer review comments, comments of the editor(s), etc. are available here: <https://peerreviewarchive.com/review-history/6771.5>

Abstract

Small, micro and medium enterprises (SMMEs) play an important role in developing countries, including alleviating poverty, reducing unemployment and improving the fair distribution of income. However, most of these businesses fail within a few years of operation. Literature claims that these challenges are severe for the businesses operated by women. Considering the role played by SMMEs, it is necessary to invest in initiatives that help to improve their performance. The study investigated the mediating effect of strategic planning on the relationships between strategic thinking, strategic innovation and the performance of women-owned small businesses in South Africa. Quantitative research approach was used. Data was collected from women entrepreneurs operating in the Eastern Cape Province using convenience sampling. Data was collected using a self-administered questionnaire distributed using convenience sampling. Statistical tests used in this study include Multiple Linear Regression and factor analysis. The mediation effect was tested using Partial Least Squares Structural Equation Modelling (PLS-SEM) via SmartPLS 4, suitable for examining mediation with moderate sample sizes. The results suggest that strategic thinking and strategic innovation positively influence business performance. It was also reported that these relationships are significantly mediated by strategic planning. The findings from this study contribute to the literature on women entrepreneurship, strategic management, and small business performance, offering practical insights for policymakers, educators, and women entrepreneurs on the value of strategic

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thinking, strategic planning and strategic innovation in improving small business performance. Recommendations were provided to women entrepreneurs and parties that provide support to women entrepreneurs.

Keywords: Strategic planning; strategic thinking and innovation; women-owned SMMEs; small business performance; Eastern Cape; South Africa.

1. Introduction

Recent studies have shown that there has been a rise in the number of women-owned SMMEs (Neneh, 2018). Other researchers have argued that there is a general underperformance of women-owned businesses versus their male counterparts (Hoque & Awang, 2019; Lopez-Nicolas et al., 2020; Rankhumise & Letsoalo, 2019). Business performance may be measured by various factors, including internal decision-making, which involves strategy, the number of employees, level of profit, and sales volume, among other factors (Mio et al., 2022; Rojas-Lema et al., 2021; Candiya et al., 2018). Many strategies that enhance performance have been discussed, including strategic planning (Donkor et al., 2018; Sithole & Wotela, 2024) and innovation (Zeb & Ihsan, 2020; Expósito et al., 2024). It is therefore important to have a thorough understanding of the strategies these SMMEs implement and how they affect performance.

Strategic planning as a concept refers to the process of ensuring and establishing the direction that business activities should go in making an evaluation of both the current objectives and future objectives (AlQershi, 2021), whilst strategic innovation is an alignment tool, used to align strategies that are in line with the business's abilities, potentialities and resources with opportunities in order to increase the survival chances of the business as well as its performance in the long run (Fayomi et al., 2019; Kiende et al., 2019). AlQershi (2021) and Dixit et al. (2021) emphasise the importance of strategic thinking in achieving a competitive advantage. Strategic thinking involves extensive research, analysis, and forethought to develop a coherent strategy for business direction and resource utilisation. This approach is particularly beneficial for SMMEs and women, enhancing performance and growth. Whereas strategic innovation is also regarded as those creations, modifications and inventions, whose goal is establishing and bringing novelty within an enterprise (Kiende et al., 2019; Zeb & Ihsan, 2020; Nonaka & Teece, 2001). SMMEs are said to cultivate innovation, to promote poverty alleviation methods in communities that are not well developed, as well as in developed communities, amongst many other benefits (Basson & Omoruyi, 2025). All these benefits fostered by SMMEs, however, depend on the performance of SMMEs, as good performances will ensure benefits to be enjoyed, while if the SMMEs perform poorly, there will be no benefits to be enjoyed by the economies and business owners at large (Donkor et al., 2018; Malik et al., 2021; Mio et al., 2022; Shakeel et al., 2020).

While the study examines the roles of strategic thinking, strategic planning, and innovation, the analysis places particular emphasis on strategic planning as the mediating construct and influencing the performance of women-owned SMMEs.

Introducing this perspective allows for a more nuanced understanding of how internal strategic actions shape the outcomes in resource-constrained environments.

2. Problem Statement

Developed and developing economies all over the world understand that women-owned small businesses play a huge role in relation to the development of countries economically and that women entrepreneurship can continue to be successful if the women-owned enterprises continually innovate and strategically plan their organisation's operation processes (Elam, 2022). SMMEs in the Eastern Cape face significant challenges in performance and development (Sogaxa, 2024; Mrwebi & Mawila, 2023). The low participation of women in entrepreneurship is concerning, given that women-led SMEs have the potential to enhance the overall performance and sustainability of businesses in the Eastern Cape (Sogaxa, 2024; Mrwebi & Mawila, 2023). Nevertheless, for women-owned businesses to remain thriving and contribute towards the economy, women entrepreneurs have to keep on innovating and strategically planning their organisational practices. However, there has been little research on what contributes towards these positive impacts on the economy.

Given the persistent economic challenges in the Eastern Cape and South Africa at large, including high unemployment and limited access to formal markets, women-owned SMMEs face significant pressure to innovate in order to survive and grow. In such a context, strategic thinking, strategic planning, and strategic innovation become critical capabilities for firm survival and performance (AlQershi, 2021). However, few empirical research has examined how these strategic dimensions interact through mediation pathways in South African women-owned SMMEs. Women-owned SMMEs are acknowledged as vital to economic development; however, their performance is frequently varied and poorly performing, especially in regions without adequate resources like South Africa's Eastern Cape (Donga & Chimucheka, 2024; Mxunyelwa & Vallabh, 2025; Napier & Albert, 1990). Existing research has not sufficiently explained the variance in performance among these enterprises, especially from a strategic capability perspective. This study addresses that gap by examining whether strategic planning acts as a mediating factor in this relationship, particularly within the under-researched context of the Eastern Cape, South Africa.

While innovation is often promoted as a driver of performance among small firms, especially in developing economies, performance outcomes among women-owned SMMEs remain inconsistent. Existing studies have largely focused on direct relationships, with limited exploration of the internal mechanisms that enable innovation to translate into tangible results.

2.1 Research Problem

Although small businesses play a critical role in African economies, most of these businesses fail within a short period of time. What is more concerning is that the

proportion of women who start, own and operate businesses in South Africa remains low when compared to those operated by their male counterparts. In addition, literature seems to suggest that the performance of women-owned businesses is further affected by the challenges that women face in families and in society.

While strategic thinking, planning, and innovation are known to influence performance (AlQershi, 2021), their interrelationships remain underexplored. Little is known about how strategic planning may act as a mediator in translating strategic intent into improved performance, particularly for women-owned small businesses within the South African context.

2.2 Research Aim

This study aims to investigate the mediating role of strategic planning on the relationship between strategic thinking, strategic innovation and the performance of women-owned SMMEs in the Buffalo City Metropolitan Municipality (BCMM).

2.3 Research Objectives

The background of the main objectives of this chapter was to:

- Investigate the mediating role of strategic planning on the relationship between strategic thinking and performance of women-owned SMMEs in BCMM.
- Investigate the mediating role of strategic planning on the relationship between strategic innovation and performance of women-owned SMMEs in BCMM.
- Investigate the effect of strategic thinking on the performance of women-owned SMMEs in the BCMM.
- Investigate the effect of strategic planning on the performance of women-owned SMMEs in the BCMM.
- Investigate the effect of strategic innovation on the performance of women-owned SMMEs in the BCMM.

2.4 Research Hypotheses

The chapter, therefore, hypothesises:

- H₁: Strategic planning has a mediating effect on the relationship between strategic thinking and the performance of women-owned SMMEs.
- H₂: Strategic planning has a mediating effect on the relationship between strategic innovation and the performance of women-owned SMMEs.
- H₃: There is a positive relationship between strategic thinking and the performance of women-owned SMMEs in the BCMM.
- H₄: There is a positive relationship between strategic planning and the performance of women-owned SMMEs in the BCMM.

H₅: There is a positive relationship between strategic innovation and the performance of women-owned SMMEs in the BCMM

2.5 Significance and Originality

This study contributes original insight by applying a mediation lens to explore the effects of strategic thinking and innovation on performance in women-owned SMMEs within a South African metropolitan context, a group that remains underrepresented in empirical strategy research.

Its originality lies in combining strategic constructs and a focus on mediation analysis to uncover the role of strategic planning as a dynamic capability. The findings have practical significance for policymakers and entrepreneurship development agencies aiming to enhance performance outcomes through targeted capacity-building in planning and innovation. While limited to one metropolitan municipality, this research lays the groundwork for future comparative studies across regions or sectors to deepen understanding and broaden impact.

3. Literature Review

3.1 Strategic Planning

Strategic planning is widely regarded as a systematic process for directing and coordinating business activities through the assessment of current and future objectives (AlQershi, 2021; Donkor et al., 2018; Henderson & Hines, 2019). It functions as a mechanism through which organisations establish their vision and formulate strategies while determining how to allocate resources effectively to support these strategies (AlQershi, 2021; George et al., 2019). According to AlQershi (2021, p.2), “strategic planning is the instrument by which a business determines its vision and strategies, as well as makes decisions about allocating resources to support this strategy.” This study will therefore adopt this definition as its conceptualisation is particularly relevant to women-owned SMMEs, as effective implementation of strategic planning can enhance competitiveness, promote distinctive market positioning, and improve organisational performance (AlQershi, 2021; Donkor et al., 2018; George et al., 2019; Gomera et al., 2018).

3.2 Strategic Thinking

AlQershi (2021) defines strategic thinking as a creative and unusual thought process. Strategic thinking often focuses on the ability to see opportunities, foresee obstacles, and set long-term goals that align with the organisation's vision and values. Women entrepreneurs may identify opportunities and dangers, make better decisions, and follow their goal with the aid of strategic thinking.

Since strategic planning and strategic thinking are composed of distinct but extensive thought processes, strategic planning should always come after strategic thinking (Dixit et al., 2021). While strategic planning is logical and convergent, strategic thinking is more diverse (Alomari, 2020; AlQershi, 2021; Booth, 2021; Dixit et al., 2021).

3.3 Strategic Innovation

Strategic innovation functions as a mechanism for alignment, ensuring that strategies align with the organisation's capabilities, potential, and resources while capitalising on opportunities. The alignment seeks to increase the likelihood of the business's survival and enhance its long-term performance (Fayomi et al., 2019; Kiende et al., 2019). Strategic innovation refers to the process of creating, modifying, and inventing to introduce and promote novelty within an organisation (Kiende et al., 2019; Zeb & Ihsan, 2020).

Strategic innovation enables women entrepreneurs to utilise creativity, embrace technology, foster an innovative culture, and engage in collaborative networks to promote growth and improve competitiveness. Women entrepreneurs employing innovative strategies are better positioned to overcome industry challenges, differentiate their products, and expand their market reach.

3.4 Performance of Women-owned Small Businesses

Performance is a vital indicator for evaluating a business's success or failure. Effective performance is crucial for maintaining a firm's competitive advantage and overall success, while failure negatively impacts the firm's reputation (Guo et al., 2020). Numerous scholars have shown a consistent interest in understanding and measuring the performance of small and medium-sized enterprises (Omiunu, 2019). There is currently no consensus among researchers regarding the suitable metrics for assessing the performance of small and medium-sized enterprises (SMMEs) (Abiodun & Amos, 2018; Ravelomanantsoa et al., 2019). Several scholars have suggested that performance metrics for SMMEs should encompass profitability, access to finance, sales, employee growth, and job creation (Geng et al., 2021; Guo & Wen, 2021; Omiunu, 2019; Zhou & Gumbo, 2021). Research studies indicate that a firm's performance is contingent upon its capacity for risk-taking; therefore, risk-taking ability can serve as a metric for assessing firm performance (Pratono, 2018; Zeb & Ihsan, 2020).

3.5 Theoretical Literature

Dynamics Capabilities Theory: In alignment with the objectives of this study, the study adopted the Dynamics Capabilities Theory (Teece, 1996). The theory is distinguished by the organisation's potential to acquire unique forms and degrees of competitive advantage over competitors through open-mindedness, adaptability to change, and rapid response to market changes (Kiende et al., 2019; Samsudin & Ismail, 2019). Capabilities are embedded in an enterprise's organisational and managerial processes; yet it is critical to recognise that not all capabilities are dynamic (Kapoor & Aggarwal, 2020; Murschetz et al., 2020; Roundy & Fayard, 2019). Dynamic capabilities are fundamentally divided into three sub-capabilities: (a) identifying and evaluating opportunities, (b) mobilising resources to capitalise on opportunities and create value, and (c) constantly renewing, reconfiguring, and redeploying resources to enable the pursuit of future opportunities (Roundy & Fayard, 2019, p. 5).

Women entrepreneurs who have dynamic capabilities such as adaptation, innovation, and strategic decision-making are better able to overcome industry challenges and sustain business success (Teece, 2018).

3.6 Empirical Literature and Hypothesis Development

Strategic planning and performance: Several decades of studies have connected strategic planning to increased business success (AlQershi, 2021; Kornelius et al., 2021). Multiple research studies indicate a positive correlation, frequently interpreting planning as a systematic process that facilitates direction, resource alignment, and quantifiable results. Ahmad and Ahmad (2019) conducted a study on medium-sized enterprises in Punjab, Pakistan, revealing that strategic planning significantly mediates the relationship between business skills and performance. Structured planning mechanisms are essential for the maintenance of enterprise success, according to their findings. However, such findings are generally representative of settings in developed or Asian economies with substantial institutional support and managerial formalisation. Emerging-market evidence, notably from Africa, paints a more mixed picture. Chitongo and Zhanda (2025) found that strategic plans in South African and Zimbabwean universities frequently serve as administrative artefacts rather than performance-enhancing instruments, owing to poor policy alignment and implementation. Similarly, Khuzwayo and Mashau (2025) found that managers perceived strategic clarity as positive; however, they were unable to achieve quantifiable results due to inadequate resources and execution capacity. The findings suggest that the effectiveness of strategic planning is dependent upon context; it may enhance coordination but does not necessarily lead to improved performance in resource-constrained settings, such as those encountered by South African small, medium, and micro-enterprises (SMMEs).

Strategic planning, strategic thinking and performance: According to Asobee (2021), strategic planning is organised and analytical, whereas strategic thinking is intuitive and generative, allowing businesses to foresee and shape change. The integration of the two improves an organisation's strategic agility and long-term performance. Recent research in South Africa indicates a notable transition towards integrative perspectives. Sayed et al. (2024) found that design thinking in the KwaZulu-Natal tourism sector enhances innovation capabilities by allowing managers to reframe problems and co-create solutions. AlQershi (2021) emphasised the capacity of systems thinking to enhance contextual analysis and adaptability in South African ICT firms. Most of these studies, however, are cross-sectional and predominantly depend on subjective performance evaluations (Mofolo & Novukela, 2024).

Women-owned SMMEs frequently face heightened uncertainty, resource limitations, and network constraints (Neneh, 2018). In this context, strategic thinking serves as an adaptive cognitive framework. The translation of such thinking into tangible outcomes depends on formalised planning to convert creative ideas into actionable strategies. Thus, strategic planning can function as a means

by which strategic thinking enhances performance. Therefore, the study hypothesises that:

H₁: Strategic planning has a mediating effect on the relationship between strategic thinking and the performance of women-owned SMMEs.

Strategic planning and strategic innovation: By reconfiguring business models, technologies, or processes, strategic innovation allows firms to acquire a competitive advantage (AlQershi et al., 2020; Islam & Wahab, 2021; Lestari et al., 2020). Strategic innovation has a positive impact on performance in Yemen's manufacturing SMEs, according to AlQershi et al. (2021), with structural capital acting as a moderator. These findings suggest that innovative strategies can improve market position and protect enterprises from value erosion.

However, in South Africa, innovation outcomes tend to be more influenced by structural and contextual factors. Govender and van der Lingen (2024) conducted a comparative assessment of innovation programs provided to startups by a South African university incubator and a multinational food industry business. Their findings revealed significant differences in communication strategies, screening and selection processes, resource offerings, and onboarding procedures between the two businesses. Despite these differences, both programmes provided unique benefits and posed distinct challenges to the participating startups. The study underscores the importance of tailored strategic planning in fostering effective innovation collaborations between startups and established organisations. Therefore, the study hypothesises that:

H₂: Strategic planning has a mediating effect on the relationship between strategic innovation and the performance of women-owned SMMEs

Strategic planning, strategic innovation and performance: AlQershi et al. (2021) study on SMEs in Yemen found that strategic thinking, planning, and innovation indirectly affect performance through human capital development. These strategies enhance internal human resource capabilities, not just strategic initiatives. The study suggests that strategic planning and thinking enable knowledge development and talent utilisation, which are the drivers of performance in resource-constrained and volatile environments.

Furthermore, this finding is supported by Batra et al. (2018), who found that strategic planning positively influences innovation performance in SMEs. Their study emphasised that SMEs with more systematic planning processes are better positioned to implement creative ideas and adapt to dynamic market conditions (Batra et al., 2018). This is particularly relevant in the context of women-owned SMMEs, which often face unique structural challenges such as limited access to capital, support networks, and formal strategic resources (Brixiová & Kangoye, 2016; Neneh, 2018). In such environments, strategic planning provides a framework that enhances the execution of innovative strategies derived from entrepreneurial thinking.

High-level strategic thinking by women entrepreneurs may produce insightful ideas, but in order to produce innovation, these ideas must be translated through systematic planning efforts. These studies show that strategic planning, strategic thinking, and performance are context-dependent. Together, these studies support the argument that strategic planning plays a critical mediating role between higher-level strategic inputs such as thinking, innovation, or leadership and firm performance (AlQershi, 2021; Batra et al., 2018).

Despite the growing volume of research, several methodological gaps still exist. Many studies conducted in South Africa are cross-sectional in nature, which restricts the ability to draw causal inferences (Mofolo & Novukela, 2024). Few studies employ longitudinal or mixed-methods approaches, and empirical analyses often overlook women-owned small, medium, and micro enterprises (SMMEs). The influence of gendered access to capital and networks on strategic behaviour (Brixiová & Kangoye, 2016) limits the comprehension of how strategic mechanisms function in various entrepreneurial contexts.

Addressing these gaps, the present study investigates how strategic planning functions as a mediating mechanism linking both strategic thinking and strategic innovation to performance among women-owned SMMEs in South Africa. By integrating insights from the resource-based view, systems thinking and behavioural strategy perspectives, the study contributes to contextualised theory building on strategic management in emerging economies.

Research approach and research design: This study adopted the descriptive research design and quantitative research approach, as it aims to investigate the effect of strategic planning and strategic innovation on the performance of women-owned SMMEs in Buffalo City Metropolitan Municipality. A quantitative research design was adopted to test mediation effects among latent constructs, using PLS-SEM due to its suitability for small-to-moderate data samples. Data was collected using a self-administered questionnaire from respondents. Due to the unavailability of a credible sampling frame, convenience sampling was used to distribute the questionnaire to the respondents.

The hypotheses were tested through the Partial Least Squares (PLS) approach, which was applied to the data using SmartPLS software to determine the relationships between the variables (performance, strategic innovation, strategic thinking and strategic planning and the performance of women-owned SMMEs).

Population and Sampling: The target population for this study comprised women-owned small, micro, and medium enterprises (SMMEs) operating within the Buffalo City Metropolitan Municipality (BCMM), located in the Eastern Cape province of South Africa. In order to be eligible for participation, individuals were required to meet the following criteria: identify as women, be 18 years of age or older, own and manage at least 51% of a registered or unregistered business and be located within the BCMM jurisdiction. Due to the absence of a complete registry of women-owned SMMEs in BCMM, the study employed a non-probability convenience sampling approach.

While convenience sampling offers practical advantages, particularly when targeting hard-to-reach or informal business segments, it presents limitations in terms of external validity. As such, the findings may not be generalisable to all women entrepreneurs in the region. To enhance diversity, recruitment efforts spanned multiple business sectors (for example,, agriculture, manufacturing, services) and varied business sizes within the SMME definition. Nevertheless, potential response bias must be acknowledged, as business owners with more structured operations and better access to networks may have been more likely to participate. The final sample consisted of 200 valid responses, which met the minimum recommended threshold for PLS-SEM analysis as suggested by Hair et al. (2021).

Data collection instrument and scales adopted: A self-administered questionnaire was developed for data collection, as this method is well-suited for collecting standardised responses on perceptions and practices across multiple constructs in a quantitative design. The questionnaire included closed-ended items using a five-point Likert scale, aimed at measuring key constructs such as strategic planning, strategic innovation, and firm performance.

Items were drawn from previously validated scales in the strategic management and entrepreneurship literature. They are also presented in Table 1.

Table 1. Scales adopted in the study

Variable	Scale used	Number of items in the scale	Cronbach's Alpha Score
Strategic thinking	(Liedtka, 1998; Rodrigues et al., 2021)	10	0.83
Strategic planning	Al-Shammari & Hussein (2008)	5	0.92
Strategic innovation	Yang, (2014)	9	0.92
SMME performance	Chimucheka et al. (2019)	14	0.98

(Source: Researcher's own compilation 2023)

The items were relevant to the South African SMME context, particularly among women-owned enterprises. For example, business terminology was simplified to improve accessibility and avoid ambiguity. While a formal pretest was not conducted, the instrument was carefully reviewed for clarity and contextual appropriateness by the researcher and academic supervisors.

The questionnaire was administered in English, which is the primary language used in business documentation and communication in the BCMM region. Assistance was offered to respondents when needed to ensure a full understanding of the items.

Reliability and Validity: Construct reliability and validity were assessed using standard criteria. Internal consistency was confirmed with Cronbach's Alpha (CA) and Composite Reliability (CR), both exceeding the 0.70 threshold. Convergent validity was supported by Average Variance Extracted (AVE > 0.50). Discriminant validity was evaluated using both the Fornell–Larcker criterion and Heterotrait–Monotrait (HTMT) ratio, with HTMT values below 0.90 indicating satisfactory discriminant separation, as shown in Table 1 with the scales that have been adopted in this study.

3.7 Data Analysis

Data were analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM) via SmartPLS 4, suitable for examining mediation with moderate sample sizes. The analysis followed a two-step approach:

Firstly, the measurement model was assessed for indicator reliability (loadings > 0.70), internal consistency (CR > 0.70), and convergent validity (AVE > 0.50). Discriminant validity was confirmed using the Fornell–Larcker criterion and HTMT ratios (< 0.90). Secondly, the structural model was evaluated using bootstrapping (5,000 subsamples). Path significance was determined by t-values (> 1.96) and p-values (< 0.05). R², f², and Q² values were reported to assess model strength and predictive relevance. For mediation, indirect effects were tested using bootstrapped confidence intervals (95%), with significance confirmed when intervals did not include zero.

Partial Least Squares Structural Equation Modelling (PLS-SEM) was employed to test the hypothesised mediation effects among strategic planning, strategic thinking, strategic innovation, and performance. PLS-SEM is appropriate in this context for several reasons. Firstly, the study aims to predict the performance of women-owned small businesses based on internal strategic capabilities, which aligns with PLS-SEM's prediction-oriented focus (Sarstedt et al., 2021). Secondly, the final sample size of 200 falls within the range where PLS-SEM is preferred due to its robustness with small-to-medium samples. Thirdly, the data did not meet strict normality assumptions, which supports the use of PLS-SEM given its distributional flexibility. Finally, the model includes latent constructs measured reflectively, which PLS-SEM handles effectively.

Hypotheses were evaluated based on the results of the PLS-SEM analysis. Direct and indirect path coefficients were tested using bootstrapping with 5,000 resamples. Statistical significance was determined using two-tailed p-values (<0.05) and 95% bias-corrected confidence intervals (CI). A hypothesis was considered supported if the p-value was less than 0.05 and the confidence interval did not include zero. For mediation effects, partial or full mediation was determined based on the significance of both direct and indirect paths, following guidelines by Hair et al. (2019).

The results are presented in a logical sequence, with path coefficients indicating positive relationships from strategic thinking and innovation to performance,

mediated by strategic planning. To enhance clarity, tables have been updated with concise explanatory notes that interpret key coefficients in practical terms (e.g., effect sizes and their implications).

Additionally, figures summarising the measurement and structural models have been included to visually support the findings. Precise indirect effect statistics, including bootstrapped confidence intervals, are provided to substantiate the mediation effects.

4. Results

All constructs met the recommended thresholds for reliability and validity (CA > 0.7, CR > 0.7, AVE > 0.5). Discriminant validity was confirmed using the Fornell–Larcker criterion and HTMT values, all of which were below 0.90, indicating acceptable construct distinctiveness.

The sample size recommended by the Raosoft sample size calculator for the study was 383. However, the actual number of respondents was 200. This means that there was a response rate of 52%, which is good, as it is more than 50% of the respondents from the desired sample.

List 1. Response rate

Sample	Total	Percentage
Original sample	383	100%
Final sample	200	52%

Source: Researchers own compilation (2023)

The principal data collection instrument used for this study was a questionnaire consisting of five sections. The first section (Section A) focused on demographic and organisational information. The second section (Section B) focused on strategic thinking. The third section (Section C) focused on strategic planning. The fourth section (Section D) focused on strategic innovation, while the fifth and last section (Section E) focused on SMME performance. The questions were further reduced into constructs using confirmatory factor analysis in Smart PLS. These questions (factors) were all Likert scale-type questions, and their internal consistency was tested using Cronbach’s alpha (CA) and Composite Reliability (CR). The research instrument was further confirmed through discriminant validity, which was measured using the Discriminant Value (DV) (square root of Average Extracted Variance (AVE)) using the Fornell-Larcker Criterion. The results of the instrument’s reliability are presented in Table 2.

Table 2. Research instrument reliability

Items	CA	CR	AVE
SMME Performance	0.961	0.966	0.668
Strategic Innovation	0.955	0.961	0.735
Strategic Planning	0.938	0.953	0.801
Strategic Thinking	0.947	0.955	0.704

Results presented in Table 2 indicate that for all values, the measure of internal consistency of the measurement items (Cronbach's Alpha) is at least 0.5. In essence, Tavakol and Dennick (2011) provide a simplified understanding of the interpretation of Cronbach's alpha coefficient, which states that a value of more than 0.7 is considered adequate, while a value of at least 0.5 is considered acceptable if the Composite Reliability (CR) is higher than 0.6. It is also evident that the construct (Strategic Planning) has the lowest Cronbach's alpha (0.938), and the associated composite reliability value is 0.955, rendering the construct reliable.

In addition, the Average Variance Extracted values exceed 0.5 on all variables, suggesting that the level of variation within the factors is captured by a construct instead of variation because of measurement error (Fornell & Larcker, 1984; Kock, 2019). This implies that the measurement constructs considered in the research are reliable.

Demographic profile of respondents: The majority (60%) of the respondents were youths aged between 18 and 34 (Stats SA, 2022). This group was followed by the age group 45 to 54 with 29,5%, and the age groups 55 and older were only represented by 10,5 %. Most of the respondents (45%) were of Black ethnicity, followed by Whites (29%), Coloureds (10%), while the lowest responses came from Indian (8.5%) and Asian women (7.5%). More than half (52%) of the respondents were married, 24% single, 21% divorced, and 2.5% were widowed. The industry categories of the sample comprise the service industry (41%), manufacturing (12%), wholesale (12%), 11,5% agriculture and 6% were involved in construction. The remaining 17.5% were from other industries.

Descriptive Statistics for Strategic Thinking: The ranking of the factors of strategic thinking is presented in Table 3. The factors are presented in descending order, starting with the most important. The mean was used to show their relative importance.

Results presented in Table 3 show the frequencies and the mean of each of the responses generated from the questionnaire to determine strategic thinking amongst women entrepreneurs. The results, as presented in Table 3, reveal that most of the respondents either agreed (58.50%) or strongly agreed (29.50%) with the statements in the questionnaire, as the mean for all the responses was above 2.5, which indicates that all the respondents responded positively to the statements under this variable. On the other hand, the statement under the strategic thinking variable, which recorded the lowest mean score (3.90), is "Our organisation has the ability to formulate and design future situations of main processes of the organisation," which could mean that most of the respondents have the ability to formulate and design future plans for their organisations. Additionally, from the results in Table 3, all the factors' standard deviations are below the mean, suggesting that the measure is important, thus they build towards strategic thinking. This indicates that women entrepreneurs in the sample generally perceive themselves as actively engaging in forward-looking and strategic planning activities, which supports the role of strategic thinking as a key contributor to performance.

Table 3. Descriptive Statistics: Strategic Thinking

	Frequencies					Descriptive		
	SD	D	N	A	SA	N	Mean	St Dev
Our organisation is always trying to create a climate full of positive thinking, honesty and transparency.	1.50%	5.00%	5.50%	58.50%	29.50%	200	4.09	.824
Our organisation encourages the staff to change their dismantled way of thinking to a systematic way of thinking.	1.50%	5.00%	6.00%	59.50%	28.00%	200	4.08	.820
Our organisation has a vision resulting from internal and external analysis	1.50%	5.00%	7.00%	59.00%	27.50%	200	4.06	.824
Our organisation can manage any conflicts and struggles among group members.	2.50%	4.00%	5.50%	61.50%	26.50%	200	4.06	.840
Our organisation has awareness about organisation's strengths and weaknesses.	3.00%	4.50%	7.00%	59.00%	26.50%	200	4.01	.888
Our organisation has the ability to select and use appropriate patterns from the organisation's background	1.50%	6.00%	9.50%	58.00%	25.00%	200	3.99	.851
Our organisation always benefits from past events for future predictions	1.00%	6.50%	11.00%	58.50%	23.00%	200	3.96	.832
Our organisation works on establishing connections amongst the past, present and future.	1.00%	8.50%	10.00%	57.50%	23.00%	200	3.93	.871
Our organisation has the ability to formulate and design future situations of the main processes of the organisation.	1.50%	6.50%	14.00%	56.00%	22.00%	200	3.90	.866

Table 4. Descriptive statistics: Strategic planning

	Frequencies					Descriptive		
	SD	D	N	A	SA	N	Mean	St Dev
Our organisation has a long-range plan that includes the determination of future resources that will be required	0.50%	3.50%	10.00%	59.50%	26.50%	200	4.08	.739
Our organisation has made some attempts to account for factors outside of the immediate environment of the firm.	2.00%	2.50%	7.50%	62.50%	25.50%	200	4.07	.780
Our organisation has a long-range plan that includes the specification of objectives and goals.	1.50%	4.00%	9.00%	58.00%	27.50%	200	4.06	.812
Our organisation has procedures for anticipating or detecting errors in, or failures of, the plan for preventing or correcting.	2.50%	4.00%	7.00%	65.00%	21.50%	200	3.99	.821
Our organisation has a long-range plan that includes the selection of long-range strategies.	1.00%	5.50%	11.50%	58.50%	23.50%	200	3.98	.814

Table 5. Descriptive Statistics: Strategic Innovation

	Frequencies					N	Descriptive	
	SD	D	N	A	SA		Mean	St Dev
Our organisation always makes new products or upgrades old products to meet consumer demands.	0.50%	4.50%	7.50%	58.50%	29.00%	200	4.11	.762
Our organisation uses some methods to acquire goods or services at the best possible total cost.	1.50%	2.00%	6.50%	66.00%	24.00%	200	4.09	.717
Our organisation makes improvements in the quality of some materials.	1.50%	4.00%	6.50%	61.50%	26.50%	200	4.07	.789
Our organisation uses new designs for branding and entire product categories to show the inner spirit and unique culture	1.50%	5.00%	7.00%	59.50%	27.00%	200	4.06	.822
Our organisation has increased the use of high technology for the transformation and flow of goods for external efficiency.	1.00%	4.00%	8.50%	62.50%	24.00%	200	4.04	.759
Our organisation develops new marketing methods, ideas, and ways of advertising, public relations and promotions	2.00%	4.00%	6.50%	63.50%	24.00%	200	4.04	.804
Our organisation develops and incorporates a financial system to improve operational efficiency and reduce costs.	2.00%	4.50%	6.50%	64.00%	23.00%	200	4.02	.811
Our organisation improves new customer interaction channels, distribution systems or technological concepts	2.00%	4.00%	8.50%	61.50%	24.00%	200	4.01	.817
Our organisation has found new ways to deliver products that customers already use and appreciate, like direct sales.	1.00%	6.00%	7.00%	64.00%	22.00%	200	4.00	.789

Descriptive statistics for strategic planning: The ranking of the factors of strategic planning is presented in Table 4. The factors are presented in descending order, starting with the most important. The mean was used to show the relative importance of each factor.

Results presented in Table 4 show the frequencies and the mean of each of the responses generated from the questionnaire to determine strategic planning amongst women entrepreneurs. The results, as presented in Table 4, reveal that most of the respondents either agreed (59.50%) or strongly agreed (26.50%) with the statements in the questionnaire. Therefore, according to the findings shown in Table 4, the means of all factors influencing strategic planning are below the standard deviations, which means that the measure is important and builds towards strategic planning. This indicates that women entrepreneurs in the study place strong emphasis on formal planning practices, which likely enhances their ability to align business goals with long-term strategies.

Descriptive statistics for strategic innovation: The ranking of the factors of strategic innovation is presented in Table 5. The factors are presented in descending order, starting with the most important. The mean was used to show the relative importance of each factor.

Table 5 shows the frequencies of each of the responses from the questionnaire. Similar to strategic thinking and strategic planning, the majority of the women entrepreneurs either agreed or strongly agreed, as the mean value of all the statements leans above 2.5, which therefore means that the strategic innovation variable experienced only positive responses, as indicated with the scores of each of the statements, as shown in Table 5. Additionally, from the findings presented in Table 5, the mean is higher than the standard deviation, meaning that the measure used is important to strategic innovation and the statements are true. This suggests that women entrepreneurs view innovation as a strategic tool in driving business growth and adapting to changing market conditions.

Descriptive statistics for SMME performance: The ranking of the factors of SMME performance is presented in Table 6. The factors are presented in descending order, starting with the most important. The mean was used to show the relative importance of each factor.

Results presented in Table 6 show the frequencies and the mean of each of the responses generated from the questionnaire to determine SMME Performance amongst women entrepreneurs. The results, as presented in Table 6, reveal that most of the respondents agreed (50%) and also strongly agreed (23%) with the statements in the questionnaire. The statement under the SMME performance variable that recorded the lowest mean score (3.83) is "Generally, my business performs better than those of my competitors." This could potentially mean that some respondents' businesses perform better than their competitors, while other respondents were not aware of how their businesses perform compared to their competitors. This finding indicates that although the majority of women entrepreneurs believe their businesses are doing well, there might be a lack of clarity or insufficient measuring procedures in relation to competitive performance.

Table 6. Descriptive Statistics: SMME Performance

	Frequencies					Descriptive		
	SD	D	N	A	SA	N	Mean	St Dev
Generally, my business performs better than those of my competitors	2.00%	9.00%	15.50%	50.50%	23.00%	200	3.83	.950
My business is growing in terms of assets	1.00%	6.00%	9.00%	57.50%	26.50%	200	4.03	.829
My business revenue is increasing in terms of sales growth	1.50%	5.00%	9.50%	60.50%	23.50%	200	4.00	.818
My business's profitability is increasing	4.00%	4.50%	10.50%	59.50%	21.50%	200	3.90	.924
My business is growing in terms of employment capacity (employment growth)	1.00%	4.50%	10.00%	60.50%	24.00%	200	4.02	.783
The survival chances of my business are still high	4.00%	5.50%	7.00%	60.50%	23.00%	200	3.93	.938
My return on assets is increasing	1.50%	5.50%	8.00%	59.50%	25.50%	200	4.02	.833
I sell my stock faster than my competitors	2.50%	6.50%	9.00%	58.50%	23.50%	200	3.94	.900
My business is sustainable	2.00%	3.50%	6.00%	64.00%	24.50%	200	4.06	.791
I have acquired property using profits generated from this business	0.50%	6.00%	9.50%	61.50%	22.50%	200	3.99	.780
I am able to pay all my employees using profits generated from this business	2.50%	3.00%	4.50%	62.50%	27.50%	200	4.09	.812
I am satisfied with the performance of this business	0.50%	4.50%	6.50%	63.50%	25.00%	200	4.08	.732
It is clear that my business is performing well	1.00%	3.50%	8.50%	63.00%	24.00%	200	4.06	.745
Judging from my business's financial records, my business is performing well	0.50%	4.50%	8.50%	59.00%	27.50%	200	4.09	.762

T-test for Business Ownership: The t-test was conducted to determine the variations between business owners and non-business owners based on strategic thinking, strategic innovation, strategic planning and SMME performance. The significance of these differences was evaluated using a p-value set at 0.05. The t-test statistics and Cohen's d state the strength of the effect of the difference between demographic variables. Table 7 displays the results of the variance analysis.

Table 7. T-Test for business ownership

	T	P - Value	Mean Differences	Cohen's d
Strategic Thinking	1.282	0.201	0.183	0.730
Strategic Planning	1.440	0.152	0.212	0.753
Strategic Innovation	2.257	0.025	0.297	0.674
SMME Performance	1.288	0.199	0.171	0.680

The existence of differences in variances is ratified by assuming a Pearson Correlation p-value ($p < 0.05$). Table 7 indicates that business owners' and non-business owners' opinions are not the same. Strategic Thinking ($t=1.282$; $p > 0.201$; $d=0.730$), Strategic Planning ($t=1.440$; $p > 0.152$; $d=0.753$), and SMME Performance ($t=1.288$; $p=0.199$; $d=0.680$) are statistically significant at ($p < 0.05$).

However, in terms of Strategic Innovation ($t=2.257$; $p > 0.025$; $d=0.674$), the opinions of business owners and non-business owners tend to differ since the p-value is closer to 0. This finding suggests that practical business experience may influence how respondents perceive and value strategic innovation, with business owners showing a stronger association with its importance. The size of the difference between the groups was calculated using Cohen's d, resulting in a value of 0.674, which falls within the range of 0.50 to 0.79, which is considered a medium to large effect. According to Kinney et al. (2020), a Cohen's d of 0.20 indicates a small effect, 0.50 indicates a medium effect, and 0.80 indicates a large effect.

Model under investigation: Fig. 1 shows that the independent variables explain the dependent variables very well. The combined explained variance of Strategic Thinking, Strategic Planning, and Strategic Innovation on SMME Performance is (Strat-Think; Strat-Plan; Strat-Innov => SMME Performance; $R^2 = 0.665$ (66.5 per cent)). This indicates that the independent variables explain 66,5% of the variations in SMME performance. Also, the combined explained variance of Strategic Thinking and Strategic Innovation on Strategic Planning is (Strat-Think; Strat-Innov; => Strat-Plan $R^2 = 0.736$ (73.6 per cent)). Therefore, it is evident that strategic thinking and strategic innovation explain 73,6% of the variation regarding strategic planning. Lastly, the explained variance of Strategic Thinking on Strategic innovation is (Strat-Think => Strat-Innov; $R^2 = 0.600$ (60%)), suggesting that strategic planning explains 60% of the variation regarding strategic innovation.

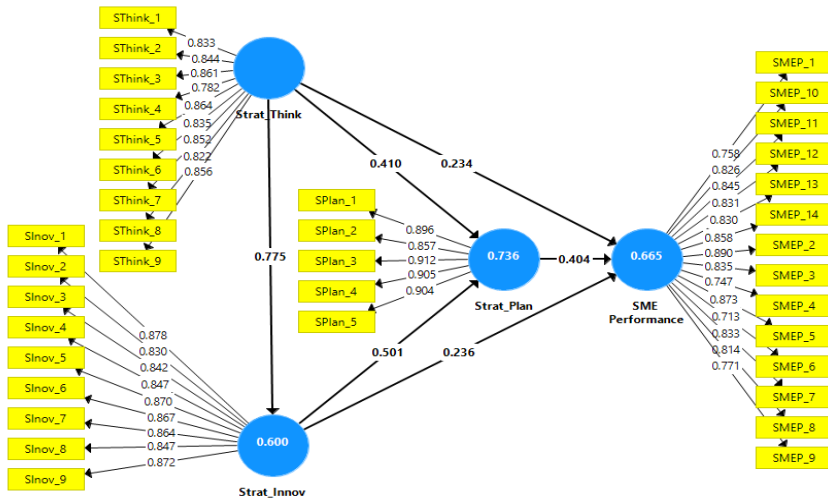


Fig. 1. Strategic planning as a mediating variable

Testing the mediation effect of strategic planning on the relationship between strategic thinking, strategic innovation and performance of women-owned SMMEs: The mediation effect was tested using the bootstrap method at 95% confidence interval, to examine the mediating effect of strategic planning on the relationship between strategic thinking, strategic innovation and performance of women-owned SMMEs. Table 8 presents the summary of the results.

Based on the results of the coefficients presented in Table 8, strategic planning mediates the relationship between strategic thinking and SMME performance. ($\beta = 0.322$; $t = 4.212$; 95% CI [0.310; 0.592]). This conclusion is arrived at following Lin & Huang, (2020) interpretation of bootstrap bias corrected at 95% confidence interval, which suggests that if the confidence interval range is above zero and does not include zero, then we report partial mediation if the indirect effect is significant. Therefore, we can conclude that strategic planning enhances the relationship between strategic thinking and SMME performance by 32,2%. Therefore, we do not reject the hypothesis which states that:

H₁: Strategic planning has a mediating effect on the relationship between strategic thinking and the performance of women-owned SMMEs.

Based on the results of the coefficients presented in Table 9, Strategic Planning mediates the relationship between Strategic Innovation and SMME Performance. ($\beta = 0.202$; $t = 3.518$; 95% CI [0.097; 0.327]). In essence, the Direct Effect, Total Effect, and Specific Indirect Effect are statistically significant as the bootstrap bias corrected at 95% confidence interval range is above zero (does not include zero). Therefore, we report partial mediation. So, we can conclude that Strategic Planning enhances the relationship between Strategic Innovation and SMME Performance by 20,2%.

Table 8. Mediating effect of strategic planning on the relationship between strategic thinking and SMME Performance

	Relationship	Coefficient			Bias-correlated 95% CI		Mediation existence
		Beta	T	P	Lower CL	Upper CL	
Direct Effect	ST->SMMEP	0.233	2.664	0.008			
Total Effect	ST->SMMEP	0.738	16.655	0.000			
Indirect Effect	ST->SP->SMMEP	0.322	4.212	0.000	0.310	0.592	Partial

Table 9. Mediating effect of strategic planning on the relationship between strategic innovation and SMME performance

	Relationship	Coefficient			Bias-correlated 95% CI		Mediation existence
		Beta	T	P	Lower CL	Upper CL	
Direct Effect	SI->SMMEP	0.236	2.004	0.046			
Total Effect	SI->SMMEP	0.438	3.964	0.000			
Indirect Effect	SI->SP->SMMEP	0.202	3.518	0.000	0.097	0.327	Partial

Table 10. Strategic Planning Mediation on the Relationship between Strategic Thinking and SMME Performance

	Relationship	Coefficient			Bias-correlated 95% CI		Mediation existence
		Beta	T	P	Lower CL	Upper CL	
Direct Effect	ST->SMMEP	0.233	2.590	0.010			
Total Effect	ST->SMMEP	0.738	15.865	0.000			
Indirect Effect	ST->SP->SMMEP	0.166	2.933	0.004	0.075	0.289	Partial

Based on the results of the coefficients presented in Table 9, strategic planning mediates the relationship between strategic thinking and SMME performance. ($\beta = 0.166$; $t = 2.933$; 95% CI [0.075; 0.289]). In essence, the Direct Effect, Total Effect, and Specific Indirect Effect are statistically significant. Also, the bootstrap bias corrected at 95% confidence interval range is above zero and does not include zero. Therefore, we report partial mediation. So, we can conclude that Strategic Planning enhances the relationship between Strategic Innovation and SMME Performance by 16,6%.

Hypotheses were tested for the significance of the relationships hypothesised in the model. The results of the direct effect of the relationships are presented in Table 11. The results indicate direct positive relationships between each of the three independent variables (strategic thinking, strategic planning and strategic innovation) and the performance of women-owned SMMEs.

Table 11. Structural model's PLS results

Hypothesis	Relationship	Coefficients				Decision
		Std Beta (β)	STDEV	T	P-values	
H3	ST -> SMMEP	0.233	0.088	2.664	0.008	Supported
H4	SP -> SMMEP	0.404	0.095	4.246	0.000	Supported
H5	SI -> SMMEP	0.236	0.120	1.969	0.050	Supported

5. Conclusion

The study concludes that there is a positive relationship between strategic thinking and strategic innovation, strategic planning and strategic innovation, and strategic thinking and strategic planning. The study also concludes that strategic planning mediates the relationship between strategic thinking and performance in women-owned SMMEs. In addition, strategic planning also mediates the relationship between strategic innovation and the performance of women-owned SMMEs. The study also concludes that the three independent variables in this study, namely, strategic thinking, strategic planning and strategic innovation, had a direct positive relationship and effect on the performance of women-owned SMMEs.

These findings support the role of strategic planning as a dynamic capability that enables entrepreneurs to convert strategic inputs into performance outcomes. The results align with findings of other studies, such as Araújo et al (2022) and Gomera et al (2018).

6. Implications

The findings from this study carry significant implications for society, particularly for women entrepreneurs and managers of women-owned SMMEs. It is essential for them to acquire competencies in strategic thinking, strategic planning, and strategic innovation to enhance their performance and ultimately secure a

competitive advantage. Consequently, the following recommendations for the various stakeholders are presented.

The study adds to the body of knowledge the role of strategic planning, strategic innovation and strategic thinking, and how these factors affect the performance of small businesses, particularly in the context of developing countries such as South Africa.

7. Recommendations

Recommendations are offered to women entrepreneurs and managers of women-owned SMMEs, government, municipalities, and organisations promoting women entrepreneurship.

The researchers recommend that women operating small businesses in the Buffalo City Metropolitan Municipality of South Africa should equip themselves with competencies on strategic thinking, strategic planning, and strategic innovation to improve performance and gain a competitive advantage. Women entrepreneurs should also invest in training their workforce, attend workshops, and create a conducive working environment that promotes strategic thinking, planning and innovation.

The government should enhance funding for small businesses, monitor performance, develop strategic practices, and allocate resources for awareness campaigns and education centres. Government institutions that provide support to women entrepreneurs should consider providing training sessions focusing on strategic thinking, planning and innovation. Organisations promoting women entrepreneurship should offer training and workshops on strategic thinking, planning, and innovation, raise awareness, provide support, and inform women about opportunities for education, funding, and strategic collaborations. They should also encourage networking and mentorship for women entrepreneurs.

8. Suggestions for Future Research

While the conclusions are grounded in the results, generalizability is limited due to sampling constraints, which may be addressed by future research. The study recommends future research on the impact of strategic thinking, planning, and innovation on women-owned SMMEs' performance to apply a qualitative research approach to obtain detailed and context-specific information. Comparing results across different metropolitan municipalities and exploring other variables affecting women-owned SMMEs is also suggested. Future studies could conduct cross-sector comparisons to enhance external validity. Longitudinal or mixed-methods designs could provide deeper insights into how strategic planning capabilities evolve over time and influence performance in different contexts.

Conference Disclaimer

Some part of this manuscript was previously presented in the conference: International Conference on Business and Management Dynamics (ICBMD) 2025, dated 29th October, 2025 in Cape Town, South Africa, Web Link of the proceeding: <https://www.icbmd.org.za>

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Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of this manuscript.

Competing Interests

Authors have declared that no competing interests exist.

References

- Abiodun, E. A., & Amos, D. D. (2018). The performance of women entrepreneurs: Human and financial capital. *Triple A Research Journal of Social Science and Humanity*, 2(1), 30–37. <http://www.triplearesjournal.org/jssh>
- Ahmad, I., & Ahmad, S. Bin. (2019). The mediation effect of strategic planning on the relationship between business skills and firm's performance: Evidence from medium enterprises in Punjab, Pakistan. *Opción: Revista de Ciencias Humanas y Sociales*, 35(24), 746–778. <https://produccioncientificaluz.org/index.php/opcion/article/view/30711>
- Alomari, Z. S. (2020). Does human capital moderate the relationship between strategic thinking and strategic human resource management? *Management Science Letters*, 10(3), 565–574. <https://doi.org/10.5267/j.msl.2019.9.024>
- AlQershi, N. (2021). Strategic thinking, strategic planning, strategic innovation and the performance of SMEs: The mediating role of human capital. *Management Science Letters*, 11, 1003–1012. <https://doi.org/10.5267/j.msl.2020.9.042>
- AlQershi, N. A., Abas, Z. Bin, & Mokhtar, S. S. M. (2021). The intervening effect of structural capital on the relationship between strategic innovation and manufacturing SMEs' performance in Yemen. *Management Science Letters*. <https://doi.org/10.5267/j.msl.2020.8.034>
- AlQershi, N. A., Diah, M. L. B. M., Latiffi, A. B. A., & Ahmad, W. N. K. W. (2020). Strategic innovation and competitive advantage of manufacturing SMEs: The mediating role of human capital. *Quality Innovation Prosperity*, 24(3), 70–89. <https://doi.org/10.12776/QIP.V24I3.1493>
- Al-Shammari, H. A., & Hussein, R. T. (2008). Strategic planning in emergent market organizations: Empirical investigation. *International Journal of Commerce and Management*. <https://doi.org/10.1108/10569210810871489>

- Araújo, G. R., Kato, H. T., & Del Corso, J. M. (2022). Dynamic capabilities, strategic planning and performance: A virtuous and mutually reinforcing cycle. *Journal of Management & Organization*, 28(5), 1116–1132. <https://doi.org/10.1017/jmo.2022.33>
- Asobee, M. S. (2021). Exploring the importance of strategic thinking to strategic planning in the strategic management process. *Journal of Business and Management Sciences*, 9(2), 68–70. <https://doi.org/10.12691/jbms-9-2-2>
- Basson, N., & Omoruyi, O. (2025). Internal and external factors affecting the growth of SMMEs: A qualitative study. *Southern African Journal of Entrepreneurship and Small Business Management*, 17(1), a919. <https://doi.org/10.4102/sajesbm.v17i1.919>
- Batra, S., Sharma, S., Dixit, M. R., & Vohra, N. (2018). Does strategic planning determine innovation in organizations? A study of Indian SME sector. *Australian Journal of Management*, 43(3), 493–513. <https://doi.org/10.1177/0312896217734893>
- Bongomin, G. C. O., Munene, J. C., Ntayi, J. M., & Malinga, C. A. (2018). Determinants of SMMEs growth in post-war communities in developing countries: Testing the interaction effect of government support. *World Journal of Entrepreneurship, Management and Sustainable Development*, 14(1), 50–73. <https://doi.org/10.1108/WJEMSD-06-2017-0026>
- Booth, K. (2021). The evolution of strategic thinking. In *Contemporary Strategy: Theories and Policies* (pp. 22–49). Routledge. <https://doi.org/10.4324/9781003104339>
- Brixiová, Z., & Kangoye, T. (2016). Gender and constraints to entrepreneurship in Africa: New evidence from Swaziland. *Journal of Business Venturing Insights*, 5, 1–8. <https://doi.org/10.1016/j.jbvi.2015.10.001>
- Chimucheka, T., Chinyamurindi, W. T., & Dodd, N. (2019). The effect of the use of social networks on the performance of immigrant entrepreneurs operating SMMEs in the Eastern Cape province, South Africa. *Academy of Entrepreneurship Journal*, 25(4), 1–15. <https://www.abacademies.org/journals/academy-of-entrepreneurship-journal-volume-25-issue-4-2019.html>
- Chitongo, L., & Zhandu, K. (2025). Transforming universities through strategic plans in South Africa and Zimbabwe: Continuities and discontinuities. *Journal of Education and Learning Technology*, 6(8), 607–621. <https://doi.org/10.38159/jelt.2025687>
- Dixit, S., Singh, S., Dhir, S., & Dhir, S. (2021). Antecedents of strategic thinking and its impact on competitive advantage. *Journal of Indian Business Research*, 13(4), 437–458. <https://doi.org/10.1108/JIBR-08-2020-0262>
- Donga, G., & Chimucheka, T. (2024). Rural women entrepreneurship in South Africa: Issues and challenges. *African Journal of Inter/Multidisciplinary Studies*, 6(1), 1–12. <https://doi.org/10.51415/ajims.v6i1.1175>
- Donkor, J., Donkor, G. N. A., & Kwarteng, C. K. (2018). Strategic planning and performance of SMEs in Ghana. *Asia Pacific Journal of Innovation and Entrepreneurship*, 12(1), 62–76. <https://doi.org/10.1108/APJIE-10-2017-0035>

- Elam, A. B. (2022). GEM 2021/22 Women's entrepreneurship report: From crisis to opportunity. Global Entrepreneurship Monitor. <https://www.gemconsortium.org/report/gem-202122-womens-entrepreneurship-report-from-crisis-to-opportunity>
- Expósito, A., Sanchis-Llopis, A., & Sanchis-Llopis, J. A. (2024). Entrepreneur's gender and SMEs performance: The mediating effect of innovations. *Journal of Knowledge Economy*, 15(3), 11877–11911. <https://doi.org/10.1007/s13132-023-01555-8>
- Fayomi, O. S. I., Adelakun, J. O., & Babaremu, K. O. (2019). The impact of technological innovation on production. *Journal of Physics: Conference Series*, 1378(2). <https://doi.org/10.1088/1742-6596/1378/2/022014>
- Fornell, C., & Larcker, D. F. (1984). Misapplications of simulations in structural equation models: Reply to Acito and Anderson. *Journal of Marketing Research*, 21(1), 113–117. <https://doi.org/10.1177/002224378402100112>
- Geng, D., Lai, K. H., & Zhu, Q. (2021). Eco-innovation and its role for performance improvement among Chinese small and medium-sized manufacturing enterprises. *International Journal of Production Economics*. <https://doi.org/10.1016/j.ijpe.2020.107869>
- George, B., Walker, R. M., & Monster, J. (2019). Does strategic planning improve organizational performance? A meta-analysis. *Public Administration Review*, 79(6), 810–819. <https://doi.org/10.1111/puar.13104>
- Gomera, S., Chinyamurindi, W. T., & Mishi, S. (2018). Relationship between strategic planning and financial performance: The case of small, micro- and medium-scale businesses in the Buffalo City Metropolitan. *South African Journal of Economic and Management Sciences*, 21(1), 1–9. <https://doi.org/10.4102/sajems.v21i1.1634>
- Govender, E. A., & Van der Lingen, E. (2024). Startups' innovation programmes: A food industry versus university cases. *The Southern African Journal of Entrepreneurship and Small Business Management*, 16(1), 1–8. https://hdl.handle.net/10520/ejc-sajesbm_v16_n1_a775
- Guo, F., Zou, B., Zhang, X., Bo, Q., & Li, K. (2020). Financial slack and firm performance of SMMEs in China: Moderating effects of government subsidies and market-supporting institutions. *International Journal of Production Economics*, 223, 107530. <https://doi.org/10.1016/j.ijpe.2019.107530>
- Guo, X., & Wen, M. (2021). Research on competitive strategy of Coca-Cola Company. In *Proceedings of the 2021 3rd International Conference on Economic Management and Cultural Industry (ICEMCI 2021)* (pp. 2879–2885). <https://doi.org/10.2991/assehr.k.211209.467>
- Hair, J. F., Astrachan, C. B., Moisescu, O. I., Radomir, L., Sarstedt, M., Vaithilingam, S., & Ringle, C. M. (2021). Executing and interpreting applications of PLS-SEM: Updates for family business researchers. *Journal of Family Business Strategy*, 12(3), 1–8. <https://doi.org/10.1016/j.jfbs.2020.100392>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European business review*, 31(1), 2–24.

- Henderson, A. E., & Hines, R. D. (2019). Using concepts from strategic planning. In *Data Strategy in colleges and universities* (pp. 37-52). Routledge.
- Hoque, A. S. M. M., & Awang, Z. B. (2019). Does gender difference play moderating role in the relationship between entrepreneurial marketing and Bangladeshi SME performance? *Accounting*. <https://doi.org/10.5267/j.ac.2018.06.001>
- Islam, A., & Wahab, S. A. (2021). The intervention of strategic innovation practices in between regulations and sustainable business growth: A holistic perspective for Malaysian SMEs. *World Journal of Entrepreneurship, Management and Sustainable Development*, 17(3), 396–421. <https://doi.org/10.1108/wjemsd-04-2020-0035>
- Kapoor, M., & Aggarwal, V. (2020). Tracing the economics behind dynamic capabilities theory. *International Journal of Innovation Science*, 12(2), 187–201. <https://doi.org/10.1108/IJIS-05-2019-0050>
- Khuzwayo, S., & Mashau, P. (2025). The effectiveness of strategic management practices at a public university in South Africa. *Journal of Sustainable Development Law and Policy*, 16(1), 162–186. <https://doi.org/10.4314/jsdlp.v16i1.9>
- Kiende, C. K., Mukulu, E., & Odhiambo, R. (2019). Influence of strategic innovation on the performance of small and medium women-owned enterprises in Kenya. *Journal of Entrepreneurship & Project Management*, 3(1), 50–67. <https://stratfordjournalpublishers.org/journals/index.php/journal-of-entrepreneurship-proj/article/view/247>
- Kinney, A. R., Eakman, A. M., & Graham, J. E. (2020). Novel effect size interpretation guidelines and an evaluation of statistical power in rehabilitation research. *Archives of Physical Medicine and Rehabilitation*. <https://doi.org/10.1016/j.apmr.2020.02.017>
- Kock, N. (2019). Factor-based structural equation modeling with WarpPLS. *Australasian Marketing Journal*, 27(1), 57–63. <https://doi.org/10.1016/j.ausmj.2019.02.002>
- Kornelius, H., Supratikno, H., Bernarto, I., & Widjaja, A. W. (2021). Strategic planning and firm performance: The mediating role of strategic maneuverability. *Journal of Asian Finance, Economics and Business*, 8(1), 479–486. <https://doi.org/10.13106/jafeb.2021.vol8.no1.479>
- Lestari, S. D., Leon, F. M., Widyastuti, S., Brabo, N. A., & Putra, A. H. P. K. (2020). Antecedents and consequences of innovation and business strategy on performance and competitive advantage of SMEs. *Journal of Asian Finance, Economics and Business*, 7(6), 365–378. <https://doi.org/10.13106/jafeb.2020.vol7.no6.365>
- Liedtka, J. M. (1998). Strategic thinking: Can it be taught? *Long Range Planning*, 31(1), 120–129. [https://doi.org/10.1016/s0024-6301\(97\)00098-8](https://doi.org/10.1016/s0024-6301(97)00098-8)
- Lin, C. Y., & Huang, C. K. (2020). Employee turnover intentions and job performance from a planned change: The effects of an organizational learning culture and job satisfaction. *International Journal of Manpower*, 42(3), 409–423. <https://doi.org/10.1108/IJM-08-2018-0281>

- López-Nicolás, C., Nikou, S., Molina-Castillo, F. J., & Bouwman, H. (2020). Gender differences and business model experimentation in European SMEs. *Journal of Business and Industrial Marketing*, 35(7), 1205–1219. <https://doi.org/10.1108/JBIM-05-2019-0194>
- Malik, I. S. B. A., Chan, V., & Chan, C. (2021). The determinants factors of womenpreneurship performances in low economic class: An evidence from Melaka. *International Journal of Entrepreneurship, Business and Creative Economy*, 1(1), 25–38. <https://doi.org/10.31098/ijebce.v1i1.423>
- Mio, C., Costantini, A., & Panfilo, S. (2022). Performance measurement tools for sustainable business: A systematic literature review on the sustainability balanced scorecard use. *Corporate Social Responsibility and Environmental Management*, 29(2), 367–384. <https://doi.org/10.1002/csr.2206>
- Mofolo, M. A., & Novukela, C. S. (2024). Integrating the performance management system of a university in South Africa with its strategic plan. *SA Journal of Human Resource Management*, 22(0), a2404. <https://doi.org/10.4102/sajhrm.v22i0.2404>
- Mrwebi, W., & Mawila, P. (2023). Examination of the dynamics of a sustainable entrepreneurial ecosystem towards enhancing SME development in a selected metropolitan municipality in the Eastern Cape. *Academy of Entrepreneurship Journal*, 29(5), 1–22. <https://www.abacademies.org/articles/examination-of-the-dynamics-of-a-sustainable-entrepreneurial-ecosystem-towards-enhancing-sme-development-in-a-selected-metropolita-16338.html>
- Murschetz, P. C., Omid, A., Oliver, J. J., Kamali Saraji, M., & Javed, S. (2020). Dynamic capabilities in media management research: A literature review. *Journal of Strategy and Management*, 13(2), 278–296. <https://doi.org/10.1108/JSMA-01-2019-0010>
- Mxunyelwa, S., & Vallabh, D. (2025). Lack of government support: A hindrance to entrepreneurship development of SMTE sector in Buffalo City, South Africa. *Africa's Public Service Delivery and Performance Review*, 13(1), 1–9. <https://doi.org/10.4102/apsdpr.v13i1.853>
- Napier, N. K., & Albert, M. S. (1990). East Asian and American perspectives on thinking strategically: The leopard and his spots. *Asia Pacific Journal of Human Resources*. <https://doi.org/10.1177/103841119002800404>
- Neneh, N. B. (2018). Family-work conflict and performance of women-owned enterprises: The role of social capital in developing countries—Implications for South Africa and beyond. *Journal of International Women's Studies*, 19(6), 326–343. <https://vc.bridgew.edu/jiws/vol19/iss6/21>
- Nonaka, I., & Teece, D. J. (Eds.). (2001). *Managing industrial knowledge: Creation, transfer and utilization*. Sage. <https://us.sagepub.com/en-us/nam/managing-industrial-knowledge/book9780761954989>
- Omiunu, O. G. (2019). E-literacy-adoption model and performance of women-owned SMEs in Southwestern Nigeria. *Journal of Global Entrepreneurship Research*, 9(1). <https://doi.org/10.1186/s40497-019-0149-3>

- Pratono, A. H. (2018). Does firm performance increase with risk-taking behavior under information technological turbulence? Empirical evidence from Indonesian SMEs. *Journal of Risk Finance*, 19(4), 361–378. <https://doi.org/10.1108/JRF-10-2017-0170>
- Rankhumise, E. M., & Letsoalo, M. E. (2019). Owners perspective of factors associated with performance of small, medium and micro enterprises. *International Journal of Entrepreneurship*, 23(3), 1–7. <https://www.abacademies.org/articles/owners-perspective-of-factors-associated-with-performance-of-small-medium-and-micro-enterprises-8519.html>
- Rankhumise, E. M., & Letsoalo, M. E. (2019). Owners perspective of factors associated with performance of small, medium and micro enterprises. *International Journal of Entrepreneurship*, 23(3), 1–17. <https://www.abacademies.org/articles/owners-perspective-of-factors-associated-with-performance-of-small-medium-and-micro-enterprises-8519.html>
- Ravelomanantsoa, M. S., Ducq, Y., & Vallespir, B. (2019). A state of the art and comparison of approaches for performance measurement systems definition and design. *International Journal of Production Research*, 57(15–16), 5026–5046. <https://doi.org/10.1080/00207543.2018.1506178>
- Rodrigues, R. I., Ferreira, A., & Neves, J. (2021). Strategic thinking: The construction and validation of an instrument. *Polish Psychological Bulletin*, 52(3), 241–250. <https://doi.org/10.24425/ppb.2021.137888>
- Rojas-Lema, X., Alfaro-Saiz, J. J., Rodríguez-Rodríguez, R., & Verdecho, M. J. (2020). Performance measurement in SMEs: Systematic literature review and research directions. *Total Quality Management and Business Excellence*, 32(15–16), 1803–1828. <https://doi.org/10.1080/14783363.2020.1774357>
- Roundy, P. T., & Fayard, D. (2019). Dynamic capabilities and entrepreneurial ecosystems: The micro-foundations of regional entrepreneurship. *Journal of Entrepreneurship*, 28(1), 94–120. <https://doi.org/10.1177/0971355718810296>
- Samsudin, Z., & Ismail, M. D. (2019). The concept of theory of dynamic capabilities in changing environment. *International Journal of Academic Research in Business and Social Sciences*, 9(6), 1071–1078. <https://doi.org/10.6007/IJARBS/v9-i6/6068>
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2021). Partial least squares structural equation modeling. In C. Homburg, M. Klarmann, & A. Vomberg (Eds.), *Handbook of market research* (pp. 587–632). Springer International Publishing. https://doi.org/10.1007/978-3-319-57413-4_15
- Sayed, Z., Proches, C. N. G., Kader, A., & Taylor, S. M. (2023). Design thinking as a strategic lever in promoting tourism in KwaZulu-Natal, South Africa. In *Strategic human resource management in the hospitality industry: A digitalized economic paradigm* (pp. 15–56). IGI Global. <https://doi.org/10.4018/978-1-6684-7494-5.ch002>

- 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). <https://doi.org/10.1177/2158244020919520>
- Sithole, C., & Wotela, K. (2024). A conceptual framework for researching disruptive innovation and innovative business models. In *International Business - New Insights on Changing Scenarios*. IntechOpen. <https://doi.org/10.5772/intechopen.111808>
- Sogaxa, A. (2024). SME contractors' management practices to achieve sustainable business performance in the Eastern Cape province, South Africa. *Acta Structilia*, 31(2), 81–122. <https://doi.org/10.38140/as.v31i2.8196>
- Statistics South Africa. (2022). *Quarterly labour force survey Quarter 1: 2022 (Statistical Release P0211)*. Statistics South Africa. <https://www.statssa.gov.za/publications/P0211/P02111stQuarter2022.pdf>
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53–55. <https://doi.org/10.5116/ijme.4dfb.8dfd>
- Teece, D. J. (1996). Firm organization, industrial structure, and technological innovation. *Journal of Economic Behavior & Organization*, 31(2), 193–224. [https://doi.org/10.1016/S0167-2681\(96\)00895-5](https://doi.org/10.1016/S0167-2681(96)00895-5)
- Teece, D. J. (2018). Dynamic capabilities as (workable) management systems theory. *Journal of Management & Organization*, 24(3), 359–368. <https://doi.org/10.1017/jmo.2017.75>
- Yang, X. (2014). Different choice of strategic innovation among companies in China market. *Journal of Science and Technology Policy Management*. <https://doi.org/10.1108/JSTPM-02-2014-0006>
- Zeb, A., & Ihsan, A. (2020). Innovation and the entrepreneurial performance in women-owned small and medium-sized enterprises in Pakistan. *Women's Studies International Forum*, 79(January), 102342. <https://doi.org/10.1016/j.wsif.2020.102342>
- Zhou, H., & Gumbo, V. (2021). Key performance drivers of small enterprises in the manufacturing sector in KwaZulu Natal Province, South Africa. *International Journal of Entrepreneurship*, 25(3 Special Issue), 1–12.

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Peer-Review History:

This chapter was reviewed by following the Advanced Open Peer Review policy. This chapter was thoroughly checked to prevent plagiarism. As per editorial policy, a minimum of two peer-reviewers reviewed the manuscript. After review and revision of the manuscript, the Book Editor approved the manuscript for final publication. Peer review comments, comments of the editor(s), etc. are available here: <https://peerreviewarchive.com/review-history/6771.5>

The Effect of Demographic Factors on the Financing of Informal Sector Traders of Umlazi, South Africa

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DOI: <https://doi.org/10.9734/bpi/mono/978-81-998711-1-3/CH6>

Peer-Review History:

This chapter was reviewed by following the Advanced Open Peer Review policy. This chapter was thoroughly checked to prevent plagiarism. As per editorial policy, a minimum of two peer-reviewers reviewed the manuscript. After review and revision of the manuscript, the Book Editor approved the manuscript for final publication. Peer review comments, comments of the editor(s), etc. are available here: <https://peerreviewarchive.com/review-history/6771.6>

Abstract

South Africa remains a developing country with a high unemployment rate. Many households include working-age members who are unemployed due to limited education or work experience. As a result, South Africans have increasingly turned to the informal business sector as a means of generating income. The South African economy, therefore, comprises both formal and informal sectors, each contributing to economic growth as reflected in indicators such as Gross Domestic Product (GDP) and Gross National Product (GNP). The informal sector is a key driver of economic activity; however, traders in this sector face significant challenges in accessing formal financial services. The current research aimed to examine how demographic factors influence the financing of informal sector traders in Umlazi, South Africa. To better understand its role in financing informal traders, the methodological approach of the study was qualitative; a non-probability sampling frame was selected, and an appropriate sample size from the various informal sector industries was interviewed. Through in-depth interviews, the research found that informal traders in Umlazi face major obstacles to accessing financial support, including limited awareness of government policies, stringent requirements from financial institutions, inadequate business training, and poor communication about developmental programmes that could improve their financial readiness. Regular policy reviews, improved communication strategies, structured business training, and flexible financing models by financial institutions are essential to enhance financial inclusion. Recommendations made to bridge the gap between Umlazi's informal traders and the formal financial sector. Future research would be recommended to apply the mixed method research technique for testing of the theoretical proposition, which is qualitative, followed by the development of a

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richer and theoretical understanding, which is quantitative, based on experimentation and survey research strategies. The current research is based on Umlazi informal sector traders, and South Africa has nine provinces consisting of two hundred and seventy-eight municipalities, comprising male and female, young and old, different racial groups, and informal sector traders in various industries.

Keywords: Financial institution; informal sector traders; local government; demographic factors; South Africa.

1. Introduction

South Africa is a developing country with a high unemployment rate. Many households include individuals of working age who remain unemployed due to limited experience or inadequate education. As a result, families often turn to informal trading for financial support. However, obtaining financial assistance remains a challenge. Unlike formal sector businesses, informal traders lack collateral or security, making them ineligible for financial aid and restricting opportunities for growth and expansion (Zogli *et al.*, 2021).

1.1 Background to the Problem

According to the latest Quarterly Labour Force Survey (QLFS) by Statistics South Africa (Stats SA), informal sector jobs accounted for nineteen-point-five per cent of total employment in the fourth quarter of 2024. In 2023, fifty-seven-point-one per cent of informal traders reported unemployment as their primary motivation for starting a business (Statistics South Africa, 2025). Informal vendors significantly contribute to poverty reduction in Umlazi Township, South Africa, yet they face challenges in accessing financial support from formal financial institutions. Additionally, many lack the knowledge required to operate and sustain their businesses effectively. Researchers agree that insufficient funding and limited experience hinder the growth of small informal enterprises (Matos & Hall, 2021; Kabange & Simatele, 2022; Mhlongo & Daya, 2023). In a study on financing access for Small and Medium Enterprises (SMEs) in Sub-Saharan Africa (SSA), Simba *et al.* (2024) noted that their research aimed to address the scarcity of investigations into why SMEs in SSA are perceived as high-risk for lending, resulting in greater financial constraints.

Recent observations indicate that numerous laws governing national and provincial jurisdictions fail to address the informal economy (South Africa, 2019b; Matamanda *et al.*, 2022). This omission has significant implications for both government and informal traders in their efforts to alleviate poverty through job creation, reducing unemployment, and fostering economic growth, as reflected in the Gross National Product (GNP) and Gross Domestic Product (GDP). Magidi (2022) and Thwala *et al.* (2023) note that the informal business sector holds considerable potential to sustain livelihoods and mitigate challenges such as inadequate municipal services and crime.

1.2 Research Question

Based on the nature of the current study, the following main research question is:

How do selected demographic factors influence the access informal traders in Umlazi have to financial resources?

1.3 Research Objectives

The main research question will be addressed by responding to the following research objectives:

RO₁ To examine how age influences the financial access experiences of informal traders in Umlazi.

RO₂ To investigate how gender influences the capacity of informal sector traders in Umlazi to access financial services.

RO₃ To examine the experiences of Umlazi informal sector traders regarding how the length of their business operations affects their access to finance.

RO₄ To evaluate the extent to which the educational level of Umlazi informal sector traders affects their access to financial resources.

1.4 Significance of the Study

In South Africa, research has been conducted regarding the contribution of the informal sector traders to improving the economy of the country. The impact of women creating and sustaining businesses within the various economic sectors of the country has also been highlighted. However, an exploratory study into the effect of demographic factors on the financing of informal-sector traders within the Umlazi community in South Africa has not been carried out.

The current research will thus benefit the informal sector traders, the financial sector and local government authorities within the Umlazi community. The informal sector traders will benefit from understanding the effect and importance of obtaining business training and developmental skills in order to have access within the financial sector in relation to financial access and business longevity. The financial sector will understand the impact of not granting financial assistance to informal sector traders and the effect this has on the development of the South African economy. The local government will gain insight into the effect of drawing up policies that would be in support of the informal sector trading, thus improving the ability of the informal sector traders to boost the South African economy.

2. Literature Review

2.1 Informal Sector

Musara and Nieuwenhuizen (2020), along with Jonck and Nwosu (2022), argue that the informal sector is crucial in addressing the socioeconomic issues

encountered by numerous countries, and they further note that this sector accounts for ten to twenty per cent of GDP in developed nations compared to sixty per cent in developing countries. In the context of South Africa, the informal sector contributes to fifteen to seventeen per cent of total employment and five-point-two per cent of GDP, yet there is minimal focus on how the entrepreneurial orientation of informal traders influences the rise and growth of entrepreneurial leadership and the reverse. Several authors agree that globally, SMEs play a significant role in development and economic progress; however, South Africa faces similar challenges that impede SME growth due to political instability and economic turmoil (Rens et al., 2021; Mugano, 2023; Sibiya et al., 2023).

Shahzad et al. (2023) state that informal traders participate in a diverse range of economic activities, which encompass selling clothing and related items, providing haircuts, repairing and creating shoes, as well as selling leather products. Sultana et al. (2022) contend that despite the clear positive effects that informal sector trade has had on the economy, development literature generally reflects a consensus that economists consistently overlook the significance of the informal sector in the development process. However, it is important to note that the persistence and growth of the traditional or informal sector were acknowledged by the International Labour Organisation's initial mission to Africa.

Jonck and Nwosu (2022) and Schneider et al. (2023) concur that the characteristics of informal sector traders lead to varying definitions of this sector in different countries, as there is no universally accepted definition. Etim and Daramola (2020) agree and further explain that within the South African context, the informal sector is part of the SMEs, which are categorized as micro, small, or medium enterprises that fulfill three specific criteria: the owners or part owners oversee the daily operations, the business operates independently and is not part of a larger enterprise, and it holds a small market share.

Khambule (2022) and Mkhize et al. (2023) suggest that the South African informal trade has surged dramatically due to the scarcity of job opportunities in both the public and private sectors. The SME sector represents fifty-five to sixty-five per cent of overall employment in the economy; thus, it serves as a crucial link between the aim of inclusive economic growth and the structure of the local economy (Statistics South Africa, 2018). Small-scale vendors, traders, and hawkers play a significant role in the informal sector, typically operating in locations that are near residential areas or natural marketplaces; however, because these informal sector operators lack registered or legalised businesses, they are viewed as illegal (Korsunova et al., 2022).

2.2 Local Government Development Policies

In accordance with the Organised Local Government Act of 1997 (Act 52 of 1997), the South African government is committed to enhancing municipalities through ongoing local economic development (LED). This strategy is designed to alleviate poverty and foster economic growth by encouraging local communities to collaborate in sustaining economic advancement at both local and municipal levels (South Africa, 2018; Enaifoghe et al., 2024).

2.2.1 Local Government

South Africa operates as a constitutional democracy, featuring a three-tiered government system alongside an independent judiciary, which includes national, provincial, and local levels of government; each level is characterised as unique yet interdependent and interconnected, possessing its own legislative and executive powers (South Africa, 2018). The country consists of nine provinces: Eastern Cape, KwaZulu-Natal, Free State, Gauteng, Limpopo, North-West, Northern Cape, Western Cape, and Mpumalanga, as well as two hundred and seventy-eight municipalities, which include two hundred and twenty-six local municipalities, forty-four districts, and eight metropolitan municipalities (Department of Government Communication and Information Systems (GCIS), 2017/18). The eight metropolitan municipalities: City of Cape Town, Ekurhuleni Metropolitan Municipality (East Rand), Mangaung Municipality (Bloemfontein), Nelson Mandela Metropolitan Municipality (Port Elizabeth), Buffalo City (East London), City of Johannesburg, City of Tshwane (Pretoria), and City of eThekweni (Durban) are dedicated to stimulating local economies and enhancing infrastructure and services (South Africa, 2018).

Umlazi is a township found within the City of eThekweni metropolitan municipality, covering an area of four thousand four hundred and eighty-one point seven hectares and having a population estimated at five hundred and fifty thousand residents. However, considering an average of four individuals per household, it is feasible to estimate the population at one million, six hundred and seventy-seven thousand, five hundred and fifty-six individuals (South Africa, 2013). Umlazi Township is divided into 13 wards, some of which are closely connected and consist of both formal and informal households, though the numbers fluctuate as informal settlements continue to grow in the area, often without being fully documented (Mkhize et al., 2023). Given Umlazi's large area and its status as the second-largest township in South Africa, several typical urban issues are intensified:

- High unemployment rates;
- Limited economic growth;
- Significant housing shortages; and
- Large informal settlements.

The principal informal sector includes the food and catering, accommodation, transportation, wholesale and retail services, clothing manufacturing, and agricultural industries (South Africa, 2008; Miti et al., 2021).

Zeemering (2021) suggests that local government, being the level of government that is closest to citizens, is ideally positioned to effectively address the needs, interests, and expectations of local communities, making it essential for municipalities to provide a range of fundamental services to the populations within their areas. Masuda et al. (2022) reinforce this opinion by pointing out that local government serves as the nearest interface between individuals and government institutions. According to Chapter seven, section 152 (1) (c) of the

Constitution of the Republic of South Africa, 1996, and the Organised Local Government Act of 1997 (Act 52 of 1997), local government municipalities are involved in the activities of the National Council of Provinces (NCOP), which facilitates ongoing practical support through an established system and capacity-building initiatives that concentrate on vital aspects like integrated development planning (IDP), local economic development (LED), financial management, service delivery, and public engagement; as well as coordinating and aiding policy formulation, executing the Local Government Strategic Agenda, and supervising and supporting service delivery (South Africa, 2018).

The Integrated Development Plan (IDP) for 2024/2025 of the eThekweni Municipality, which includes Umlazi, presents a detailed strategic guide aimed at turning the city into the most compassionate and liveable urban area in Africa by the year 2030. The mayor's foreword highlights the essential importance of teamwork and solidarity among community members and stakeholders to achieve this ambition. A fundamental aspect of the IDP is the municipality's eight-point plan, which outlines vital priorities for sustainable and inclusive development. Particularly, plan two, titled "*develop a prosperous, diverse economy and employment creation*" focuses on encouraging economic growth and fostering significant economic transformation in the area. The primary objective of this plan is to improve the material welfare of all residents through robust economic performance, the establishment of sustainable job opportunities, and efficient poverty reduction efforts (eThekweni Municipality, 2024).

2.2.2 Development Policies

Koma (2013) suggests that the framework for achieving set goals can be viewed as the primary system relating to policies and that clarifying the various assumptions tied to the foundational premises, needs priorities, and financial allocation is an essential aspect of policy development. Fourie (2018), referencing the work of Fourie and Leibbrandt (2012) and Kanbur (2015), concurs and notes that the informal sector has often been excluded from economic analysis and policy discussions, not only in South Africa but also on a global scale.

Koma (2013) observe that in South Africa, there is a general consensus that the informal business sector operates under the legal framework designated for SMEs, as there is no specific legislation addressing the informal sector directly. The coexistence of formal and informal sectors can serve as drivers of growth during times marked by sluggish economic performance and high unemployment rates. Historically, the informal economy has been perceived with scepticism due to its operation outside regulatory frameworks, but recently, there has been a growing recognition and acceptance of this sector as one that has transformed the business landscape. It would be interesting to explore how informal markets function in other cities, particularly with support from both the government and private sector, facilitating their growth. Fourie (2018), in his discussion of global policymaking in the informal sector, notes that there is considerable heterogeneity and diversity within countries' informal sectors that must be

considered in analysis and policymaking, despite the presence of certain common characteristics across the global informal sector. Furthermore, Ault and Spicer (2022) state that to safeguard and encourage informal-sector enterprises, some governments have implemented policies and legislation or devised schemes, often through specific sector policies. The most prevalent substantive policy approach is the formalisation of the informal sector, which creates inherent contradictions.

2.3 Financial Accessibility

The progress of informal sector traders is frequently hindered by various challenges, such as insufficient funding, limited access to capital markets, and a deficiency in managerial skills, technology, and equipment, among others. Nguimkeu & Okou (2021). According to Quartey et al. (2017:21):

“within the financing constraints literature, access to finance for a firm has typically been modeled using financial statements.”

Informal sector traders often lack the training and capabilities to prepare financial documents, which leads to restricted accessibility to financial support. Sepadi and Nkosi (2023) point out that a significant reason for the informal sector's funding shortfall is the nearly absent utilisation of informal sector debt financing, as formal sector financial institutions impose strict regulations that informal traders often cannot fulfil due to their lack of training. Nguimkeu & Okou (2021) concur that the primary challenge facing South African SMEs is the difficulty in securing finance, which constrains their growth. Bureaucratic hurdles, excessive red tape, and a lack of understanding by financial institutions regarding SME entrepreneurs contribute to the rare financing of start-up ventures, reflecting a reluctance to provide funds to informal sector traders lacking business records (Dlamini, 2023).

2.4 The Involvement of the Financial Sector in Financing Informal Sector Traders

Dhawnarain (2024) argues that the financial sector plays a role in funding informal sectors, provided several criteria are met, such as business registrations for informal enterprises, provision of collateral or guarantees, and significant initiation fees and interest charges. Glackin's 2002 research (as cited in Schraader et al., 2010:332) identifies additional factors, including perceived bias, regulatory and legal issues, a limited or inadequate credit history, absence of collateral, a lack of awareness regarding microloan programs, geographic limitations, and a general mistrust of financial institutions.

2.5 Training and Development of Business Management Skills

A significant number of individuals in the informal sector lack the skills necessary for formal employment, while some are semi-literate, and a smaller percentage possess varying levels of qualifications; as a result, securing financial aid

becomes challenging due to the absence of essential skills (Aigbavboa, 2022). According to Okunlola and Hendricks (2022), entrepreneurs require financial training regarding cash flow management to protect themselves from potential failures, and SMEs must navigate different phases of business to effectively conduct cash flow forecasts, which can increase their likelihood of success. Mpofu and Sibindi (2022), as well as Phil-Ugochukwu (2024), suggest that providing training to traders in the informal sector will enhance their understanding of savings, enabling them to accumulate collateral that financial institutions necessitate when seeking funding. Bushe (2019) agrees, emphasising that adequate training for informal sector traders can lead to improved long-term planning and saving, enhanced financial management, and the ability to secure funding, as financial institutions require well-developed business plans and compliance with financial regulations and standards.

2.6 Contextualisation of Key Concepts

The effect of the local government development policies in supporting the informal sector traders in securing financial assistance: The government is responsible for implementing policies that guarantee the effective management of the country it governs. These policies must extend across all areas of governance, including finance and financial institutions, as they are directly linked to economic development and the overall financial health of a nation. However, policy inertia, lack of prioritisation, and poor policy execution continue to obstruct the attainment of crucial developmental objectives (South Africa, 2019c). In relation to the financial sector, the government plays a vital role in fostering healthy competition, improving financial infrastructure, and providing robust prudential oversight; to ensure evidence-based decision-making and sound financial systems that promote strong economic performance, it is essential to have regular updates, as the financial system is ever-evolving and conditions frequently change (World Bank, 2013).

Evaluation of the extent of involvement of the financial sector in financing informal sector traders: Finance and access to financial services are vital for development, as increasing evidence suggests that financial institutions, like banks and insurance companies, have a significant impact on economic growth, poverty reduction, and economic stability (World Bank, 2013). While credit information services for individual consumers are well-established and advanced in South Africa, there is a shortage of widely accessible information for making credit decisions for small businesses; additionally, there is an excess of government funding and financiers, many of whom have overlapping roles and a lack of scale and expertise. The insufficient credit information available for SMEs is a related challenge (South Africa, 2019a). Emphasising the essential role of finance in socioeconomic development and comprehending how to enhance financial systems is critical for countries aiming to achieve greater prosperity and eliminate poverty. All stakeholders, including policymakers, regulatory bodies like the government, financial institutions acting as bankers, and the financial consumers represented here by informal sector traders, must collaborate to promote sustainable financial development and enhance the performance of

financial systems, given the prevalent reliance on various institutional factors and players (World Bank, 2013).

Recommendation of training and development in business management skills for informal sector traders: A key component of any economic sector's sustainable growth and development is the existence of the abilities, knowledge, skills, attitudes, competencies, and values that people need to perform an activity successfully (Quendler & Lamb, 2016; Muzam, 2023). Although SME business entities make a substantial contribution to the South African economy, according to Olarewaju & Msomi (2021), prior research indicates that South African SMEs have some of the lowest sustainability rates in the world, mainly as a result of unmanaged economic factors. Msomi and Olarewaju (2021), and Otto (2022) indicate that although SME business entities significantly contribute to the South African economy, previous research findings suggest that South African SMEs experience some of the lowest sustainability rates globally, primarily due to unmanaged economic factors.

3. Conceptual Framework

Varpio et al. (2020) assert that a conceptual framework links concepts, actual research, and relevant theories to advance and standardise knowledge. The conceptual framework is designed to respond to two important questions: the importance and relevance of the study, and what contributions the research outcomes might add to the current body of knowledge (Grant & Oslo, 2014). The conceptual framework diagram below is designed for theoretical alignment:

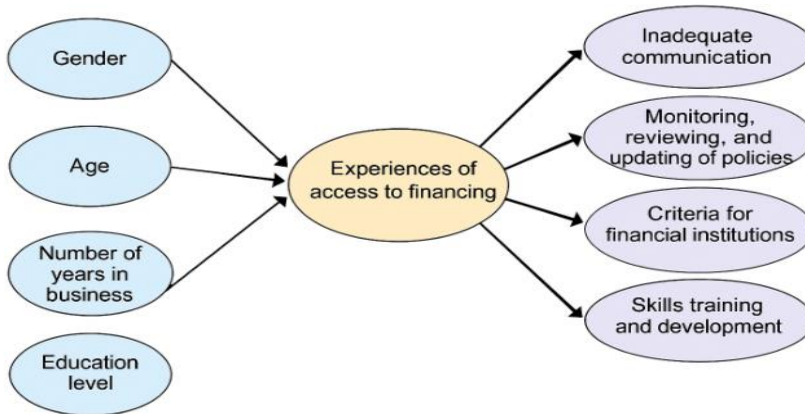


Diagram 1. Conceptual framework

4. Research Methodology

An exploratory research approach was used to investigate, learn more about, and comprehend the effects of non-financial accessibility on informal-sector

merchants in South Africa's Umlazi community. The study additionally explored how local government development initiatives influenced the funding options available to traders in the informal sector. Saunders *et al.* (2009), as well as Makri and Neely (2021), concur that the aim of exploratory research is to pursue new insights and evaluate phenomena from a different perspective or lens. As the data collected will aid in identifying recurrent themes in people's perceptions of their experiences, the phenomenology research philosophy was selected for this qualitative investigation. Phenomenology is an approach aimed at comprehending, detailing, and interpreting human actions and the significance individuals assign to experiences and emphasises the nature of what was experienced and the manner in which it was experienced (Käufer & Chemero, 2021; Ayton, 2023; Dodgson, 2023). The study looked at how Umlazi informal sector traders perceived non-financial accessibility and made recommendations for company management skill development and training. A comprehensive examination of the topic in real-world settings was conducted using the case study methodology. Yin (2009) and Priya (2020) describe a case study as an empirical investigation that examines a phenomenon within its actual context, and various data collection methods are employed, as a comprehensive exploration of a phenomenon is required. First-hand information about the impact of non-financial accessibility on Umlazi informal-sector merchants was acquired. The study's target population is Umlazi's 750 informal traders (Dlamini, 2015; Mkhize, Mthembu & Napier, 2023). Participants from the food, catering, transportation, and clothing industries were found to be appropriate.

The non-probability purposive sampling approach was used as the participants were well known by the Umlazi residents based on the services provided. The interviews took place at the participants' preferred location; it was thus more convenient to interview the participants at their homes or places of business. Expertise was used to choose the right individuals. Following the identification of a gap in the body of literature about the Umlazi community and informal-sector traders, the participants were pertinent in getting fresh perspectives on the influence of non-financial accessibility on the phenomena being examined. Clothing, Food service, Metal and Engineering, Hospitality, Land and Building, Culinary, Imports, Transportation, Human Resources, Logistics and Procurement, were among the informal sector industries included in the sample.

According to Creswell (2009), qualitative research is a method for comprehending, exploring, and eliciting thoughts and perceptions from participants regarding issues related to or identified as a problem using open-ended questions in the process of conducting empirical research. Since the study is qualitative, conducting interviews was chosen as the method of data collection; an interview guide was also created. Participants were asked questions to get firsthand knowledge of how non-financial accessibility affects traders in the informal trade sector. Semi-structured interviews were conducted to solicit attitudes, as a semi-structured interview permits and gives freedom for any additional questions that may arise during the interviews to be asked (Karatsareas, 2022).

Christou (2022) and Tracy (2024) postulate that qualitative analysis is the analysis of textual, audio, or visual data and covers a spectrum from confirmation to exploration, with content and thematic analysis being two prominent methods used for analysing message content. Both methods have similarities, as they involve codes and coding, which is a process of representing message content with convenient and abbreviated symbols. Saunders *et al.* (2016) concur that thematic analysis is the most utilised approach in analysing qualitative data, which is conducted by searching for themes and patterns that occur across a data set, such as interviews. Naeem *et al.* (2023) are of the same view and further state that these themes are used to address the research and comment on issues after the identification. Thematic analysis was more appropriate, as the research was qualitative.

4.1 Trustworthiness

A constant or single method cannot address the issue of quality in qualitative research, but verification of the credibility, dependability, confirmability, and transferability of the study may be used as a judgment measure regarding the trustworthiness and quality of the research (Chowdhury, 2015; Ahmed, 2024). In qualitative research, the assessment of quality cannot be confined to a single, rigid method. Instead, researchers must engage with a multidimensional framework to ensure the integrity and trustworthiness of their studies.

According to Chowdhury (2015) and Ahmed (2024), the concepts of credibility, dependability, confirmability, and transferability serve as essential criteria for evaluating qualitative research. These elements function collectively as verification strategies that provide a more nuanced and context-sensitive approach to assessing research quality. Credibility involves establishing confidence in the truth of the findings, often through techniques like member checking and triangulation. Dependability relates to the stability of data over time and under varying conditions, typically supported by an audit trail or transparent documentation of the research process. Confirmability ensures that the findings are shaped by the participants' experiences rather than researcher bias, while transferability refers to the applicability of findings to other settings or contexts, which is facilitated by thick, rich description. Emphasising these dimensions moves qualitative research beyond the constraints of standardisation and toward a more reflective and robust process of quality verification.

Anney (2014) and Haq *et al.* (2023) concur, stating that the rigour of qualitative findings and authenticity are based on the trustworthiness of the research. Credibility was ensured by using the interview technique of open-ended questions in a structured format in line with the study's objectives, which ensured that all the participants were privy to the same questions and the responses given were credible. By documenting all the participants' responses, reference purposes and consistency were achieved by adherence to the same interview guide for all participants, thus creating the dependability of the current study. Confirmability was achieved by asking similar questions to all the participants, and when the data were analysed, similar responses were grouped and coded

within the same theme. Transferability was achieved as research was conducted after the identification of a gap regarding the impact of non-financial accessibility of the Umlazi informal-sector traders; minimal prior studies had been found concerning the aim of the study. The current research can be used as a reference for future research.

4.2 Ethical Consideration

Creswell (2013) prescribes that in qualitative research, researchers encounter numerous ethical challenges during the data collection and data analysis stages. In a later work, Creswell (2015) reiterates that the researcher's primary obligation is to respect the values, needs, and rights of the participants or interviewees, highlighting that many scholars discussing qualitative research design emphasise the significance of ethical considerations. Similarly, Saunders et al. (2016), Newman et al. (2021), and Rivera et al. (2022) assert that ethical conduct involves alignment with the appropriate principles of a specific profession and that proper behaviour considers the rights of participants and others influenced by the research. In this study, obtaining participants' consent was a critically undertaken step.

Ensuring participants have given informed consent: Prior to commencing with the interviews, an overview of the study and the associated research questions was provided, and a consent form was presented for participants to sign, confirming their voluntary agreement to participate in the interview process.

Ensuring no harm comes to participants: By indicating that the identity of the participants will remain confidential, an assurance was given that no harm would occur.

Ensuring confidentiality and anonymity: The anonymity and confidentiality of the participants were protected by ensuring that once the information was gathered, individuals could not be recognised, as their names were kept confidential and their responses were assigned numerical labels such as Participant One, Participant Two, etc. It was emphasised that anonymity regarding the answers provided would be preserved, as there was no connection made between the participants' identities and their responses.

Ensuring that permission is obtained: The current study did not involve any specific company or businesses; hence, obtaining permission was not required. The study focused on informal-sector traders in Umlazi. Prior to starting the interviews, every participant signed a consent form allowing the interview to proceed, and they were informed of their right to withdraw at any point during the interview.

5. Data Analysis

5.1 Presentation of Data

The collection of empirical data from the respective participants was carried out through in-person interviews, employing the chosen method of data collection, along with an interview guide.

5.2 Demographics

Gender

Table 1. Represents the gender of participants

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	3	30	30	30
Female	7	70	70	100
Total	10	100	100	

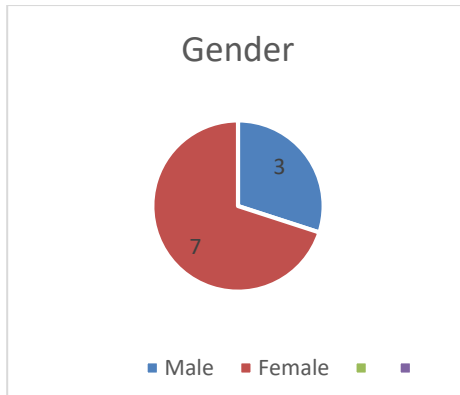


Fig. 1. Gender distribution of the participants

Table 1 and Fig. 1 display the participants based on gender distribution; a significant majority of the participants are female (seventy per cent), while males make up a smaller portion (thirty per cent). The trends observed within the informal sector industries in South Africa reveal that there is a higher number of female informal traders, with females representing forty-seven-point six per cent in contrast to thirty-point-six per cent of males (Statistics South Africa, 2018). In 2023, the figure had risen to fifty-one per cent of female informal sector traders (Statistics South Africa, 2025a).

Age

Table 2. Illustrates the age of the participants

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 20 years	0	0	0	0
21-30 years old	1	10	10	10
31-40 years old	3	30	30	40
41-50 years old	5	50	50	90
Older than 51 years old	1	10	10	100
Total	10	100	100	

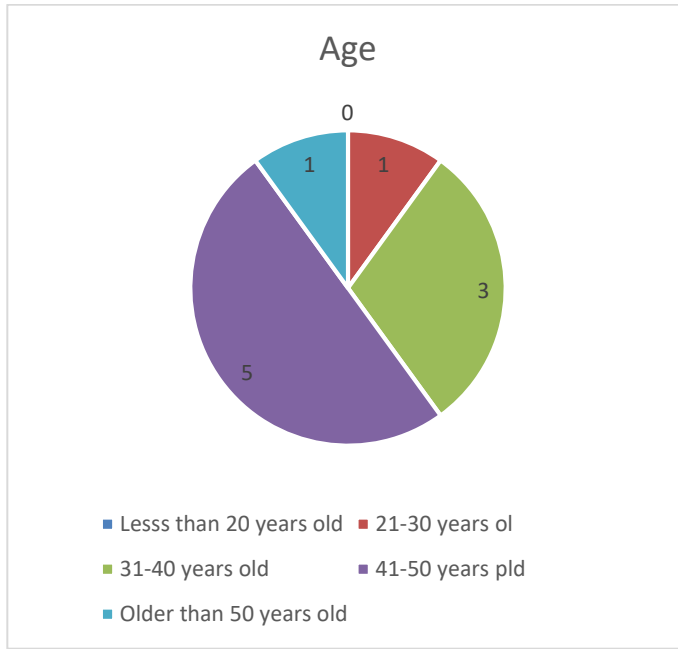


Fig. 2. Age distribution of the participants

Table 2 and Fig. 2 present the participants categorised by age. In South Africa, the unemployment rate is at 32,9% of the working-age population (15-64 years); the remainder of the population is involved in informal sector trading or is not employed at all (Statistics South Africa, 2025b). Statistics South Africa (2025a) also indicated that the age range of 45-54 years consistently exhibited the largest share of informal business traders during the 2023 trading year.

Number of years in business

Table 3. Portrays the number of years participants have been in business

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 1 year	1	10	10	10
Between 1 - 5 years	7	70	70	80
Between 6 - 10 years	0	0	0	80
Less than 10 years	2	20	20	100
Total	10	100	100	

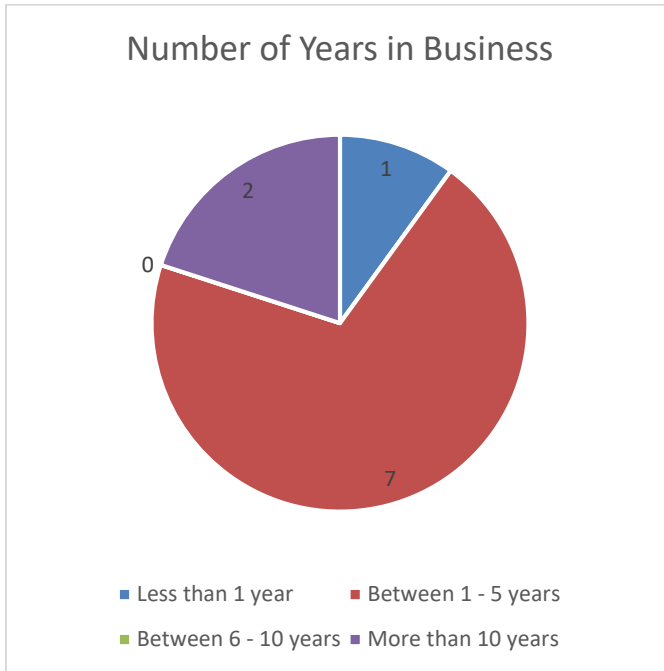


Fig. 3. Number of years participants have been in business

Table 3 and Fig. 3 present the number of years that informal sector traders have been in operation or trading. According to Fundie et al. (2015) and Kouam *et al.* (2022), the mismanagement and instability of informal sector enterprises reflect the financial and skill-related difficulties encountered by many informal traders. From the table presented, it is evident that only two participants have been involved in trading for over a decade.

Educational level

Table 4. Illustrates the education level of participants

	Frequency	Percent	Valid Percent	Cumulative Percent
No Matric	0	10	10	10
Matric	0	70	70	80
Diploma	4	0	0	80
Honours	2	20	20	100
Masters	0	100	100	
Doctorate	0			
Other	4			
Total	10	100	100	

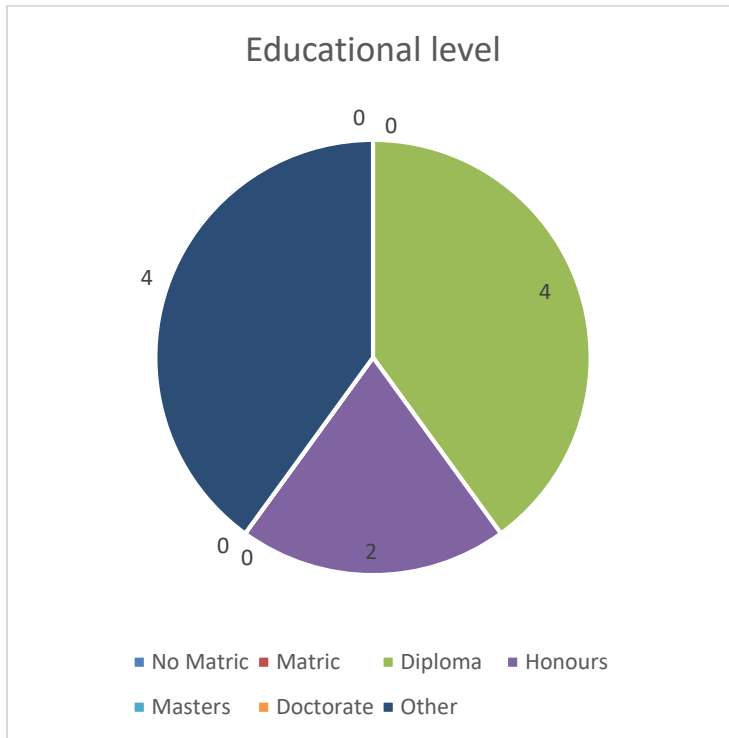


Fig. 4. Educational background of the participants

Table 4 and Fig. 4 show the educational backgrounds of the participants. Contrary to the belief that informal sector traders predominantly possess low levels of education, none of the participants had only completed matric (Horn, 2011; Khuzwayo, 2023 & Mkulisi, 2024).

5.3 Interpretation and Discussion of Emergent Themes

A thematic analysis was performed when the data were analysed and interpreted, leading to the identification of various codes (see Diagram 1 below), which were analysed using Atlas.ti software. Thereafter, the codes were categorised and organised into five primary themes derived from the qualitative interviews conducted:

- Inadequate communication;
- Monitoring, reviewing, and updating policies;
- Criteria for financial institutions;
- Skills training and development; and
- Discrimination.

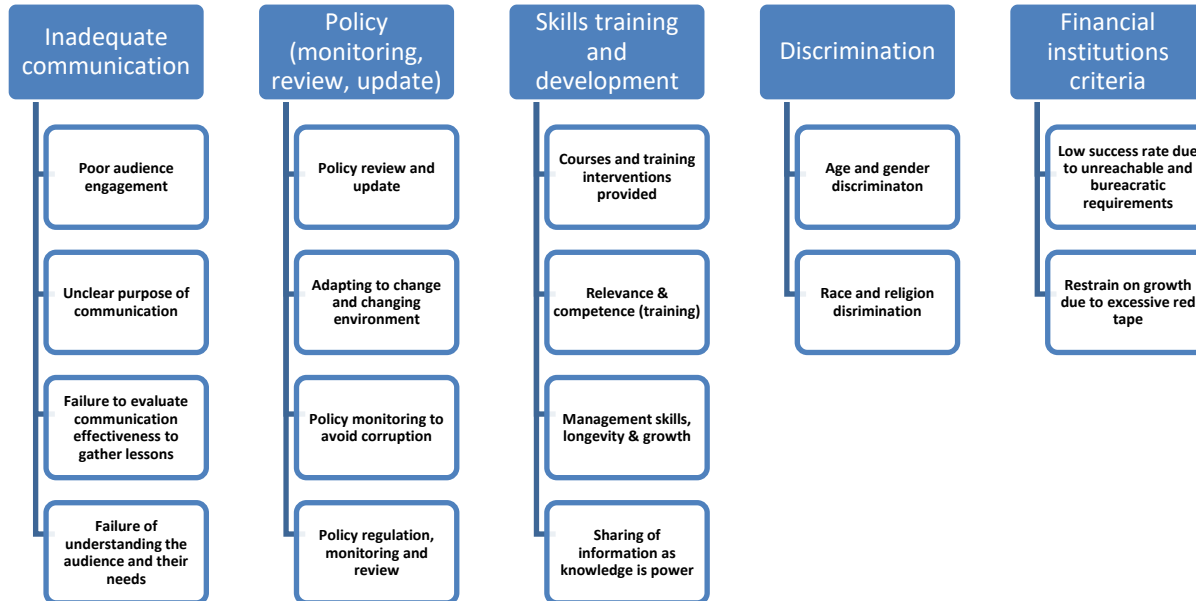


Fig. 5. Themes and Subthemes of the study

5.3.1 Inadequate Communication

Chaka and Adanlawo (2024) argue that effective communication is crucial for development and nation-building, playing an essential role in fostering social changes and progress within a community. A lack of effective communication has been noted, particularly in the sharing and dissemination of policy information. As informal sector traders are often unaware of local government development policies, these policies do not aid in their requests for financial assistance. Additionally, financial institutions also struggle with conveying effective communication; some participants mentioned that there is often insufficient communication from relevant financial institutions, making it challenging to even submit funding applications. Regarding the third objective related to training and developing business management skills for informal sector traders, participants indicated that they have not been informed of any management skills training and development programs that could assist them in successfully applying for financing.

The literature reviewed emphasises that effective communication is crucial for the government to ensure that individuals are made aware of their rights and informed about:

- Which government departments can provide services and support, and
- Which policies and regulations pertain to various areas, including education, health, and business?

Shavshukov and Zhuravleva (2023) state that the government's role in regulating and supervising the financial sector is unquestionable; however, the discussion centres on how to effectively fulfil this role. This necessitates careful attention to the design of policies and programs, along with enhancing the capacity and accessibility of delivery mechanisms, as well as focused efforts in raising awareness and improving communication.

5.3.2 Policy Monitoring, Review, and Update

South Africa operates as a democratic nation that employs various policies to steer decision-making and provide direction to state-owned entities, government departments across national, provincial, and local levels, public and private enterprises, as well as the general populace. The majority of respondents believe that government development policies aimed at assisting informal-sector traders in obtaining financial support lack adequate monitoring to ensure their effectiveness and are not frequently updated to adapt to the rapidly evolving business environment influenced by globalisation and the impact of the internet on both personal and business domains.

As indicated in the literature reviewed, it is the government's duty to guarantee that policies are established to ensure the effective management of the nation it governs. Policies should integrate into all levels of governance, including the financial sector, since these areas are closely linked to economic growth and the

overall financial health of a country; however, issues such as policy inertia, insufficient prioritization, and poor policy implementation continue to obstruct the realization of critical developmental objectives (South Africa, 2019c; Xiong & Dai, 2023; Ofoeda, Amoah, Anarfo & Abor, 2024).

5.3.3 Financial Institutions Criteria

Hayes (2019), Buha, Yevenko and Pastushenko (2023) characterise a financial institution (FI) as an entity engaged in monetary and financial transactions, which encompass activities like investments, loans, deposits, and currency exchange. The financial sector encompasses a diverse array of operations, including banks, insurance firms, investment dealers, trust companies, and non-banking entities such as government agencies. In South Africa, all financial institutions operate under regulatory policies and are required to respect the rule of law while conducting their financial activities. Participants reported that securing financial support is challenging due to the stringent requirements imposed by various financial institutions; informal sector traders often lack the necessary financial training and expertise to prepare financial statements, and due to insufficient communication from the government, many are unaware of which departments they should approach to meet the compliance criteria set by financial institutions.

Existing literature has highlighted the obstacles that informal sector traders encounter when seeking financial assistance from different financial institutions. Schraader et al. (2010) note that the minimum financial aid available from financial institutions poses a challenge in terms of non-financial accessibility, leading to limited or no success, as the capital demands can be prohibitively high. Etim and Daramola (2020) concur, stating that a key issue for informal sector traders is the difficulty in accessing finance, which hinders growth due to excessive bureaucratic hurdles, administrative challenges, and a lack of understanding from the entrepreneurs' side, contributing to the reluctance of financial institutions to provide funding for start-up businesses, particularly those without formal financial records.

5.3.4 Skills Training and Development

The participants were ultimately asked which training programs were designed to provide business management skills, and seven participants gave similar feedback regarding the training intervention implemented by SEDA, although they noted challenges concerning the relevance of the programs offered. The tendency to focus on government annual goals rather than engaging with informal sector traders to identify and understand their specific training requirements obstructs the financial assistance process.

When questioned about the effect of training programs on the business skills of informal-sector traders, the participants suggested that once training and development skills are acquired, these traders would be better equipped to manage their businesses and could empower other traders through knowledge sharing. Additionally, compliance with the financial institutions' criteria for

financial assistance would become achievable, as creating business plans and cash flow forecasts would be manageable.

Participants indicated that training programs would aid in the following ways:

- Identifying best practices to adopt and avoid in business operations;
- Financial Management skills to facilitate access to financial support;
- Planning and Time Management strategies;
- Business growth and sustainability;
- Recognising and implementing ideas for business expansion.

The reviewed literature supports the notion that possessing relevant abilities, knowledge, skills, attitudes, competencies, and values is crucial for successfully performing activities and is a key element for sustainable growth and development in any economic sector or area (Jafarov, 2025).

Bruwer and Smith (2018) affirm that inadequate basic business skills represent a significant socio-economic challenge in South Africa, and research has been undertaken on the development of individual business skills necessary for South African SMEs, as the prevailing belief is that enhancing basic business skills in these entities may positively impact their achievement of essential business objectives in the near future. Olomi et al. (2018) and Muzam (2023) further assert that all individuals possess the potential to be empowered to gain power and control by flexibly harnessing their talents, skills, and opportunities as they embark on a business-oriented journey from a fundamental level.

5.3.5 Discrimination

Akpan and Cascant-Sempere (2022) note that informal sector traders are facing discrimination in the creation of policies. The South African government's approach to the informal sector has been inconsistent, characterised by marginalisation, neglect, and intentional oppression and destruction. Discriminatory practices in politics and governance include bias against individuals and denying them their rights, treating a specific group more poorly than the general population based on factors such as race, age, gender, disability, religion, employment and industrial activity, marital status, and personal associations (Cambridge Dictionary, 2020).

Participants reported that local government officials display discriminatory behaviour in how they process and approve funding and tenders for informal sector traders, as well as in the requirements set by financial institutions for these traders seeking financial support, which are seen as racially biased. A male participant responded by indicating that "I was deprived of financial assistance based on gender, regardless of race, which was very discriminatory". When asked about training programs designed to provide business management skills to informal-sector traders, participants mentioned that these programs impose age restrictions perceived as discriminatory.

In agreement with the existing literature, Mijid and Bernasek (2013), Nguyen and Canh (2021) argue that access to credit is crucial for a firm's success; however, small businesses and informal sector traders encounter significant obstacles in obtaining external funding compared to larger enterprises. Research also indicates that minority-owned businesses experience greater rates of loan and financial denial when seeking loans compared to businesses owned by other racial groups, due to discrimination against small enterprises.

6. Conclusion

The current research intended to evaluate how demographics played a role in financing informal-sector traders within the Umlazi community in South Africa. This was accomplished through a literature review and data gathering via interviews with informal-sector traders involved in different industries. The study clarified concepts designed to respond to the research inquiries.

6.1 Findings from Literature Review

According to existing literature, trade within the informal sector has positively influenced the nation's economic growth, contributing to poverty alleviation and providing many families with sustainable livelihoods (Mpofu & Sibindi, 2022). Conversely, Phil-Ugochukwu (2024) noted that insufficient funding, which is critical for successful enterprises, obstructs business expansion, and governments should implement policies that encompass all areas, including the financial sector. The local government, positioned as the third-tier level in South Africa's constitutional democracy, is recognised as the closest to the populace and tasked with providing a range of basic yet vital services, serving as the initial point of contact and the most suitable platform for economic intervention related to local economic development (South Africa, 2018). Zeemering (2021) concurs that local municipalities are expected to address the needs, expectations, and interests of their communities, with economic development being a primary focus.

However, Khambule (2022) and Mkhize, Mthembu, and Napier (2023) have pointed out that, in South Africa, informal trading enterprises are generally regulated under the SME legal framework since there is no specific legislation governing the informal business sector. Sepadi and Nkosi (2023) support Nguimkeu & Okou (2021) by stating that bureaucratic obstacles and excessive red tape hinder access to finance and that many SME entrepreneurs lack understanding.

In summary, the reviewed literature outlines the following:

The government must ensure that policies are established to guarantee the effective and efficient management of the country; these policies should intersect across all areas, including finance, as financial institutions play a crucial role in economic growth, leading to a robust financial condition (South Africa, 2019c).

An increasing body of evidence indicates that finance and access to financial resources are vital for development, with financial institutions significantly impacting economic stability and growth, ultimately contributing to poverty reduction (World Bank, 2013).

A critical factor for the sustainable growth and development of any economic sector or activity is the presence of necessary competencies, skills, knowledge, and values that individuals require for successful performance (Muzam, 2023). Jafarov (2025) shares this perspective, noting that the lack of essential basic business skills prevents a substantial number of South African citizens from engaging in economic activities, resulting in a negative effect on the national economy.

6.2 Findings from the Primary Research

Participants from different sectors expressed concerns about communication barriers that have led to a situation where policy, financial, and training information is not reaching informal sector traders, preventing them from accessing funding opportunities and appropriate training.

The primary research conducted revealed the following findings:

Local government policies aimed at helping informal sector traders secure financial support were largely unknown, which resulted in a lack of awareness about how these policies facilitated access to financial assistance and how frequently they were updated, as participants largely agreed on this point.

Financial institutions imposed similar bureaucratic requirements that informal sector trading applicants had to navigate before receiving any financial aid. The overall conclusion was that these requirements were often difficult for informal sector traders to satisfy, mainly due to limited business administrative training, challenges in preparing financial documentation, from drafting business plans to creating cash flow statements, and the absence of guarantees or collateral, leading to a high rate of declined finance applications and minimal chances of success.

During interviews conducted in the primary research, a distinction was drawn between training and developmental programmes; stakeholders encouraged the government to take a more active role in utilising accessible communication channels to promote these programmes. The significant benefits that training programmes could have on the business skills of informal sector traders were underscored, demonstrating that improved skills would help them meet the requirements imposed by financial institutions, ultimately enhancing their access to financing.

7. Recommendations

The following recommendations are proposed after reaching the aim of the study:

7.1 Local Government Development Policies

Local government should disseminate policy information through freely distributed, accessible weekly newsletters or publications. These communications must clearly identify the relevant departments or offices that informal sector traders should contact for business registration, financial assistance, and training opportunities.

Cost-effective communication channels should be employed to ensure that informal traders can access information on development policies and funding opportunities. Furthermore, district councillors ought to establish community forums to gather traders' input as valuable contributions to policy reform. These forums can also serve as platforms for informing traders about contemporary business challenges and policy developments, including the implications of the Fourth Industrial Revolution and globalisation.

A comprehensive review of existing policies supporting informal sector traders in accessing financial aid is essential. Although funding is available to applicants aged eighteen to thirty-five, many traders over thirty-five possess substantial business acumen and require financial support to expand their enterprises. Policy frameworks should therefore be inclusive of all business sectors, including those engaged in imports, in light of globalisation and international trade dynamics affecting South Africa.

Regular business workshops should be organised to update informal traders on policy changes and developments relevant to their operations. This initiative would enhance policy comprehension, encourage compliance, and foster transparent communication.

7.2 Financial Sector Involvement

The financial sector requires a paradigm shift to recognise informal sector traders as viable recipients of financial support and to develop a broader understanding of the informal market. Addressing prejudice and discrimination is essential to improving the current financial relationship. When surety is the sole barrier preventing informal traders from accessing financing, government intervention is necessary. Letters of guarantee should be facilitated through relevant funding agencies, including the Department of Trade and Industry (DTI), the National Empowerment Fund (NEF), the Industrial Development Corporation (IDC), the Small Enterprise Finance Agency (SEFA), and the National Youth Development Agency (NYDA).

The government should adopt a more initiative-taking role in regulating how financial institutions assess financing applications from informal sector traders. Given that financial institutions are profit-driven and often base decisions on commercial viability, it is incumbent upon the government to ensure compliance with established regulations. A coordinated and comprehensive governmental approach would align financial practices with national development priorities while guiding financial institutions on relevant policy frameworks. This alignment could significantly improve the likelihood of funding being extended to informal sector traders.

7.3 Training and Developmental Business Management Skills

To effectively manage each level, the government must clearly distinguish between training and the development of business management skills. Greater emphasis on business studies should be integrated into the Department of Basic Education (DBE) curriculum. Restricting training based on factors such as age, gender, or years of trade fosters prejudice and discrimination. Competent business management skills are essential for creating profitable, sustainable businesses with growth potential. Training should be led by officials with firsthand experience in informal sector trading.

The Small Enterprise Development Agency (SEDA) should collaborate with all government branches to implement comprehensive training initiatives. A coordinated strategy is necessary to ensure traders receive instruction across relevant governmental domains. Furthermore, training programs must be effectively publicised. Government departments are encouraged to distribute informational booklets, engage schools, and utilise billboards, banners, and library posters for outreach.

8. Managerial Implications

Based on the recommendations discussed above, the following managerial implications are postulated:

Enhance policy communication and accessibility: Leaders at local, provincial and national levels must implement cost-effective, multi-channel communication to ensure traders receive timely policy and funding updates. Examples being the utilisation of community radio stations to broadcast information, newsletters in a language that the local community can understand without using jargon, and affordable communication tools.

Establish community forums for engagement: Leaders at local, provincial and national levels should institutionalise informal trader forums to gather feedback, refine policies, and educate traders on emerging trends like globalisation, e-commerce and the effect of the Fourth Industrial Revolution (4IR).

Review and Expand Policy Inclusivity: Leaders at local, provincial and national levels need to advocate for inclusive funding policies by removing age-based

restrictions, enabling experienced traders over the age of 35 to access financial support.

Facilitate and administer regular local business workshops: Leaders at local and provincial levels should institutionalise training programs that provide updates on policies, compliance requirements, and financial literacy to strengthen trader capacity.

Foster transparent engagement and communication with financial institutions: Leaders at provincial and national levels must be a mediation mechanism between informal traders and financial institutions to clarify eligibility criteria and reduce perceived discrimination.

9. Limitations of the Study

While this study provides valuable insights into the barriers faced by informal-sector traders in Umlazi, its scope was geographically limited to a single community. This constraint reduces the generalisability of findings across South Africa's nine provinces, which encompass diverse demographic profiles, industries, and socio-economic contexts. Furthermore, the qualitative approach adopted offered rich contextual understanding without the statistical validation that a mixed-method design could provide. Additionally, the study did not fully capture variations across racial groups, underscoring the need for broader, more inclusive investigations.

10. Recommendations for Future Research

The current study, together with the literature review, highlighted the need for further research because the analysis focused exclusively on the Umlazi community, even though South Africa comprises nine provinces and 278 municipalities. These municipalities represent diverse populations: men and women, young and old, and people from various racial backgrounds who participate in informal sector trading across multiple industries and often face barriers beyond financial constraints. Future research is essential to deepen understanding of the vital role informal-sector traders play in driving South Africa's economic growth. A mixed-methods approach is recommended to strengthen qualitative insights and build a more comprehensive theoretical framework through quantitative data collected via survey-based strategies (Saunders et al., 2016; Nanthagopan, 2021; Tzagarakis & Kritas, 2023).

Consent

As per international standards or university standards, Participants' written consent has been collected and preserved by the author(s).

Ethical Approval

As per international standards or university standards written ethical approval has been collected and preserved by the author(s).

Conference Disclaimer

Some part of this manuscript was previously presented and published in the conference: 18TH International Business Conference, 2025, Web Link of the proceeding: <https://internationalbusinessconference.com/an-exploratory-study-into-the-impact-of-non-financial-accessibility-on-informal-sector-traders-a-case-study-of-the-umlazi-community-in-south-africa/>.

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Author(s) hereby declare that generative AI technologies such as Large Language Models, etc. have been used during the writing or editing of manuscripts. This explanation will include the name, version, model, and source of the generative AI technology and as well as all input prompts provided to the generative AI technology.

Details of the AI usage are given below:

1. Grammarly and MS Editor was utilised for grammar and conciseness check during the editing process.
2. COPILOT was utilised to draft the Conceptual Framework diagram based on the data already forming part of the paper.

Competing Interests

Author has declared that no competing interests exist.

References

- Ahmed, S. K. (2024). The pillars of trustworthiness in qualitative research. *Journal of Medicine, Surgery, and Public Health*, 2, 100051. <https://doi.org/10.1016/j.gjmedi.2024.100051>
- Aigbavboa, S. V. (2022). An assessment of informal trading operations in Krugersdorp Central Business District South Africa (Master's thesis, University of Johannesburg). <https://hdl.handle.net/10210/505366>
- Akpan, I., & Cascant-Sempere, M. J. (2022). Do tax policies discriminate against female traders? A gender framework to study informal marketplaces in Nigeria. *Poverty & Public Policy*, 14(3), 287–306. <https://doi.org/10.1002/pop4.349>
- Anney, V. N. (2014). Ensuring the quality of the findings of qualitative research: Looking at trustworthiness criteria. *Journal of Emerging Trends in Educational Research and Policy Studies*, 5(2), 272–281. <https://repository.udsm.ac.tz/server/api/core/bitstreams/cead7c8d-1b27-4a88-809f-3a82a3cbf575/content>
- Ault, J. K., & Spicer, A. (2022). The formal institutional context of informal entrepreneurship: A cross-national, configurational-based perspective. *Research Policy*, 51(9), 104160. <https://doi.org/10.1016/j.respol.2020.104160>

- Ayton, D. (2023). Phenomenology. In D. Ayton, T. Tsindos, & D. Berkovic, Qualitative research – a practical guide for health and social care researchers and practitioners. Council of Australian University Librarians Open Educational Resources Collective. <https://oercollective.caul.edu.au/qualitative-research/>
- Brough, P. (Ed.). (2018). Advanced research methods for applied psychology: Design, analysis and reporting. Routledge. <https://doi.org/10.4324/9781315517971>
- Bruwer, J.-P., & Smith, J. (2018). The role of basic business skills development and their influence on South African small, medium and micro enterprise sustainability. *Journal of Economics and Behavioral Studies*, 10(2), 48–62. <https://doi.org/10.22610/jeps.v10i2.2216>
- Buha, H., Yevenko, D., & Pastushenko, V. (2023). Concept and classification of non-banking financial institutions. *Baltic Journal of Economic Studies*, 9(1), 18–26. <https://doi.org/10.30525/2256-0742/2023-9-1-18-26>
- Bushe, B. (2019). The causes and impact of business failure among small to micro and medium enterprises in South Africa. *Africa's Public Service Delivery & Performance Review*, 7(1), 1–26. <https://doi.org/10.4102/apsdpr.v7i1.210>
- Cambridge Dictionary. (2020). Discrimination. <https://dictionary.cambridge.org/dictionary/english/discrimination>
- Chaka, M., & Adanlawo, E. F. (2024). The role of communication in nation-building: A theoretical framework for South African national unity. *Studies in Media and Communication*, 12(3), 325–334. <https://doi.org/10.11114/smc.v12i3.7070>
- Chemero, A., & Käufer, S. (2021). Phenomenology: An introduction, 2nd Edition. Polity Press. <https://www.politybooks.com/bookdetail?isbn=9781509540662>
- Chowdhury, I. A. (2015). Issue of quality in a qualitative research: An overview. *Innovative Issues and Approaches in Social Sciences*, 8(1), 142–162. <https://doi.org/10.12959/issn.1855-0541.IIASS-2015-no1-art09>
- Christou, P. A. (2023). How to Use Thematic Analysis in Qualitative Research. *Journal of Qualitative Research in Tourism*, 3(2), 79–95. <https://doi.org/10.4337/jqrt.2023.0006>
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative and mixed methods approaches* (3rd ed.). Sage.
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Sage.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage Publications. <https://study.sagepub.com/creswellrd4e>
- Department of Government Communication and Information Systems (GCIS), 2017/18). <https://www.gcis.gov.za/content/resource-centre/sa-info/officialguide/2017-18>
- Dhawnarain, K. (2024). Access to finance and SME growth in the formal sector (Master's thesis, University of Pretoria, South Africa). <https://repository.up.ac.za/handle/2263/97990>

- Dlamini, M. V. (2015). Perceptions of informal local traders on the influence of emerging markets: Umlazi and Kwa-Mashu Townships (MBA mini-dissertation, University of KwaZulu-Natal). <https://researchspace.ukzn.ac.za/handle/10413/13000>
- Dlamini, S. (2023). The role of the institutional environment as a barrier or an enabler to entrepreneurial and innovation activity; the case of the South African green economy industry (Doctoral dissertation, University of Westminster) <https://doi.org/10.34737/w366w>
- Dodgson, J. E. (2023). Phenomenology: Researching the Lived Experience. *Journal of Human Lactation*, 39(3), 385-396. <https://doi.org/10.1177/08903344231176453>
- Enaifoghe, A., & Vezi-Magigaba, M. F. (2023). Conceptualizing the role of entrepreneurship and SME in fostering South Africa's local economic development. *International Journal of Research in Business & Social Science*, 12(4), 96–105. <https://doi.org/10.20525/ijrbs.v12i4.2444>
- eThekweni Municipality. (2016). Embracing micro business in the informal economy, eThekweni EDGE (Economic Development and Growth in eThekweni). eThekweni Municipality. http://www.durban.gov.za/Resource_Centre/edge/Documents/Edge%2017th%20Edition%20Microbusiness%20in%20the%20Informal%20Economy.pdf
- eThekweni Municipality. (2024). Integrated development plan (IDP): By 2030, eThekweni will be Africa's most caring and livable city. https://www.durban.gov.za/City_Government/IDP_Budget/Pages/Integrated-Development-Plan.aspx
- 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*, 6(4), 134. <https://doi.org/10.3390/joitmc6040134>
- Fourie, F. (2018). The South African informal sector: Creating jobs, reducing poverty. HSRC Press. <https://www.hsrcpress.ac.za/books/the-south-african-informal-sector-providing-jobs-reducing-poverty>
- Fundie, A. S., Chisoro, C., & Karodia, A. M. (2015). The challenges facing informal traders in the Hilbrow area of Johannesburg. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 4(6), 46–75. <https://doi.org/10.12816/0018968>
- Grant, C., & Osanloo, A. (2014). Understanding, selecting, and integrating a theoretical framework in dissertation research: Creating the blueprint for your “house.” *Administrative Issues Journal: Connecting Education, Practice, and Research*, 4(2), 12–26. <https://doi.org/10.5929/2014.4.2.9>
- Haq, Z. U., Rasheed, R., Rashid, A., & Akhter, S. (2023). Criteria for assessing and ensuring the trustworthiness in qualitative research. *International Journal of Business Reflections*, 4(2), 150–173. <https://doi.org/10.56249/ijbr.03.01.44>
- Hayes, A. (2019, September 25). Financial institution (FI). Investopedia. <https://www.investopedia.com/terms/f/financialinstitution.asp>

- Jafarov, S. (2025). Education and skill development: A pathway to sustainable growth. *International Journal of Scientific Research and Management*, 13(2), 3963–3969. <https://doi.org/10.18535/ijprm/v13i02.e106>
- Jonck, P., & Nwosu, L. (2022). The influence of demographic variables on financial record-keeping in small- and medium-sized enterprises in the South African informal sector. *Journal of Economic and Financial Sciences*, 15(1), 1–9. <https://doi.org/10.4102/jef.v15i1.681>
- Kabange, M. M., & Simatele, M. (2022). Constraints to formal small business performance in the service sector in Cameroon. *African Journal of Economic and Management Studies*, 13(3), 344–365. <https://doi.org/10.1108/AJEMS-07-2021-0331>
- Kajiita, R. M., & Kang'ethe, S. M. (2024). Socio-economic dynamics inhibiting inclusive urban economic development: Implications for sustainable urban development in South African cities. *Sustainability*, 16(7), 1–17. <https://doi.org/10.3390/su16072803>
- Karatsareas, P. (2022). Semi-structured interviews. In R. Kircher & L. Zipp (Eds.), *Research methods in language attitudes* (pp. 99-113). Cambridge University Press. <https://doi.org/10.1017/9781108867788.010>
- Khambule, I. (2022). COVID-19 and the informal economy in a small-town in South Africa: Governance implications in the post-COVID era. *Cogent Social Sciences*, 8(1), 1–16. <https://doi.org/10.1080/23311886.2022.2078528>
- Khuzwayo, F. (2023). *A qualitative analysis of the informal social networks of street traders in the Pretoria Central Business District, South Africa* (Doctoral dissertation, University of Pretoria).
- Koma, S. B. (2013). The trajectory of economic development policies in South Africa. *Administratio Publica*, 21(1), 142–160. <https://doi.org/10.10520/ejic-adminpub-v21-n1-a9>
- Korsunova, A., Halme, M., Kourula, A., Levänen, J., & Lima-Toivanen, M. (2022). Necessity-driven circular economy in low-income contexts: How informal sector practices retain value for circularity. *Global Environmental Change*, 76, 102573. <https://doi.org/10.1016/j.gloenvcha.2022.102573>
- Kouam, J. C., Asongu, S. A., Meh, B. J., Nantchouang, R., Asanga, F. L., & Foretia, D. (2024). Duration of support and financial health of business support structures in Burkina Faso, Cameroon, and Ghana. *Journal of African Business*, 25(4), 728–746. <https://doi.org/10.1080/15228916.2023.2257554>
- Magidi, M. (2022). The role of the informal economy in promoting urban sustainability: Evidence from a small Zimbabwean town. *Development Southern Africa*, 39(2), 209–223. <https://doi.org/10.1080/0376835X.2021.1925088>
- Makri, C., & Neely, A. (2021). Grounded theory: A guide for exploratory studies in management research. *International Journal of Qualitative Methods*. <https://doi.org/10.1177/16094069211013654>
- Masuda, H., Kawakubo, S., Okitasari, M., & Morita, K. (2022). Exploring the role of local governments as intermediaries to facilitate partnerships for the Sustainable Development Goals. *Sustainable Cities and Society*. <https://doi.org/10.1016/j.scs.2022.103883>

- Matamanda, A. R., Nel, V., Chanza, N., Leboto-Khetsi, L., Mangara, F., & Paradza, P. (2022). The political economy of COVID-19 pandemic: Lessons learned from the responses of local government in Sub-Saharan Africa. In C. N. Silva (Ed.), *Local government and the COVID-19 pandemic: A global perspective* (pp. 103–128). Springer. https://doi.org/10.1007/978-3-030-91112-6_5
- Matos, S., & Hall, J. (2020). An exploratory study of entrepreneurs in impoverished communities. *Entrepreneurship and Regional Development*, 32(1–2), 134–155. <https://doi.org/10.1080/08985626.2019.1640476>
- Mhlongo, T., & Daya, P. (2023). Challenges faced by small, medium and micro enterprises in Gauteng: A case for entrepreneurial leadership as an essential tool for success. *Southern African Journal of Entrepreneurship and Small Business Management*, 15(1), 1–12. <https://doi.org/10.4102/sajesbm.v15i1.591>
- Mijid, N., & Bernasek, A. (2013). Decomposing racial and ethnic differences in small business lending: Evidence of discrimination. *Review of Social Economy*, 71(4), 443–473. <https://doi.org/10.1080/00346764.2012.761751>
- Miti, J. J., Perkiö, M., Metteri, A., & Atkins, S. (2021). The informal sector and social protection. In E. Schüring & M. Loewe (Eds.), *Handbook on social protection systems* (pp. 389–402). Edward Elgar. <https://doi.org/10.4337/9781839109119.00052>
- Mkhize, X., Mthembu, B. E., & Napier, C. (2023). Transforming a local food system to address food and nutrition insecurity in an urban informal settlement area: A study in Umlazi Township in Durban, South Africa. *Journal of Agriculture and Food Research*, 12, 100565. <https://doi.org/10.1016/j.jafr.2023.100565>
- Mkulisi, S. (2024). Assessing some socio-economic and demographic changes affecting the employment in the informal sector between the years 2017 and 2020. (Master's thesis, University of the Western Cape). <https://hdl.handle.net/10566/14865>
- Mpofu, O., & Sibindi, A. B. (2022). Informal Finance: A Boon or Bane for African SMEs?. *Journal of Risk and Financial Management*. <https://doi.org/10.3390/jrfm15060270>
- Mugano, G. (2023). Role of SMEs in economic development in Africa. In G. Mugano & N. Dorasamy, **SMEs and economic development in Africa** (pp. 1–16). Routledge. <https://doi.org/10.4324/9781003413172>
- 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. <https://doi.org/10.1080/23322373.2020.1777817>
- Muzam, J. (2022). The challenges of modern economy on the competencies of knowledge workers. *Journal of the Knowledge Economy*, 14(2), 1635–1671. <https://doi.org/10.1007/s13132-022-00979-y>

- Naeem, M., Ozuem, W., Howell, K., & Ranfagni, S. (2023). A step-by-step process of thematic analysis to develop a conceptual model in qualitative research. *International Journal of Qualitative Methods*. <https://doi.org/10.1177/16094069231205789>
- National Treasury, Republic of South Africa. (2019). Budget Review 2019. <https://www.treasury.gov.za>
- Neuendorf, K. A. (2019). *Advanced research methods for applied psychologists: Design, analysis and reporting*. New York, NY: Routledge.
- Newman, P. A., Guta, A., & Black, T. (2021). Ethical considerations for qualitative research methods during the COVID-19 pandemic and other emergency situations: navigating the virtual field. *International Journal of Qualitative Methods*. <https://doi.org/10.1177/16094069211047823>
- Nguimkeu, P., & Okou, C. (2021). Leveraging digital technologies to boost productivity in the informal sector in Sub-Saharan Africa. *Review of Policy Research*, 38(6), 707–731. <https://doi.org/10.1111/ropr.12441>
- Nguyen, B., & Canh, N. P. (2021). Formal and informal financing decisions of small businesses. *Small Business Economics*, 57(3), 1545–1567 <https://doi.org/10.1007/s11187-020-00361-9>
- Ofoeda, I., Amoah, L., Anarfo, E. B., & Abor, J. Y. (2024). Financial inclusion and economic growth. *International Journal of Finance & Economics*, 29(1), 832–848. <https://doi.org/10.1002/ijfe.2709>
- Okunlola, J. O., & Hendricks, W. (2022). Functionality of secondary education: An investigation into numeracy, literacy, and civic/citizenship competencies of secondary school graduates in rural communities of Southwestern Nigeria. *Universal Journal of Educational Research*, 10(8), 489–503. <https://doi.org/10.13189/ujer.2022.100801>
- Olarewaju, O., & Msomi, T. (2021). Factors affecting SMEs' financial sustainability. *African Journal of Inter/Multidisciplinary Studies*, 3(1), 103–117. <https://doi.org/10.51415/ajims.v3i1.893>
- Olomi, D., Charles, G., & Juma, N. (2018). An inclusive approach to regulating the second economy: A tale of four Sub-Saharan African economies. *Journal of Entrepreneurship in Emerging Economies*, 10(3), 447–471. <https://doi.org/10.1108/JEEE-08-2017-0056>
- Otto, W. H. (2022). The impact of the business environment in South Africa on the management of trade credit in SMEs (Doctoral thesis, University of Johannesburg). <https://hdl.handle.net/10210/503093>
- Phil-Ugochukwu, A. I. (2024). Informal financial savings practices to facilitate formal financial inclusion. *World Journal of Advanced Research and Reviews*, 24(3), 1970–1979. <https://doi.org/10.30574/wjarr.2024.24.3.3779>
- Priya, A. (2020). Case Study Methodology of Qualitative Research: Key Attributes and Navigating the Conundrums in Its Application. *Sociological Bulletin*, 70(1), 94–110. <https://doi.org/10.1177/0038022920970318>
- Quartey, P., Turkson, E., Abor, J. Y., & Iddrisu, A. M. (2017). Financing the growth of SMEs in Africa: What are the constraints to SME financing within ECOWAS?. *Review of Development Finance*, 7(1), 18–28. <https://doi.org/10.1016/j.rdf.2017.03.001>

- Quendler, E., & Lamb, M. (2016). Learning as a lifelong process - meeting the challenges of the changing employability landscape: competences, skills and knowledge for sustainable development. *International Journal of Continuing Engineering Education and Life-Long Learning*, 26(3), 273–293. <https://doi.org/10.1504/IJCEELL.2016.078447>
- Rens, V., Iwu, C. G., Tengeh, R. K., & Esambe, E. E. (2021). SMEs, Economic Growth, and Business Incubation Conundrum in South Africa: A Literature Appraisal. *Journal of Management and Research*, 8(2), 214–251. <https://doi.org/10.29145/jmr/82/08>
- Republic of South Africa. (1996). Constitution of the Republic of South Africa, 1996, Chapter 7: Local Government. <https://www.gov.za/documents/constitution/chapter-7-local-government-constitution-republic-south-africa-1996>.
- Rivera, S. C., Aiyegbusi, O. L., Ives, J., Draper, H., Mercieca-Bebber, R., Ells, C., & Calvert, M. J. (2022). Ethical considerations for patient-reported outcomes. *JAMA*, 327(19), 1910–1919. <https://doi.org/10.1001/jama.2022.6421>
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*. Pearson Education.
- Saunders, M., Lewis, P., & Thornhill, A. (2016). *Research methods for business students* (7th ed.). Pearson Education.
- Schneider, F., Morkunas, M., & Quendler, E. (2023). An estimation of the informal economy in the agricultural sector in the EU-15 from 1996 to 2019. *Agribusiness*, 39(2), 406–447. <https://doi.org/10.1002/agr.21774>
- Schraader, D., Whittaker, L., & McKay, I. (2010). Debt financing the capital requirements of South African informal market traders. *South African Journal of Economic and Management Sciences*, 13(3), 329–344. <https://doi.org/10.4102/sajems.v13i3.105>
- Schraader, D., Whittaker, L., & McKay, I. (2010). Debt financing the capital requirements of South African informal market traders. *South African Journal of Economic and Management Sciences*. <https://doi.org/10.4102/sajems.v13i3.105>
- Sepadi, M. M., & Nkosi, V. (2023). Strengthening Urban Informal Trading and Improving the Health of Vendors: An Integrated Management Model. *International Journal of Environmental Research and Public Health*, 20(6). <https://doi.org/10.3390/ijerph20064836>
- Shahzad, K., Ahmed, J., & Fatima, K. (2023). Identification of informal economic sectors of Quetta City. *Central European Management Journal*, 31(4), 102–118. <https://doi.org/10.32052/23364890.cemj.31.4.118>
- Shavshukov, V. M., & Zhuravleva, N. A. (2023). National and International Financial Market Regulation and Supervision Systems: Challenges and Solutions. *Journal of Risk and Financial Management*, 16(6), 289. <https://doi.org/10.3390/jrfm16060289>
- Sibiya, A., van der Westhuizen, J., & Sibiya, B. (2023). Challenges Experienced by SMMEs and Interventions by the South African National and Provincial Government: A Literature Review. *African Journal of Inter/Multidisciplinary Studies*, 5(1), 1–11. <https://doi.org/10.51415/ajims.v5i1.1224>

- Simba, A., Tajeddin, M., Dana, L. P., & Ribeiro Soriano, D. E. (2024). Deconstructing involuntary financial exclusion: a focus on African SMEs. *Small Business Economics*, 62(1), 285–305. <https://doi.org/10.1007/s11187-023-00767-1>
- South Africa. (2016). Economic Development and Growth in eThekweni-eThekweni Municipality (2016). *EDGE*, 17. EThekweni.
- South Africa. (2018). South Africa yearbook 2017/18. Government Communication and Information System. <https://www.gcis.gov.za/content/south-africa-yearbook-201718>
- South Africa. (2019b). Policy for the informal economy of KwaZulu-Natal. Department of Economic Development and Tourism, KwaZulu-Natal Provincial Government.
- South Africa. 2006. South Africa Constitution 2006 Chapter 7 Local Government.
- South Africa. National Treasury. (2019). Economic transformation, inclusive growth, and competitiveness: Towards an Economic Strategy for South Africa. National Treasury. <https://www.polity.org.za/article/economic-transformation-inclusive-growth-competitiveness-towards-an-economic-strategy-for-south-africa-2019-08-28>
- Statistics South Africa. (2018). Quarterly Labour Force Survey, statistical release P0211, Quarter 2: 2018. Statistics South Africa. <https://doi.org/10.25828/r7by-fv52>
- Statistics South Africa. (2025a). *Survey of employers and the self-employed (SESE), 2023, statistical release P0276*. Government Printers.
- Statistics South Africa. (2025b). Quarterly labour force survey, Quarter 1: 2025 (Statistical Release P0211). Statistics South Africa. <https://www.statssa.gov.za/publications/P0211/P02111stQuarter2025.pdf>
- Sultana, N., Rahman, M. M., & Khanam, R. (2022). The effect of the informal sector on sustainable development: Evidence from developing countries. *Business Strategy & Development*, 5(4), 437–451. <https://doi.org/10.1002/bsd2.217>
- Thwala, S., Masiya, T., & Lubinga, S. N. (2023). Contribution of the informal sector towards sustainable livelihoods: evidence from Khayelitsha Township, Cape Town. *International Journal of Sociology and Social Policy*, 43(13/14), 90–105. <https://doi.org/10.1108/IJSSP-11-2022-0289>
- Tracy, S. J. (2024). *Qualitative research methods: Collecting evidence, crafting analysis, communicating impact*. John Wiley & Sons. <https://www.wiley.com/en-us/Qualitative+Research+Methods%3A+Collecting+Evidence%2C+Crafting+Analysis%2C+Communicating+Impact%2C+3rd+Edition-p-9781119988656>
- Tzagkarakis, S. I., & Kritas, D. (2023). Mixed research methods in political science and governance: approaches and applications. *Quality & Quantity*, 57(Suppl. 1), 39–53. <https://doi.org/10.1007/s11135-022-01384-y>
- Varpio, L., Paradis, E., Uijtdehaage, S., & Young, M. (2020). The distinctions between theory, theoretical framework, and conceptual framework. *Academic Medicine*, 95(7), 989–994. <https://doi.org/10.1097/ACM.0000000000003075>

- Vivek, R., & Nanthagopan, Y. (2021). Review and Comparison of Multi-Method and Mixed Method Application in Research Studies. *European Journal of Management Issues*. <https://doi.org/10.15421/192119>
- World Bank. (2013). Global financial development report: Rethinking the role of the state in finance. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/853761468326979957>
- Xiong, Y., & Dai, L. (2023). Does Green Finance Investment Impact on Sustainable Development: Role of Technological Innovation and Renewable Energy. *Renewable Energy*, 214, 342–349. <https://doi.org/10.1016/j.renene.2023.06.002>
- Yin, R. (2009). *Case study research: Design and methods* (4th ed.). SAGE Publications.
- Zeemering, E. S. (2021). Sustainability management, strategy and reform in local government. In **Sustainable public management** (pp. 141–158). Routledge. <https://doi.org/10.1080/14719037.2017.1293148>
- Zogli, L. J., Dlala, N., & Dlamini, B. I. (2021). Assessing the challenges faced by informal street traders operating in Durban, South Africa. *International Journal of Entrepreneurship and Business Development*, 4(4), 412–417. <https://doi.org/10.29138/ijebd.v4i4.1418>

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Peer-Review History:

This chapter was reviewed by following the Advanced Open Peer Review policy. This chapter was thoroughly checked to prevent plagiarism. As per editorial policy, a minimum of two peer-reviewers reviewed the manuscript. After review and revision of the manuscript, the Book Editor approved the manuscript for final publication. Peer review comments, comments of the editor(s), etc. are available here: <https://peerreviewarchive.com/review-history/6771.6>

Strategic Drivers of Success in Unconventional Oil and Gas Projects for Sustainable Economic Inclusion in South Africa

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DOI: <https://doi.org/10.9734/bpi/mono/978-81-998711-1-3/CH7>

Peer-Review History:

This chapter was reviewed by following the Advanced Open Peer Review policy. This chapter was thoroughly checked to prevent plagiarism. As per editorial policy, a minimum of two peer-reviewers reviewed the manuscript. After review and revision of the manuscript, the Book Editor approved the manuscript for final publication. Peer review comments, comments of the editor(s), etc. are available here: <https://peerreviewarchive.com/review-history/6771.7>

Abstract

Project managers in South Africa point to both strategic and operational drivers for unconventional oil and gas development (UOGD). Strategically, UOGD is framed as a way to strengthen energy security, diversify the national energy mix, and unlock gas-based industrial and infrastructure development that can widen participation in the economy. This paper examines the strategic drivers of success in unconventional oil and gas development (UOGD) projects in South Africa. It further explores how these drivers can support more sustainable forms of economic inclusion. The study responds to the country's dependence on imported crude oil and the slow progress of domestic UOGD. It also speaks to the need for credible pathways to broaden participation in the energy economy. A qualitative design was used, and semi-structured interviews were conducted with senior project managers from eight operators. At the time of the study, all eight held licences issued by the South African Agency for Promotion and Exploitation of Petroleum (SOC) Limited. All participants had more than 15 years of project-management experience and brought technical, legal, and strategic expertise. Interview data were transcribed, coded, and thematically analysed. The findings show that predictable regulation, coordinated licensing, and investment in midstream infrastructure are central to project viability. Governance stability and regulatory coherence are also important. Strong stakeholder relationships and fair risk allocation across the value chain emerged as further strategic drivers. The study shows that UOGD can support sustainable economic inclusion only when key conditions align, such as technical capability, governance quality, environmental safeguards and inclusive engagement. This study contributes to

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scientific knowledge by identifying project-level factors that enable UOGD in contested regulatory and social conditions. The study provides a practical framework that can be tested in other emerging economies with similar governance complexity. It also draws attention to implications for policymakers, including the need for clearer regulation, coordinated approvals and long-term infrastructure planning.

Keywords: Critical success factors; fracking; petroleum; project management; unconventional oil and gas development (UOGD).

1. Introduction

1.1 Unconventional Oil and Gas Development (UOGD) in South Africa and Globally

Unconventional oil and gas development (UOGD) has become an important driver of upstream portfolio diversification globally. However, progress in South Africa remains cautious and uneven. Recent scholarship shows that while the Karoo Basin retains potential as a domestic gas source, subsurface uncertainty, unresolved regulatory questions and weak institutional capacity limit investor confidence and long-term planning (Esterhuysen, 2023; Hemingway & Gormally-Sutton, 2024). In addition, UOGD is embedded in broader debates about water security, cumulative environmental risk and the justice dimensions of South Africa's energy transition, with public perceptions of risk and trust in government emerging as central to any social licence to operate (Redelinghuys et al., 2024; Coban et al., 2024). These national dynamics suggest that strategic project drivers cannot be reduced to geology and price cycles alone; they also depend on credible regulatory pathways, enforceable groundwater protections and inclusive engagement processes that align UOGD with long-term sustainable development and economic inclusion objectives (Esterhuysen, 2023; Hemingway & Gormally-Sutton, 2024).

International evidence on large oil and gas projects supports the importance of governance, risk management and portfolio-level coordination as critical success factors. A recent megaproject portfolio study identifies proactive learning, flexible governance and aligned leadership as key drivers of strategic fit, risk control and value creation across complex project pipelines (Berge et al., 2025). Empirical work on oil and gas project risk further shows that structured, data-driven risk management in the production phase improves safety outcomes and limits cost and schedule overruns, particularly when advanced decision-support tools are integrated into project controls (Khalilzadeh et al., 2025). At the project level, critical success factor analyses emphasise stakeholder engagement, contract strategy, supply-chain reliability and front-end planning as determinants of performance in upstream petroleum settings (Ayanaba et al., 2023; Singh et al., 2025). These studies suggest that strategic drivers of success in South African UOGD will need to couple robust technical and risk-management capabilities with context-specific governance, social and environmental arrangements if unconventional resources are to contribute meaningfully to sustainable economic

inclusion. The importance of this research lies in clarifying the strategic drivers that influence investment confidence and delivery capacity. It addresses a gap linking project management success factors to social legitimacy, environmental oversight and inclusion outcomes in the UOGD sector.

1.2 Strategic and Operational Motivations

Project managers in South Africa point to both strategic and operational drivers for unconventional oil and gas development (UOGD). Strategically, UOGD is framed as a way to strengthen energy security, diversify the national energy mix, and unlock gas-based industrial and infrastructure development that can widen participation in the economy. At the project level, operators focus on portfolio diversification, first-mover learning effects, and the potential to build local engineering and service capabilities. Across these perspectives, however, three gating conditions recur. These include clear and enforceable regulation, credible subsurface data, and a stable social licence to operate (Esterhuysen, 2023; Hemingway & Gormally-Sutton, 2024). Recent South African work shows that groundwater governance, institutional capacity and coordination across regulators are central to investment confidence, particularly in water-scarce regions such as the Karoo (Hemingway & Gormally-Sutton, 2024; Esterhuysen, 2023). Detailed geomechanical and reservoir characterisation studies in the Bredasdorp Basin further demonstrate that high-quality subsurface data are now a practical precondition for de-risking hydraulic fracturing designs and capital commitments (Zangqa et al., 2024). These findings suggest that governance quality and technical certainty are as important as resource potential for project success and long-term economic inclusion.

Hydraulic fracturing remains the main stimulation technique. Recent international and South African research shows a consistent bundle of execution risks. These include water sourcing and disposal, well integrity, induced seismicity, and surface disturbance (Al Krmagi, 2024; Zangqa et al., 2024). These risks now sit at the centre of regulatory scrutiny and project risk registers. They have direct implications for cost, schedule, and financing. Studies on risk management in oil and gas projects show that systematic risk identification, response planning, and monitoring improve project performance. They also reduce cost escalation, particularly where HSE obligations are strict (Khalilzadeh et al., 2025; Al Krmagi, 2024). In South Africa, public perceptions of fairness, transparency, and benefit-sharing strongly influence the social licence to operate. Mistrust and perceived injustice often lead to legal challenges, delays, and higher transaction costs (Redelinghuys et al., 2024). For UOGD to support sustainable economic inclusion, several strategic drivers should align. These include predictable and capacitated regulation, robust hydrogeological and reservoir data, disciplined environmental and social risk management, and credible mechanisms for local employment, procurement, and revenue participation (Esterhuysen, 2023; Redelinghuys et al., 2024).

1.3 Problem Statement

South Africa remains heavily reliant on imported crude oil and refined products for its liquid fuel needs. This exposes the economy to global supply disruptions and price volatility. Recent analyses of the country's energy system show that this dependence, together with ageing infrastructure and governance constraints, undermines energy security. It also raises systemic transition risk (Anekwe & Akpasi, 2024). In this context, unconventional oil and gas development (UOGD) is viewed as a possible strategic option. It could diversify supply and unlock domestic gas resources. However, it should align with just energy transition commitments and broader decarbonisation pathways (Esterhuysen, 2023). International work on transition pathways similarly positions natural gas as a potential bridging fuel that supports reliability and system flexibility. At the same time, scholars warn against locking countries into long-term carbon-intensive assets (Kulušić et al., 2024).

However, UOGD in South Africa faces persistent structural barriers. Policy and regulatory uncertainty slow progress. Lengthy environmental approval processes and contested decision-making spaces further delay projects and weaken investor confidence (Esterhuysen, 2023). Empirical studies on public perceptions show that communities question risk governance, distributive fairness, and long-term benefits. These concerns erode the social licence to operate and increase the likelihood of litigation and mobilisation (Redelinghuys, Esterhuysen & Goodrick, 2024). International evidence reinforces this picture. Research shows that unconventional projects often reproduce economic vulnerability, environmental risk, and procedural exclusion when governance and accountability mechanisms are weak (Malin, Mayer & Hazboun, 2023). Project managers should therefore operate within a strategic framework that balances multiple demands. This includes clear regulatory signals, transparent risk management, and inclusive stakeholder engagement. It should also align with national energy-security objectives. Only then can UOGD contribute credibly to sustainable economic inclusion in South Africa (Molepo, Aboalez & Mathaba, 2025).

1.4 Research Gap

Most recent South African scholarship on unconventional oil and gas development (UOGD) has focused on environmental risk, groundwater protection, governance gaps, and community resistance, particularly in the Karoo. These studies map how UOGD debates have evolved over time. They reveal uncertainty in the regulatory framework and document public concerns about water security, ecosystem impacts, and distributive justice (Esterhuysen, 2023; Redelinghuys, Esterhuysen & Goodrick, 2024; Hemingway & Gormally-Sutton, 2024). While this work is valuable for understanding the policy and social context, it offers limited attention to project management questions. It seldom asks which critical success factors (CSFs) enable delivery of UOGD projects under contested conditions, or how these factors might support more inclusive economic outcomes. Current South African analyses also rarely examine how project governance, portfolio choices, or execution

capabilities could align with energy-security and inclusion objectives in a high-risk, low-trust environment (Coetzee, 2024; Mkhize & Nel-Sanders, 2023).

International research offers a complementary lens. Studies on megaprojects show that proactive knowledge sharing, flexible governance, and aligned leadership improve strategic fit and risk handling across portfolios (Berge et al., 2025). Research in the oil and gas sector shows the importance of project managers' behavioural competencies, such as communication, coordination, and adaptive decision-making, for achieving cost and schedule performance (Abdulla & McCauley-Smith, 2025; Lamprou & Vagiona, 2022). Work on digital transformation initiatives further shows that contracting strategy, supply-chain integration, data systems, and organisational learning function as CSFs that enhance efficiency and reduce implementation risk (Hasan et al., 2024; Al-Mhdawi et al., 2024). However, these insights have not been systematically tested in the South African UOGD context, where project progress is tightly bound to energy security, environmental safeguards, and the social licence to operate (Manik & Ekelund, 2023; Redelinghuys et al., 2024).

This study responds to this gap. It focuses specifically on the CSFs that matter for project managers working on UOGD in South Africa. It examines how governance arrangements, stakeholder relationships, and project-execution capabilities can be configured to improve project outcomes while supporting sustainable economic inclusion.

1.5 Aim, Research Question and Objective

The aim of this study was to identify the critical success factors (CSFs) that influence the planning, execution and delivery of unconventional oil and gas development (UOGD) projects in South Africa. The central research question was: What are the critical success factors that determine successful project management of UOGD projects in South Africa?

In line with this aim and question, the main objective of the study was to determine the CSFs that enable project managers' ability to deliver UOGD projects successfully within South Africa's complex regulatory, socio-environmental and institutional context (Esterhuysen, 2023; Redelinghuys et al., 2024; Coetzee, 2024).

1.6 Significance and Rationale

This study contributes to practice by offering project managers a framework for aligning governance, stakeholder management, risk management and contracting strategies to South African conditions. It contributes to research by extending international CSF literature into a South African context and provides empirical evidence from a developing economy under energy-security pressure (Hasan et al., 2024; Manik & Ekelund, 2023).

2. Literature Review

2.1 Global Perspectives on Unconventional Oil and Gas Development

The global energy sector has undergone major structural change in recent decades, with unconventional oil and gas development (UOGD) increasingly seen as a driver of supply diversification and energy resilience. Resources such as shale gas and tight gas have drawn attention as conventional reserves decline and alternative fossil-based sources are sought (Wang et al., 2024). In the United States and Canada, the commercialisation of shale gas has been transformative. These developments reshaped domestic energy balances and influenced international trade in gas (Tao, 2025). The perceived success of these projects has spurred exploration interest in regions such as Africa, Latin America and Asia (Ukoba, 2025).

Globally, UOGD projects operate in complex geopolitical, technological and environmental contexts. They are promoted as instruments of economic growth, energy independence and industrial competitiveness. At the same time, they are constrained by significant environmental risks including groundwater contamination, induced seismicity and greenhouse-gas emissions (Tao, 2025). These dual imperatives, stimulating growth while ensuring sustainability, generate project risks. Thus, project-management capabilities become central to the success or failure of UOGD initiatives (Wang et al., 2024). Recent international research has emphasised governance frameworks, stakeholder engagement and adaptive risk management as essential critical success factors (Guggilla, 2024). Furthermore, contracting strategies, supply-chain integration and organisational learning are now flagged as central to controlling cost and schedule risk in large upstream projects (Hasan et al., 2024).

2.2 The South African Context

South Africa's energy system remains heavily reliant on coal and imported crude oil, which leaves the economy exposed to global supply shocks and price volatility (Coetzee, 2024). Domestic petroleum production is minimal, and synthetic fuel operations remain the primary alternative (Coetzee, 2024). Within this setting, UOGD, especially shale-gas exploration in the Karoo basin, has been positioned as a potential contributor to energy security and economic diversification (Esterhuysen, 2023). However, development has been slow and contested, with barriers including fragmented governance, contested regulation and sustained public opposition on environmental grounds (Redelinghuys, Esterhuysen & Goodrick, 2024). The uncertain regulatory environment and slow approval processes add to investor risk (Mkhize & Nel-Sanders, 2023). These conditions emphasise the need for identifying context-specific CSFs for UOGD in South Africa, to balance technical feasibility with regulatory integrity and stakeholder expectations.

2.3 Project Management Success and Broader Project Success

Recent project management literature draws a clear distinction between project management success and overall project success. Project management success focuses on meeting cost, time and quality targets, while broader success includes stakeholder satisfaction, long-term value, environmental performance and legitimacy. Lamprou and Vagiona (2022) show that cost, schedule, quality and client satisfaction still dominate success criteria, but that these should be read together with financing and team capability. In oil and gas, Abdulla (2025) argues that sustainable project success depends on balancing efficiency (on-time, on-budget delivery) with effectiveness (strategic contribution, long-term outcomes). Al-khulaqi et al. (2023) similarly find that much of the literature still privileges project management success and underreports social and environmental outcomes in turnaround maintenance projects.

For unconventional oil and gas development (UOGD) in South Africa, success, therefore, cannot be defined only through technical delivery. It should also include social acceptance, environmental justice and equitable benefit distribution. Recent South African work shows how UOGD risk is socially constructed through group identities, media narratives and contested notions of justice, which in turn influence the social licence to operate (Redelinghuys et al., 2024; Goodrick & Redelinghuys, 2022). Manik and Ekelund (2023) further stress that ecosystem services, rural livelihoods and distributional impacts are central to assessing “success” in fracking debates. In this context, strategic drivers of success in UOGD should integrate classic project metrics with distributional, environmental and procedural justice outcomes.

2.4 Critical Success Factors in Oil and Gas Projects: Global Evidence and South African Insights

Global studies of oil and gas projects include a set of critical success factors (CSFs) that can be transferred to UOGD. Rostami and Ahangari (2023) show that scope, communication and risk management knowledge areas strongly influence CSFs in upstream oil and gas projects. A systematic review by Al-khulaqi et al. (2023) identifies governance, planning quality, contractor capability and safety management as recurring CSFs for turnaround maintenance. Al-Mhdawi et al. (2024) add that proactive risk identification, contract strategy and clear allocation of risk between client and contractor are central to limiting cost and schedule overruns in oil and gas construction projects. At the level of leadership and capability, Abdulla and McCauley-Smith (2025) show that project managers’ behavioural competences, particularly communication, stakeholder management and adaptability, significantly affect oil and gas project outcomes. Lamprou and Vagiona (2022) further find that project finance, team competence and the project manager’s experience are among the most influential CSFs across complex projects. These international insights point to governance, risk, communication and leadership as core strategic drivers of success in oil and gas portfolios.

South African work contextualises these factors in a contested regulatory and socio-environmental setting. Esterhuysen (2023) traces the historical evolution of South African UOGD regulation and shows how fragmented mandates and overlapping laws increase project uncertainty and risk. Coetzee's (2024) doctoral study on onshore unconventional gas argues that effective regulation of the water–energy–food nexus, with clear institutional roles and enforcement capacity, is a precondition for credible investment. Hemingway and Gormally-Sutton (2024) emphasise the importance of groundwater governance arrangements, baseline data and monitoring frameworks for UOGD approvals in water-scarce regions. From a social perspective, Redelinghuys et al. (2024) emphasise that stakeholder trust, transparent communication and meaningful participation strongly influence perceptions of risk and fairness, thereby affecting timelines and legal contestation. Manik and Ekelund (2023) show that local benefit-sharing and protection of ecosystem services are central to public acceptance of fracking proposals. Clark (2022) adds that the viability of gas as a “transition fuel” depends on policy coherence and alignment with broader energy-transition and development goals. These South African studies suggest that regulatory clarity, hydro-social governance, community trust and coherent energy policy are context-specific CSFs for UOGD.

2.5 Managing Complexity and Synthesising Strategic Drivers for Inclusive UOGD

Oil and gas projects are characterised by high capital intensity, subsurface uncertainty and volatile markets. Recent work shows that project success in this environment depends on integrated approaches to complexity and risk. Musoma (2024), in a Tanzanian gas case, finds that local content, employment and revenue-sharing arrangements are critical to translating gas projects into improved community outcomes. Abdulla (2025) argues that sustainable project success in oil and gas requires combining operational performance with long-term value creation, organisational learning and stakeholder alignment. For South Africa, UOGD complexity is intensified by water scarcity, strong civil-society oversight and a legacy of unequal resource governance. Esterhuysen (2023) and Coetzee (2024) both underline that project-level CSFs should be aligned with system-level governance reforms if UOGD is to proceed without amplifying social and environmental risk. Redelinghuys et al. (2024) show that risk perceptions are mediated by media, group identities and historical mistrust, making risk communication and participatory processes central strategic levers rather than secondary tasks.

The literature suggests that strategic drivers of success in South African UOGD include robust governance and regulatory coherence; integrated risk and water-energy-food management; competent and ethically grounded project leadership; and deliberate strategies for social licence, benefit-sharing and local capability development (Lamprou & Vagiona, 2022; Al-khulaqi et al., 2023; Al-Mhdawi et al., 2024). When these factors are in place, UOGD projects are more likely to meet both project management and broader success criteria, contributing to energy security and more inclusive economic outcomes in South Africa.

3. Research Methodology

3.1 Research Design

This study adopted a social constructionist approach, recognising that knowledge is socially produced and meaning arises through interaction within context. Project managers were invited to articulate their lived experiences of leading unconventional oil and gas development (UOGD) projects in South Africa. This allowed participants to frame their perceptions of critical success factors (CSFs) in their own terms, yielding contextualised insights into project dynamics. Interpretive paradigms of this kind have been used in project management scholarship where human agency, institutional complexity and organisational behaviour influence outcomes (Mbebe & Fourie, 2024).

Given the exploratory nature of the study in an under-explored sector such as UOGD, a qualitative design was employed. Qualitative methods are especially appropriate in contexts where socio-political, regulatory and technical factors converge in novel ways (Esterhuysen, 2023). Semi-structured interviews permitted in-depth exploration of strategic and operational challenges, and supported identification of CSFs grounded in participants' professional experience. This design aligns with international oil and gas scholarship, where qualitative approaches are used to examine governance, stakeholder engagement and risk management in complex project environments (Esterhuysen, 2023).

3.2 Sampling Strategy

A purposive sampling strategy was adopted, targeting senior professionals directly engaged in UOGD projects. The sample consisted of experienced project managers, each with at least 15 years' industry experience and handling multiple projects valued in the multi-million USD range. Geographic representation included both onshore (Karoo Basin) and coastal exploration blocks, and operator diversity included international majors and domestic independents. The diversity in project and company context enhanced the transferability of findings across different UOGD settings (Mbebe & Jowah, 2024).

3.3 Data Collection

Data were gathered via semi-structured interviews guided by an 11-question instrument covering participant education, work history, project scope, definitions of success, perceptions of CSFs, execution challenges and lessons learned. The format allowed probing of emerging themes while maintaining comparability across respondents (Esterhuysen, 2023). Interviews ranged from 60 to 90 minutes, conducted either in-person or via online platforms, recorded with informed consent and supplemented by field notes capturing non-verbal cues and contextual observations.

3.4 Data Analysis

Data analysis followed a three-stage process. First, interview records were transcribed and compiled. Second, a grounded thematic analysis was conducted, where open coding was followed by axial coding to identify linkages among CSFs, challenges, and outcomes. Third, themes were synthesised and compared with existing literature to generate assertions about CSFs in UOGD project management. This thematic approach aligns with qualitative traditions in oil and gas project research, which capture the interplay of technical, organisational, and socio-political factors (Mbebe & Jowah, 2024).

3.5 Reliability and Validity

Several measures were implemented to ensure reliability and validity. This entailed triangulation of participant accounts with secondary industry and academic sources, member-checking where thematic summaries were validated with participants, and transferability supported by detailed contextual description of participant roles and project settings (Esterhuysen, 2023). Dependability and confirmability were supported via an audit trail of coding decisions and methodology choices.

3.6 Ethical Considerations

Participation was voluntary, and informed consent was obtained prior to interviewing. Participant confidentiality was assured through anonymisation of transcripts and secure data storage. Ethical clearance was obtained from the university's research ethics committee in accordance with South African protocols for human-participant research (Mbebe & Jowah, 2024).

4. Findings and Discussion

4.1 Profile of the Participants

The profiles of the participants in this study show the diversity of expertise and roles within unconventional oil and gas projects in South Africa. This variety is essential for identifying the critical success factors for project managers in this sector. Participants brought diverse backgrounds, ranging from geological and technical expertise to strategic and legal insights. This diversity reveals the multifaceted challenges and factors contributing to project management successes. Table 1 below provides a profile of each participant.

Table 1. Participant profiles

Participant	Role	Organization Size	Work Experience	Educational Background
1	Group Geologist	Medium (150 employees)	35 years	Postgraduate degree in Geology, Postgraduate diploma in Rock Engineering, Certificate of Competency in Business Leadership
2	Director	Small (<15 employees)	10 years	Master of Science in Mineral Production Management
3	Strategy and Planning Manager	Large (>1,000 employees)	4.5 years	MBA
4	Manager of New Ventures	Large (>1,000 employees)	18 years	MBA, Bachelor of Engineering
5	Legal Counsel	Large (>1,000 employees)	16 years	Master's degree in Law
6	Senior Reservoir Engineer	Large (>1,000 employees)	37 years	Master's degree in Petroleum Engineering
7	CEO	Large (>1,000 employees)	30 years	Master's degree in Civil Engineering, MBA in Natural Gas Management
8	Managing Director	Small (<15 employees)	2.5 years	Networking and Server Administration

4.2 Project Stages, Goals and Strategic Drivers

The interviews showed that unconventional gas projects move through distinct stages. These include exploration, application, access, appraisal, and production. Each stage has its own strategic objectives and risks. This progression confirms the complexity of upstream oil and gas projects. It also emphasises the need for staged decision-making and ongoing risk management across the project life cycle (Tao, 2025; Wang et al., 2024). Participants in the early exploration and application stages focused on identifying viable gas resources, securing investment, and obtaining regulatory approval in disadvantaged or underserved areas. These priorities align with South African work that emphasises licensing certainty, regulatory coherence, and early feasibility assessment as gating conditions for UOGD investment (Esterhuysen, 2023; Coetzee, 2024). At the access stage, participants stressed licence security, partner attraction, and the definition of exploration programmes. These issues are echoed in studies that emphasise front-end loading, contractual clarity, and stakeholder engagement as important success factors in upstream portfolios (Rostami & Ahangari, 2023; Abdulla & McCauley-Smith, 2024).

Participants involved in appraisal and production prioritised reservoir forecasting, deliverability analysis, reserve expansion, and the justification of capital commitments for liquefied natural gas (LNG) and related infrastructure. This reflects international evidence showing that technical robustness, risk-responsive appraisal, and alignment between reserve statements, capital cycles, and market demand are decisive for project viability (Al-Mhdawi et al., 2024; Berge et al., 2025). South African case studies on fracking and tight gas confirm that environmental safeguards, groundwater governance, and hydro-social risk management should be built into these stages to secure legitimacy and long-term economic inclusion (Hemingway & Gormally-Sutton, 2024; Redelinghuys et al., 2024; Zangqa et al., 2024). Across all stages, participants' goals ranged from securing permits and capital to demonstrating commercial viability, building local capacity, and scaling production for domestic markets. This supports broader literature arguing that UOGD success should be assessed beyond the "iron triangle" of cost, time, and quality. It should also include regulatory legitimacy, social licence, environmental stewardship, and contribution to just energy transitions (Esterhuysen, 2023; Manik & Ekelund, 2023; Abdulla, 2025).

4.3 Notions of Success, Barriers and Enabling Infrastructure

Participants described success in different but complementary ways. Some defined it in technical terms, such as proving producible hydrocarbons, delivering economic production, and integrating unconventional gas into existing value chains. Others saw success as securing licences, attracting partners, creating shareholder value, or supporting local industrial and community development. This range of views reflects international discussions that link project success to operational performance, strategic fit, and long-term value creation (Lamprou & Vagiona, 2022; Abdulla, 2025). South African studies support this multidimensional view. Research on fracking and gas governance shows that

UOGD projects are seen as successful only when resource development is combined with credible environmental safeguards, transparent decision-making, and fair benefit-sharing (Esterhuysen, 2023; Redelinghuys et al., 2024; Manik & Ekelund, 2023). Work on the gas-to-power programme and the wider energy transition further emphasises the need for alignment with national development goals and just-transition commitments if projects are to secure durable legitimacy (Mkhize & Nel-Sanders, 2023; Molepo et al., 2025; Ukoba, 2025).

Participants also identified several barriers that cut across project stages. These include high capital intensity, uncertain and fragmented regulation, slow permitting processes, limited midstream infrastructure, investor reluctance, and the absence or immaturity of a competitive domestic gas market. These constraints mirror South African analyses that point to governance fragility, policy volatility, and infrastructure gaps as major obstacles to UOGD and gas-to-power initiatives (Coetzee, 2024; Manik & Ekelund, 2023; Mkhize & Nel-Sanders, 2023). International CSF and risk-focused studies also show that unclear risk allocation, complex regulation, and weak logistics networks contribute to cost escalation and schedule overruns (Al-khulaqi et al., 2023; Al-Mhdawi et al., 2024; Hasan et al., 2024). Furthermore, infrastructure needs emerged as a major strategic driver. Participants consistently pointed to pipelines, compression facilities, processing plants, and related logistics as prerequisites for monetising gas and accessing markets. This aligns with research showing that midstream and downstream infrastructure are decisive enablers of unconventional gas development in South Africa and other emerging markets (Coetzee, 2024; Clark, 2022; Musoma, 2024; Ukoba, 2025). Studies on hydraulic fracturing and tight-gas potential in the Bredasdorp Basin further emphasise that infrastructure investment should be coordinated with technical feasibility, groundwater protection, and regulatory oversight to sustain the social licence to operate (Zangqa et al., 2024; Hemingway & Gormally-Sutton, 2024).

4.4 Strategic Focus, Governance, Investment and Commitment

Participants stressed that strategic orientation and governance arrangements were as important as technical competence. Many described success as maintaining regulatory compliance, engaging with policymakers, and aligning projects with evolving energy-transition policies. This reflects wider findings that regulatory clarity, coherent energy policy, and responsive governance are central drivers for gas and UOGD projects in South Africa (Esterhuysen, 2023; Coetzee, 2024; Manik & Ekelund, 2023; Ukoba, 2025). Participants viewed strategic partnerships as essential. These included collaborations with operators, service companies, financiers, and off-takers. Partnerships help share risk, pool expertise, and align projects with long-term demand. This aligns with international research showing that collaborative governance, fit-for-purpose contracting, and integrated supply chains support performance in complex oil and gas portfolios (Hasan et al., 2024; Ayanaba et al., 2023; Rostami & Ahangari, 2023). Project managers also emphasised disciplined front-end planning, rigorous due diligence, and ongoing optimisation of drilling, completion, and infrastructure schedules. These practices reflect CSF studies linking project outcomes to planning quality, risk management,

and operational integration (Al-khulaqi et al., 2023; Al-Mhdawi et al., 2024; Singh, Saxena & Kakade, 2025).

Several participants linked their own leadership practices to project outcomes. They emphasised communication, stakeholder engagement, team empowerment, and commercial evaluation. This mirrors research showing that communication, adaptability, and stakeholder management significantly influence success in oil and gas projects (Abdulla & McCauley-Smith, 2024; Berge, Hussein & Haaskjold, 2025). South African authors similarly emphasise leadership, institutional learning, and reflexive engagement with communities for navigating contested UOGD spaces and achieving broader development gains (Esterhuysen, 2023; Redelinghuys et al., 2024; Manik & Ekelund, 2023).

The interviews and literature show that strategic drivers of success encompass governance, infrastructure, leadership, collaboration, and community engagement. Effective UOGD requires robust and coherent governance across energy, water, and environmental regulation. It also relies on integrated infrastructure planning and targeted midstream investment to secure reliable transport, processing, and market access. Strong project management and leadership capabilities help navigate technical and regulatory complexity. Success further depends on collaborative partnerships and fair risk allocation across the value chain. Sustained engagement with communities, supported by visible local benefits, is also necessary for trust, legitimacy, and long-term project viability. When these drivers are present, unconventional gas projects are more likely to achieve project-level success and contribute to sustainable economic inclusion. They are also less likely to exacerbate existing vulnerabilities in South Africa's energy and social systems (Esterhuysen, 2023; Redelinghuys et al., 2024; Musoma, 2024; Abdulla, 2025).

5. Conclusion

This study aims to identify the critical success factors that influence the planning and delivery of unconventional oil and gas development (UOGD) projects in South Africa. Drawing on interviews with experienced project managers and supported by recent scholarship, the findings show that project success in this sector depends on several factors. It requires strong technical capability. It also relies on strategic and coherent governance. In addition, projects should be shaped by context-specific socio-environmental arrangements. Together, these elements determine whether UOGD initiatives can progress in a complex setting like South Africa. While participants emphasised the importance of proving resource potential and maintaining operational discipline, they also stressed several non-technical conditions. They noted that success is not possible without predictable regulation. It also depends on coordinated licensing processes. Credible mechanisms for environmental oversight are equally important, especially in water-scarce regions. These conditions shape whether projects can advance responsibly and with investor confidence. The research also shows that midstream infrastructure is a decisive enabler of commercial viability. This includes pipelines, processing facilities, and related support systems.

The absence of such infrastructure limits market access and discourages investment. Strong project management and leadership capabilities are equally important. Behavioural competencies such as communication, stakeholder engagement, and adaptive decision-making are especially valuable in high-uncertainty settings. Collaborative partnerships across the value chain also matter. These partnerships work best when risk is shared fairly and when projects align with national energy-transition goals. Together, these factors support long-term project stability. A major contribution of this study is the confirmation that social legitimacy is not peripheral. It is foundational. Trust, transparency, and visible local benefits determine whether UOGD projects gain or lose momentum. The findings show that UOGD can support sustainable economic inclusion only when key conditions align. These include governance coherence, technical certainty, environmental safeguards, and inclusive stakeholder practices. Each element should support the others. Together, they provide a practical framework for project managers, policymakers, and investors working in a complex and contested South African energy landscape. Further research could examine how these factors operate during execution rather than approval, where risk and delay typically escalate.

6. Limitations

The study is limited to UOGD projects in South Africa and may not apply to countries with mature regulatory regimes or less contested resource debates. Furthermore, rapid policy shifts and advances in stimulation and fracking technology mean that the CSFs identified here will require periodic reassessment to remain relevant (Hemingway & Gormally-Sutton, 2024; Manik & Ekelund, 2023).

Conference Disclaimer

Some part of this manuscript was previously presented in the conference: International Conference on Business and Management Dynamics (ICBMD) 2025, dated 29th October, 2025 in Cape Town, South Africa, Web Link of the proceeding: <https://www.icbmd.org.za>

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Author(s) hereby declare that generative AI technologies such as Large Language Models, etc have been used during writing or editing of this manuscript. This explanation will include the name, version, model, and source of the generative AI technology and as well as all input prompts provided to the generative AI technology.

Details of the AI usage is given below:

1. ChatGPT (GPT-5.1) "Improve sentence structure, reduce redundancy, and enhance academic tone while retaining author meaning".

Competing Interests

Authors have declared that they have no known competing financial interests or non-financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

- Abdulla, H. (2025). Enhancing sustainable project success: Criteria considered by oil and gas project managers for efficient and effective project delivery. *Management & Sustainability: An Arab Review*. <https://doi.org/10.1108/MSAR-04-2024-0019>
- Abdulla, H., & McCauley-Smith, C. (2023). Contribution mechanisms of project managers' behavioural competencies towards the success of oil and gas projects. *International Journal of Construction Management*, 24(2), 151–160. <https://doi.org/10.1080/15623599.2023.2267845>
- Al Krmagi, M. (2024). Environmental impacts and treatment technologies in hydraulic fracturing water management. *International Journal of Earth Sciences Knowledge and Applications*, 6(2), 262–267. <https://www.ijeska.com/index.php/ijeska/article/view/410>
- Al-Khulaqi, A., Al-Dubai, M., & Mohammed, Z. M. (2023). Systematic literature review of critical success factors for turnaround maintenance in the oil and gas industry. *Gyancity Journal of Engineering and Technology*, 9(1), 27–55. <https://doi.org/10.21058/gjet.2023.91002>
- Al-Mhdawi, M. K. S., O'Connor, A., & Qazi, A. (2024). Structural equation modelling and fuzzy set theory: Advancing risk assessment in oil and gas construction projects. *Environmental Impact Assessment Review*, 109, 107622. <https://doi.org/10.1016/j.eiar.2024.107622>
- Anekwe, I. M. S., Akpasi, S. O., Mkhize, M. M., Zhou, H., Moyo, R. T., & Gaza, L. (2024). Renewable energy investments in South Africa: Potentials and challenges for a sustainable transition – a review. *Science Progress*, 107(2), 1–24. <https://doi.org/10.1177/00368504241237347>
- Ayanaba, J., McLellan, I., Kourouklis, T., Cano, M., & Aka, R. O. (2023). An exploration of critical success factors for lean project management in the upstream petroleum industry in Ghana. *International Journal of Petroleum and Gas Engineering Research*, 6(1), 21–44. <https://doi.org/10.37745/ijpger.17/vol6n12144>
- Berge, T. T., Hussein, B., & Haaskjold, H. (2025). A new holistic framework for megaproject portfolio success. *Project Leadership and Society*. <https://doi.org/10.1016/j.plas.2025.100190>
- Clark, S., Van Niekerk, J., Petrie, J., & McGregor, C. (2022). The role of natural gas in facilitating the transition to renewable electricity generation in South Africa. *Journal of Energy in Southern Africa*, 33(3), 22–35. <https://doi.org/10.17159/2413-3051/2022/v33i3a8362>
- Coban, M. N., Adali, Z., Ozkan, O., & Alola, A. A. (2024). Charting sustainable future on energy security, financial development, natural resources and economic output for Turkey. *Geological Journal*, 59(12), 3296–3309. <https://doi.org/10.1002/gj.5063>

- Coetzee, H. (2024). Onshore unconventional natural gas in South Africa: Regulating the water–energy–food nexus. Tilburg University. <https://www.tilburguniversity.edu/research/publications/onshore-unconventional-natural-gas-in-south-africa-regulating-the-water-energy-food-nexus>
- Esterhuysen, S. (2023). A historical timeline of unconventional oil and gas extraction and fracking studies in South Africa: Pointers for policy development. *Alternation*, 30(1), 13–34. <https://doi.org/10.29086/2519-5476/2023/v30n1a2>
- Goodrick, W., & Redelinghuys, N. (2022). Hydraulic fracturing as an environmental and social justice issue in South Africa. In *Environment, Climate, and Social Justice* (pp. 297–322). Springer. https://link.springer.com/chapter/10.1007/978-981-19-1987-9_15
- Guggilla, R. (2024). Critical success factors and implementation challenges of industry-specific digital solutions: A study of the oil and gas sector. *International Journal for Multidisciplinary Research*, 6(6), Article 31021. <https://doi.org/10.36948/ijfmr.2024.v06i06.31021>
- Hasan, J., Thomas, A., & Tomos, O. (2024). Sustainable supply chain practices in the oil and gas industry: A case study. *Sustainability*. <https://doi.org/10.3390/su16051720>
- Hemingway, J. R., & Gormally-Sutton, A. (2024). An analysis of perspectives on groundwater governance arrangements relating to the potential development of unconventional oil and gas in South Africa. *Hydrogeology Journal*, 32(3), 705–722. <https://doi.org/10.1007/s10040-023-02742-2>
- Khalilzadeh, M., Banihashemi, S. A., Heidari, A., Orazani, S. M. H., & Taebi, P. (2025). Risk management in the production phase of oil and gas projects: Evaluating risk responses and their impact on safety and damage reduction. *Discover Civil Engineering*. <https://doi.org/10.1007/s44290-025-00250-8>
- Kulušić, I., Jukić, L., Smajla, I., & Karasalihović Sedlar, D. (2024). The role of natural gas in the socio-technical transition to a carbon-neutral society: A review of the European Union's framework. *Sustainability*, 16(9), 3791. <https://doi.org/10.3390/su16093791>
- Lamprou, A., & Vagiona, D. G. (2022). Identification and evaluation of success criteria and critical success factors in project success. *Global Journal of Flexible Systems Management*, 23(2), 237–253. <https://doi.org/10.1007/s40171-022-00302-3>
- Malin, S. A., Mayer, A., & Hazboun, S. (2023). Whose future, whose security? Unconventional oil and gas extraction and the economic vulnerability and forced participation of small-scale property owners. *Resources Policy*, 86, 104197. <https://doi.org/10.1016/j.resourpol.2023.104197>
- Manik, S., & Ekelund, N. (2023). Take stock of fracking risks and count the costs: Towards an ecosystem services assessment in South Africa. *Alternation*. <https://doi.org/10.29086/2519-5476/2023/v30n1a11>
- Mbebe, S., & Jowah, L. E. (2024). Project leadership competencies influencing success in Information Communication Technology projects. *South African Journal of Information Management*, 26(1), a1846. <https://doi.org/10.4102/sajim.v26i1.1846>

- Mkhize, N. E., & Nel-Sanders, D. (2023). The state and progress of the gas to power programme in South Africa. *Africa's Public Service Delivery & Performance Review*, 11(1). <https://doi.org/10.4102/apsdpr.v11i1.656>
- Molepo, P. M., Aboalez, K., & Mathaba, T. N. D. (2025). Analysis of barriers to South Africa's energy transition: Perspectives from industry experts. *Energy for Sustainable Development*, 88, 101777. <https://doi.org/10.1016/j.esd.2025.101777>
- Musoma, B. M., Nyanda, S. S., Muhanga, M. I., & Massawe, F. A. (2024). Gas extraction and community outcomes: The case of Mtwara rural district, Tanzania. *The Extractive Industries and Society*. <https://doi.org/10.1016/j.exis.2024.101497>
- Redelinghuys, N., Esterhuysen, S., & Goodrick, W. (2024). Fractured perceptions: Unconventional oil and gas development and the social construction of perceptions of risk in South Africa. *The Extractive Industries and Society*, 19, 101519. <https://doi.org/10.1016/j.exis.2024.101519>
- Rostami, M., & Ahangari, M. A. (2023). The effect of PMBOK knowledge areas on critical success factors in oil and gas projects in Iran: A SEM modelling. *Iranian Journal of Oil and Gas Science and Technology*. <https://doi.org/10.22050/ijogst.2023.381640.1665>
- Singh, P. K., Saxena, D., & Kakade, V. (2025). Identification of success clusters using principal component analysis for oil and gas industry. *International Journal of Construction Management*, 25(14), 1675–1690. <https://doi.org/10.1080/15623599.2025.2461349>
- Tao, S. (2025). Exploration and development of unconventional oil and gas resources: Latest advances and prospects. *Energies*, 18(15), 3933. <https://doi.org/10.3390/en18153933>
- Ukoba, K., Jen, T.-C., & Yusuf, A. A. A. (2025). Transformation of South Africa's energy landscape: Policy implications, opportunities, and technological innovations in the Fourth Industrial Revolution. *Energy Strategy Reviews*, 59, 101752. <https://doi.org/10.1016/j.esr.2025.101752>
- Wang, Z., Fan, Z., Chen, X., Li, Y., Fan, Z., Wei, Q., Peng, Y., Liu, B., Yue, W., Wang, X., & Xiong, L. (2024). Global oil and gas development situation, trends and enlightenment in 2023. *Petroleum Exploration and Development*, 51(6), 1536–1555. [https://doi.org/10.1016/S1876-3804\(25\)60558-1](https://doi.org/10.1016/S1876-3804(25)60558-1)
- Zangqa, S., Saffou, E., Gholami, R., Zimmermann, U., Raza, A., Manzi, M. S. D., & Durrheim, R. (2024). Hydraulic fracturing potential of tight gas reservoirs: A case study from a gas field in the Bredasdorp Basin, South Africa. *Gas Science & Engineering*. <https://doi.org/10.1016/j.jgsce.2024.205364>

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Peer-Review History:

This chapter was reviewed by following the Advanced Open Peer Review policy. This chapter was thoroughly checked to prevent plagiarism. As per editorial policy, a minimum of two peer-reviewers reviewed the manuscript. After review and revision of the manuscript, the Book Editor approved the manuscript for final publication. Peer review comments, comments of the editor(s), etc. are available here: <https://peerreviewarchive.com/review-history/6771.7>

A Critical Analysis of the Entrepreneurship Development Programme Offered by the South African National Youth Development Agency, NYDA

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DOI: <https://doi.org/10.9734/bpi/mono/978-81-998711-1-3/CH8>

Peer-Review History:

This chapter was reviewed by following the Advanced Open Peer Review policy. This chapter was thoroughly checked to prevent plagiarism. As per editorial policy, a minimum of two peer-reviewers reviewed the manuscript. After review and revision of the manuscript, the Book Editor approved the manuscript for final publication. Peer review comments, comments of the editor(s), etc. are available here: <https://peerreviewarchive.com/review-history/6771.8>

Abstract

Youth unemployment has become one of the most pressing economic challenges, and as a result, it has emerged as a priority for governments, businesses, educational institutions and NGOs. In response to this challenge, the South African government, through the National Youth Development Agency (NYDA), has implemented the Entrepreneurship Development Programme (EDP) to foster entrepreneurial skills and support small business development. However, despite these efforts, failure and survival rates remain relatively high. The Theoretical Framework for this study is the Entrepreneurship Competence (EntreComp) Model. The Theoretical Framework for this study is the Entrepreneurship Competence (EntreComp) Model, which comprises three competency areas of spotting ideas and opportunities, resources and taking action. The purpose of this study is to determine the extent to which the NYDA EDP has been able to equip the participants with the competencies which will enable them to improve the performance of their businesses. The studies reviewed reveal that EDPs help participants to acquire the skills, knowledge and competencies required to start and operate their businesses successfully. Participants who received comprehensive entrepreneurship training demonstrated a higher propensity to identify and act on entrepreneurial opportunities. The findings of this review have practical implications for policymakers, educators and practitioners involved in the provision and implementation of EDPs because this intervention can promote

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economic development and reduce unemployment. Future entrepreneurial development interventions should emphasise practical business skills such as incorporating innovative marketing and sales pitches. Entrepreneurs who have failed are not supported to re-emerge and learn from their mistakes. Beneficiaries should be supported throughout the stages of their entrepreneurship journey, especially during the growth phase. This research review adds to the body of knowledge examining the EDP's ability to equip the participants with the competencies required for improving business performance, through the EntreComp framework lens.

Keywords: *Entrepreneurship; entrepreneurship development programme (EDP); national youth development agency (NYDA); business performance; EntreComp.*

1. Introduction and Background

Youth unemployment has become one of the most pressing economic challenges and concerns (Asmare & Mulatie, 2014:3; Mercy Corps, 2020:1; Verick, 2023:423). As a result, it has emerged as a priority for government, businesses, educational institutions and NGOs (Hanna, 2014:2; De Lannoy et al., 2020:115; Penar, 2021:1; Taiwo & Tobias, 2022:1; Fergusson, 2021:32). Ampadu-Ameyaw et al. (2020:10) and others like Kgotlhane et al. (2018:11465); Maka et al. (2021:59). Asmare and Mulatie (2014:3) add that of more concern is the rising number of unemployed young graduates. According to Statistics South Africa (2025:2), youth aged 15-24 years and 25-34 years continue to have the highest unemployment rates at 62,4% and 40,4% respectively, while the graduate unemployment rate increased by 3,0 percentage points from 8,7% in Q4:2024 to 11,7% in Q1:2025. The above figures indicate that the unemployment rate among the youth is very high, hence it has become a great concern and a priority for the government, businesses, entrepreneurial support organisations and many other relevant stakeholders.

The youth unemployment phenomenon has economic, social and psychological consequences (Ayhan, 2016:264; Kgotlhane et al., 2018:11465; Hanna, 2014:8; Ampadu-Ameyaw et al., 2020:7; Penar, 2021:5). Economically, it hampers development and growth as well as overstretching the resources needed to support the society (Hanna, 2014:8; Kgotlhane et al., 2018:11469; Mercy Corps, 2020). On the social front, unemployed youth have been reported to engage in negative behaviours such as drunkenness, drug- and gang-related violence, robbery, petty crimes and prostitution (Maulani & Agwanda, 2020:230; Mazorodze, 2020:14). To lessen the impact of these consequences, the South African government has introduced the Social Relief of Distress grant as a relief during the economic hardship of unemployment (South African Government News Agency, 2024:1). The R350 social relief grant, which was implemented in 2020 as a temporary solution during the COVID-19 pandemic, is currently being received by about 9 million young people (Department of Social Development, 2025):1.

In response to the youth unemployment challenge (Graham, De Lannoy, Patel, & Leibbrandt, 2018:5) and to solve the graduate unemployment problem (Ismail et al., 2019:81; Morris et al., 2020:377; Penar, 2021:5), most countries formulated

integrated youth development programmes and interventions (Gulzar et al., 2020:43; International Labour Organisation (ILO) 2020; Verick, 2023:434). One such initiative is the development and promotion of entrepreneurship (Hanna, 2014:29; Fergusson, 2021:43; Motha & Nenzhelele, 2018:314; Nor, 2024:19388). Entrepreneurship is deemed to be the foundation for providing jobs and enhancing job opportunities, thereby reducing unemployment (Peprah & Adekoya, 2020:389; Iwara et al. 2019:112; Akere & Iwayemi, 2023:16). The government of South offers opportunities for youth development because it believes that the country's youth will be its future leaders (South African Government, 2022:1). To this effect, it has developed a number of policy programmes targeted at creating jobs and supporting young entrepreneurship (South Africa. DSB, 2022:1; Akinyemi, & Adejumo, 2019:3-4; Bowmaker-Falconer & Herrington 2019:4).

Numerous government agencies, including the Department of Small Business Development (South Africa, DSB 2022:1) and the Department of Trade and Industry and Competition (DTIC) (South Africa, DTIC 2025:1), and agencies like the Small Enterprise Finance Agency (SEFA), the Small Enterprise Development Agency (SEDA) and the National Youth Development Agency (NYDA) were established to guide the implementation of these initiatives (SEFA, 2022:1, SEDA, 2022:1, NYDA, 2022:1). However, failure and survival rates remain relatively high despite government interventions that provide this much-needed support (Ajuna et al., 2018:98; Botha et al., 2021:167; Cassim et al., 2014; Evbuomwan & Mrwebi, 2017:38; Tshafuta 2024:7; Cantamessa, Gatteschi, Perboli, & Rosano, 2018:1). In South Africa, more than 70-80% of small to medium-sized businesses (SMMEs) close within the first five to seven years of operation (Fatoki, 2014:922; Bushe, 2019:1). The Global Entrepreneurship Monitor (GEM) 2022/2023 also indicates that the business discontinuance rate peaked at 13,9% in 2021 and 4,9% in 2022 (Bow Fergusson, 2021; Bowmaker -Falconer et al. (2022:39).

The problem statement for this study is therefore stated as follows:

Despite the introduction of entrepreneurship development programmes by government developmental agencies, particularly NYDA, to encourage start-ups and stimulate growth, there are still high failure rates and limited growth in the SME sector.

It then becomes important to determine the effectiveness and impact of EDPs on the success of enterprises because a substantial amount of resources is invested in these EDPs (Devi, 2016:120; Rajnikant & Dave, 2020:136; Glaub & Frese, 2011:350). The assessment of such programmes helps to determine how improvements can be made in the future (Galvão, Marques & Ferreira, 2019:147). Ferdilan et al. (2021:108-109) conclude by stating that "to provide tremendous programme improvement of all deficiencies in achieving the programme's goals and objectives and closing the loop of the programme decision-making, a clear EDP evaluation measurement is necessary". The findings of this analysis will offer insightful information about the effectiveness of government-led entrepreneurship initiatives and offer recommendations for enhancing the impact of the NYDA's EDP on the performance of South Africa's youth enterprises.

This research utilises the EntreComp framework as a methodology to measure the level of entrepreneurial competencies acquired by the NYDA EDP participants in terms of the THREE focus areas of “Ideas and Opportunities, Resources and Into Action”. This model has been predominantly applied to educational institutions in the European communities (Joensuu-Salo *et al.*, 2022; Morselli & Gorenc, 2022; López-Núñez *et al.*, 2022; Czyzewska & Mroczek, 2020). The studies evaluating NYDA EDP focused on the content, the relevance and the effectiveness of the programme (Sibani Consulting 2018; Ebus-Tech Consulting 2020). Dube (2024:1) concentrated on the policy implementation of this NYDA EDP. Others examined the youth’s perceptions and experiences about Youth Development Agencies in general (Nkosi, 2023:1). Those who analysed the Entrepreneurship training programmes’ competencies only looked at one set of competencies. For instance, Letshaba *et al.* (2025:1) examined the relationship between entrepreneurship education, opportunity recognition and exploitation. A study by Mncwango *et al.* (2024:1) was about “Training interventions that enhance entrepreneurship self-efficacy among unemployed youth”. This study contributes to the body of knowledge by utilising the EntreComp framework in a South African context. The added value of this research is the analysis of an individual EDP (NYDA BMT), focusing on all three competency areas.

2. Literature Reviewed

This review made use of secondary sources from databases such as Google Scholar and the NYDA websites. These included various articles and company documents. The search words included NYDA, Government interventions, EDPS and youth unemployment.

2.1 Entrepreneurship

Entrepreneurship is widely recognised as a fundamental part of economic development, and governments at all levels are now taking steps towards promoting it (Bakry *et al.* 2019:7; Taiwo & Tobias, 2022:2; Melwani, 2018:129). Entrepreneurship is considered a “self-paid” employment tool to engage the youth and graduates (Akere & Iwayemi, 2023:1; Rajnikant & Dave, 2020:135). It helps in solving economic problems like unemployment and helps in creating job opportunities for theyouth (Rajnikant & Dave, 2020:135). There are various definitions of entrepreneurship. This study uses the two definitions that are aligned with the Enrecomp framework. The first one is that of FFE-YE (2012:15), which regards entrepreneurship “as the discovery, evaluation and exploitation of opportunities for new combinations in the context of new venture creation”. The second one is by Zizile and Tendai (2018:225), who opined that “Entrepreneurship can also be seen as an attitude of the mind to identify and pursue opportunities, take calculated risks, and benefit by establishing business ventures”.

2.2 Entrepreneurship Development Programmes (EDPs)

EDPs are structured training initiatives aimed at equipping individuals with the skills, knowledge, competencies and mindset needed to start, manage and grow

businesses (Gunawardana & Bandara, 2021:). They are often supported by governments, educational institutions, NGOs or private organizations (Rajaratne, 2024:400). Entrepreneurship development programmes aim to provide both a theoretical and practical basis for entrepreneurial concepts (Muhammad, Kaoje & Adam, 2025:2). Researchers have found a positive relationship between entrepreneurial training and firm performance (Glaub & Frese, 2011:348; Kithae et al. 2013:1). EDPs have been considered as an effective instrument for developing entrepreneurship (Bose, 2013:108). They play a very crucial role in inculcating qualities like innovation and creativity that help create better entrepreneurial opportunities that will assist the government in alleviating unemployment and poverty (Suminar et al. 2021; Rajnikant & Dave 2020:135). This research review adopts the notion that entrepreneurship training is designed to develop skills, knowledge and competencies to identify business opportunities, analyse and solve problems, develop network relations and take risks, which enable entrepreneurs to start new businesses or expand existing ones (Ismail, 2018:2; Rajnikant & Dave, 2020:136; Muhammad et al., 2025:1)

2.3 The National Youth Development Agency (NYDA)

The National Youth Development Agency (NYDA) was established under the South African National Youth Development Agency Act, 2008 (Act 54 of 2008) (NYDA Act) “to create and promote the coordination of youth development matters” (South African Government 2008:5). The Agency derives its mandate from the statutes, which include the approved Integrated Youth Development Strategy (IYDS 2022/2025), the National Development Plan 2030 and the National Youth Policy 2030 which are some of the government’s initiatives to promote youth entrepreneurship. The NYDA offers various programmes in an effort to reduce youth unemployment. These include, among others: (a) Skills Development & Training courses, (b) Entrepreneurship Development Programmes, (c) Job Placement & Internship Programmes and (d) Education Support (NYDA training 2022:1). This study reviewed NYDA’S Entrepreneurship Development Programmes. The interventions in here range from:

- The NYDA business funding/grants & voucher programmes, which offer financial support to young entrepreneurs and businesses. Modise (2025:2) observed that “an impact evaluation of the NYDA voucher programme found that over the period 2014–2017, benefits (jobs created, sustained enterprises, revenue generated) exceeded costs by a ratio of about 3:1.”
- Mentorship, incubation and business development support: a non-financial support, covering mentorship, training in business management and market-linkage assistance.
- Case studies and success stories: The NYDA promotes stories of youth whose enterprises have grown through its incubation or funding programmes.
- The Business Management Training Programme (BMT), which aims to provide young entrepreneurs with access to pertinent entrepreneurship knowledge, values and attitudes for their businesses in a supportive environment (NYDA Training 2022:1).

The focus of this research review is the Business Management Training (BMT). “The Business Management Training courses has been designed to support young entrepreneurs through the stages of Pre-start Up/Idea generation, Survivalist, Start Up, Early Development, as well as Growth & Expansion” (NYDA Training 2022:1). This programme has been approved and accredited by the International Labour Organisation (ILO) and contains the following courses: Start and Improve Your Business (SIYB), Generate Your Business Idea (GYBI), Start Your Business (SYB) and Improve Your Business (IYB) (NYDA Training 2022:2). Their characteristics are depicted in the Table below:

Table 1. The NYDA Business Management Training courses (NYDA Training 2022:2)

Course	Duration	Objective	Outcome
Generate Your Business Idea – GYBI	3 days	To develop a concrete business idea	Certificates of Completion
Start Your Business – SYB	5 days of training + 1-day Post-Training Pitching Session	To develop a bankable business plan and enhance their skills and knowledge.	Participant Certificate
Improve Your Business - IYB	IYB Course 1: 5 Training days + 1-day Pitching session IYB Course 2: 5 Training days + 1-day Pitching session	To develop skills and improve plans for their business	Certificate of Completion

The literature search found two studies conducted by Itumeleng Peter Dube. The first one was his Masters’ dissertation in 2020 titled “*Policy Design and Implementation: A Case Study of The Business Management Training Programme at the National Youth Development Agency*” (Dube, 2020:1). The second one was a Journal article in which discussed the “*Entrepreneurship Development and Training Challenges of the National Youth Development Agency to Secure Youth Employment*” focusing on the Business Management Training Programme (Dube, 2024:1). These studies provided useful insights that helped to broaden the perspective of this study, but they evaluated the NYDA EDP from the policy design and implementation perspectives.

Another Doctoral study, “*A critical analysis of entrepreneurship training programmes for business start-ups and growth in Zimbabwe*”, from the University of Pretoria was conducted by Mandengenda in 2016. The study evaluated the Start and Improve Your Business (SIYB) and Empretec Entrepreneurship Training Programmes in Zimbabwe. The SIYB is aligned with the two courses in the NYDA Business Management Programme: Start Your Business – SYB and Improve Your Business – IYB. A further contribution of this thesis is its focus on the business start-ups and growth, which are related to the business performance.

Mandengenda's study used the Entrepreneurial Performance Model, which focused on entrepreneurial skills, while the current study will focus on entrepreneurial competencies using the EntreComp Framework, hence its contribution to the body of knowledge.

2.4 Business Performance

Ismail (2018:5) identified business performance as one of the indicators that are used in the analysis of training programmes. The EDPs contain dimensions such as building confidence, pro-activeness and risk-taking qualities, which are required for growth and business performance (Rana et al., 2018:491-492; Rajnikant & Dave, 2020:135). An evaluation of business performance is about efficiency and effectiveness (Ferdilan et al., 2021:128) and includes using both financial and non-financial performance measures (Kori et al., 2020:1; Kithae *et al.*, 2013:2). Pulka, Ramli and Mohamad (2018:586); Nakku et al. (2020:2) opined that both financial and non-financial Government Business Support Programmes have a direct influence on business performance. The South African Government has established the National Youth Development Agency (NYDA) to offer such business support to the youth. The agency was created to plan, organise, oversee, assess and monitor all initiatives aimed at integrating young people into the economy and society at large (NYDA 2022:1). For instance, it conducted a Quarterly Labour Force Survey (QLFS) Q2 Analysis for the 2024-2025 Financial Year in order to observe its outcome and assess if it negatively or positively affects young people in various spheres of development (NYDA, 2025:3).

The NYDA EDP is chosen as a case study for this research project because it is a government agency which provides both non-financial support (Business Management Training and Entrepreneurship Development interventions) and financial support (Grant and Relief Fund) to youth-owned enterprises to help them start or expand their businesses (National Youth Development Agency 2022:1). A 2014-2017 cost and benefit analysis of the NYDA voucher programme established that the voucher programme did represent the best possible use of resources to achieve results of the greatest possible value to the participants (NYDA, 2019:xii), leading to better business performance. This critical analysis aims to evaluate the effectiveness of the NYDA EDP in terms of equipping young participants with the relevant competencies to create and sustain their businesses using non-financial measures.

Based on the above, the research question for this study was then formulated as follows:

To what extent does the NYDA Entrepreneurship Development Programme result in the competencies that promote and improve business performance?

2.5 Theoretical Framework

This study uses the Entrepreneurship Competence (EntreComp) Framework, developed by the Joint Research Committee (JRC) in 2015. The EntreComp tool

examines three areas of entrepreneurship: "Ideas and Opportunities," "Resources", and "Into Action." Each of these areas contains five competencies, which adds up to 15 hints and eight levels of proficiency ranging from foundation to intermediate, advanced and expert levels (Bacigalupo et al., 2016:6-12). See Fig. 1.

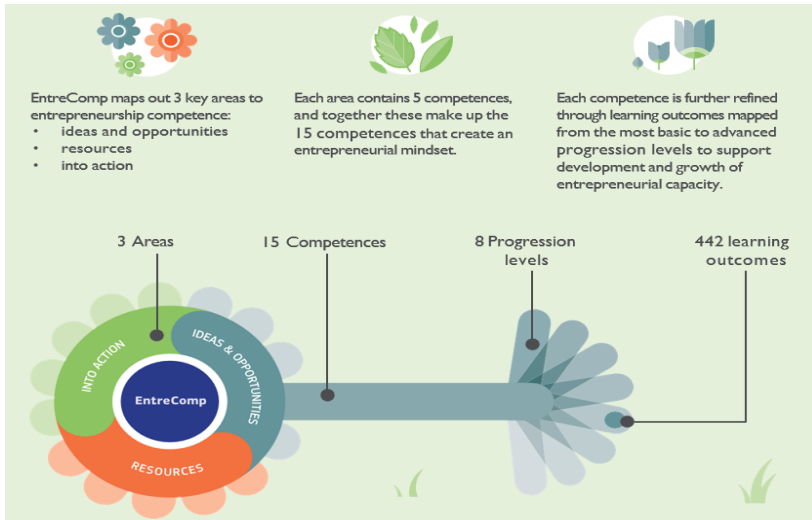


Fig. 1. EntreComp - The European Entrepreneurship Competence Framework

The three areas of competencies in the EntreComp were used to formulate the sub-objectives of this study. The first area of identifying ideas and opportunities comprises components like opportunity detection, creativity, future vision, idea consideration and ethical and sustainable thinking. The components of the second area include mobilising resources, self-awareness or self-efficacy, motivation and perseverance, knowledge of economic/financial aspects and mobilising others. The third area relates to taking action. It consists of components such as initiative, planning and management, dealing with uncertainty, ambiguity and risk, cooperation, as well as learning through experience (Bacigalupo et al., 2016:6-12).

This model was deemed suitable for this study because it has been tested and validated as a scale for measuring entrepreneurship competence in various studies (Bacigalupo, 2019:38-53; Joensuu-Salo et al., 2022:13; Armunã et al., 2020:78; Czyżewska & Mroczek, 2020:4-5; Morselli & Gorenc, 2022:6-7). The model was also found to have captured the unique characteristics of entrepreneurship competencies better by Ganesini et al. (2018:29) when they compared and contrasted its taxonomies with those of two other entrepreneurial models.

Table 2. Components of the EntreComp Framework (Bacigalupo et al., 2016:6-16)

Areas	Competences	Hints	Descriptors
1. Ideas and opportunities	Spotting opportunities	Use your imagination and abilities to identify opportunities for creating value.	Identify and seize opportunities to create value by exploring the social, cultural and economic landscape. Identify needs and challenges that need to be met. Establish new connections and bring together scattered elements of the landscape to create opportunities to create value.
	Creativity	Develop creative and purposeful ideas.	Develop several ideas and opportunities to create value, including better solutions to existing and new challenges Explore and experiment with innovative approaches Combine knowledge and resources to achieve valuable effects
	Vision	Work towards your vision of the future	<ul style="list-style-type: none"> • Imagine the future • Develop a vision to turn ideas into action • Visualise future scenarios to help guide effort and action
	Valuing ideas	Make the most of ideas and opportunities	Judge what value is in social, cultural and economic terms Recognise the potential an idea has for creating value and identify suitable ways of making the most out of it
	Ethical and sustainable thinking	Assess the consequences and impact of ideas, opportunities and actions	Assess the consequences of ideas that bring value and the effect of entrepreneurial action on the target community, the market, society and the environment Reflect on how sustainable long-term social, cultural and economic goals are, and the course of action chosen Act responsibly

Areas	Competences	Hints	Descriptors
2. Resources	Self-awareness & self-efficacy	Believe in yourself and keep developing	Reflect on your needs, aspirations and wants in the short, medium and long term. Identify and assess your individual and group strengths and weaknesses Believe in your ability to influence the course of events, despite uncertainty, setbacks and temporary failures
	Motivation & perseverance	Stay focused and don't give up	Be determined to turn ideas into action and satisfy your need to achieve Be prepared to be patient and keep trying to achieve your long-term individual or group aims Be resilient under pressure, adversity, and temporary failure
	Mobilising resources	Gather and manage the resources you need	Get and manage the material, non-material and digital resources needed to turn ideas into action. Make the most of limited resources. Get and manage the competences needed at any stage, including technical, legal, tax and digital competences.
	Financial & economic literacy	Develop financial and economic know-how	Estimate the cost of turning an idea into a value-creating activity Plan, put in place and evaluate financial decisions over time Manage financing to make sure your value-creating activity can last over the long term
	Mobilising others	Inspire, enthuse and get others on board	Inspire and enthuse relevant stakeholders Get the support needed to achieve valuable outcomes Demonstrate effective communication, persuasion, negotiation and leadership
3. Into action	Taking the initiative	Go for it	Initiate processes that create value Take up challenges Act and work independently to achieve goals, stick to intentions and carry out planned tasks.

Areas	Competences	Hints	Descriptors
	Planning & management	Prioritise, organise and follow up	Set long-, medium- and short-term goals Define priorities and action plans Adapt to unforeseen changes
	Coping with uncertainty, ambiguity & risk	Make decisions dealing with uncertainty, ambiguity and risk	Make decisions when the result of that decision is uncertain, when the information available is partial or ambiguous, or when there is a risk of unintended outcomes Within the value-creating process, include structured ways of testing ideas and prototypes from the early stages, to reduce the risks of failure Handle fast-moving situations promptly and flexibly
	Working with others	Team up, collaborate and network	Work together and cooperate with others to develop ideas and turn them into action Network Solve conflicts and face up to competition positively when necessary.
	Learning through experience	Learn by doing	Use any initiative for value creation as a learning opportunity Learn with others, including peers and mentors Reflect and learn from both success and failure (your own and other people's)

Table 3. EntreComp Progression Levels (Adapted from the European Union, 2018:9)

EntreComp progression model							
Foundation Relying on Support from Others		Intermediate Building Independence		Advanced Taking Responsibility		Expert Driving Transformation, Innovation and Growth	
Under direct supervision	Working with peers, reduced support and limited autonomy	Working on my own and together with my peers	Taking and sharing some responsibility	With some guidance, and together with others	Taking responsibility for making decisions and working with others	Taking responsibility for contributing to complex developments in a specific field	Contributing substantially to the development in a specific field.
1. Discover	2. Explore	3. Experiment	4. Dare	5. Improve	6. Reinforce	7. Expand	8. Transform
Discovering your qualities, potential and interests	Exploring different approaches to problem solving	Critical thinking and experimenting	Turning ideas into action in 'real life'	Improving your skills for turning ideas into action	Working with others, using the knowledge you have to generate value	Broadening competences needed to deal with complex challenges	Focusing on emerging challenges by developing new knowledge

The studies reviewed indicate that the EntreComp model has been applied to educational institutions (Floris & Pillitu, 2019; Joensuu-Salo *et al.*, 2022; Morselli & Gorenc, 2022; López-Núñez *et al.*, 2022; Czyzewska & Mroczek, 2020). Those in the business arena examined entrepreneurial intentions (Armuña *et al.* 2020; Giancesini *et al.* 2018; Bhatti, Doghan & Saat 2021; Vankov, Kozma & Galanternik 2022; López-Núñez *et al.* 2022:3). Most of these studies were conducted in Europe and other countries abroad. The literature search found only one Doctoral study that was conducted in 2017 by Riaan Steenberg, titled “*The entrepreneurial spirit – towards an education model for entrepreneurial success in South Africa*”. This study also alluded to the limited use of EntreComp because it merely mentions it as one of the functional skills-based models that are used in Europe and suggests that it could be extended to other countries to promote entrepreneurial intentions. This study contributes to the body of knowledge by analysing the effects of the three competence areas in improving business performance.

Two evaluation studies were conducted on the NYDA EDP. The first was the EDP impact evaluation, which was to assess whether the EDP was able to achieve its objectives and to determine the impact of the programme on the lives of young people who benefitted from the programme in the financial years 2014/15 and 2015/16 (Sibani Consulting 2018:9). The other one was a rapid assessment by Ebus-Tech Consulting to develop a theoretical framework for the entrepreneurship programme (Ebus-Tech 2020:7). Both these studies did not use any theoretical or conceptual framework and therefore lack “methodological rigour” (Glaub & Frese 2011). The use of the EntreComp model is the gap this study will fill, which is a further contribution to the body of knowledge. The various components of the model and progression levels have been depicted in Tables 2 and 3.

2.6 Conceptual Framework

This study uses the competencies derived from the EntreComp model described above. The three competence areas in the EntreComp conceptual model have been labelled to emphasise entrepreneurship competence as the ability to transform ideas and opportunities into action by mobilising resources (Bacigalupo *et al.* 2016:10). The three key competence areas of the model - ideas and opportunities, resources and taking action, are the independent variables, while the performance of the businesses as the dependent variable. These are aligned with the NYDA Business Management Training Programme courses listed above. Generate Your Business Idea (GYBI) relates to “ideas and opportunities” and Start Your Business (SYB) and Improve Your Business (IYB) relate to “utilising resources and taking action”, respectively. Start and Improve Your Business (SIYB) aligns with Business Performance because it aims to equip the participants with the skills and knowledge to start and grow their businesses and create employment. All these have been designed to cater for the various stages of entrepreneurship as indicated above. The conceptual framework has been depicted in the diagram as Fig. 2.

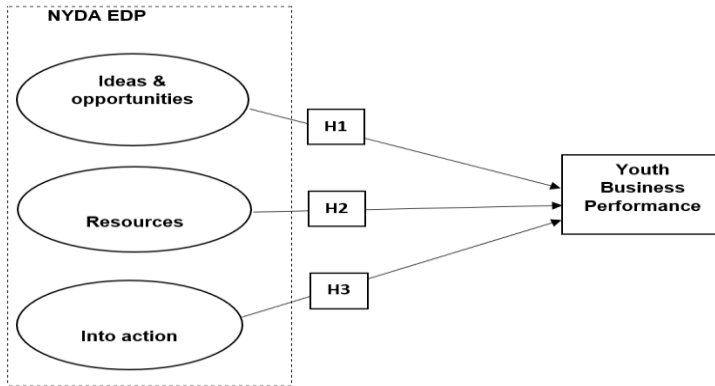


Fig. 2. The conceptual framework (Author's own compilation)

The above diagram depicts the variables of the study, which represent the three hypotheses to be tested. The following hypotheses were then formulated:

- Ho 1 - The NYDA EDP does not equip the participants with the competencies to 'Spot Ideas and Opportunities' that lead to improved business performance.
- Ha 1 - The NYDA EDP equips the participants with the competencies to 'Spot Ideas and Opportunities' that lead to improved business performance.
- Ho 2—The NYDA EDP does not equip the participants with the competencies to 'utilise the resources' to improve business performance.
- Ha 2 - The NYDA EDP equips the participants with the competencies to 'utilise the Resources' in order to improve business performance.
- Ho 3—The NYDA EDP does not equip the participants with the competencies to put their ideas into action to improve business performance.
- Ha 3 - The NYDA EDP equips the participants with the competencies to put their ideas 'Into Action' with a view to improving business performance.

3. Discussion

The NYDA EDP is aligned with the Start and Improve Your Business (SIYB), which is the largest global business management training programme which assists small-scale entrepreneurs *to start and grow their businesses and create employment*. The study seeks to determine the extent to which the NYDA EDP has been able to equip the participants with the competencies to spot ideas and opportunities, utilise the resources and the capacity to put those ideas into action in order to improve the performance of their businesses.

3.1 Entrepreneurship Development Programmes and Business Performance

Entrepreneurship Development Programmes (EDPs) are comprehensive initiatives that provide entrepreneurs with the knowledge, skills, resources, and

networks necessary to succeed in business (Muhammad, *et al.* 2025:3). These programmes typically provide training in business planning, financial management, marketing, and innovation, as well as sources of funding, greatly assists trainees in the growth and development of their businesses (Naik & Patel, 2023; Rajaratne, 2024).

Research has shown that effective entrepreneurial development programmes (EDPs) significantly increase the likelihood of business success and sustainability. For instance, a study conducted by the World Bank (2020) found that entrepreneurs who participated in Entrepreneurship Development Programmes (EDPs) were more likely to scale their businesses and create jobs compared to those who did not receive such support. Pulka *et al.* (2018:604) found that interventions by the government to SMEs positively improve the SMEs' performance and concluded that they are the vital resources that can lead to the achievement of a better performance. Shetty *et al.* (2024:2) concluded by saying, "to build competencies and develop entrepreneurial spirit among entrepreneurs, there is a need to organise training interventions".

Conversely, some studies found that there the lack of awareness about government agencies that provide entrepreneurial support (Motha & Nenzhelele 2018:314) and inaccessibility of youth entrepreneurship support structures and initiatives (Sibanye, 2018:2). Other studies allude to structural barriers that often hinder entrepreneurship, such as inadequate infrastructure, limited access to financing, and insufficient business education (Muhammad *et al.* 2025:1). Other challenges and barriers faced by these businesses are among others, difficulties accessing finance, regulatory compliance, attracting and retaining staff, lack of skills, competition as well as accessing markets (Botha, *et al.* 2021:167; Nkosi 2023:76).

3.2 The National Youth Development Agency (NYDA) and Entrepreneurship Development Programme (EDP)

The South African Government has established NYDA as an agency tasked with tackling the challenges that are faced by the youth. To this effect, the NYDA offers the Entrepreneurship Development Programme (EDP) called the Business Management Training (BMT) programme. The BMT is a training initiative that is aimed at enabling youth to have access to relevant entrepreneurial skills, knowledge, values and attitudes for their businesses (NYDA 2022:2). The BMT programme trains the youth in managing their business and trains them in the skills needed to survive in the turbulent economic environment. This programme enables the young entrepreneurs to manage their business through the stages of start-up, early development and growth and expansion (NYDA 2022:2).

In his doctoral thesis, Dube (2024:173-174) found that BMT programmes are lacking in some respects for ensuring that the South African (SA) youth participate in the economy. The findings of the study were that the current design of the BMT is not aligned with the SA environment and recommended the design of a new programme. In 2022, NYDA commissioned a study, called "Rapid Assessment on

Entrepreneurship Development and Support conducted by EBUS-TECH CONSULTING (PTY) LTD. One of that study's findings was that there was a "lack of integration and enhancement of government and institutional capacity to deliver comprehensive youth entrepreneurship development support, which was not fully accomplished" (by EBUS-TECH 2024:5).

A study conducted by Nkosi in 2023 on the youth's perceptions and experiences about Youth Development Agencies revealed varied experiences from the respondents. The study indicated an overall dissatisfaction with the work of the youth development agency regarding targeted youth development policies (Nkosi 2023:81). However, the study also revealed that young people were satisfied with the State's efforts to up-skilling and educational development, of which NYDA is part. Some of the youth that were interviewed spoke positively about "their experiences with accessing and attending various short-term training and educational programmes designed to help them, either in the job market or with their business" (Nkosi 2023:80).

3.3 The EntreComp Framework and Business Performance

The EntreComp framework, developed by the European Commission, provides a competency-based model for evaluating entrepreneurial skills, covering three key areas: Ideas and Opportunities, Resources and Into Action (Bacigalupo et al., 2016). Integrating these competencies into the NYDA courses will help to strengthen their impact on business success and sustainability.

3.3.1 Ideas and Opportunities

According to Bernado´ and Bratzke (2024:22), the competencies in the "ideas and opportunities" area are associated with entrepreneurial intention and entrepreneurial action. They opined that inspire others to start and grow their business ventures (Bernado´ & Bratzke, 2024:23). Zizile and Tendai (2018:228) are of the opinion that "idea generation is that it gives the entrepreneur greater chances of recognising opportunities". A study by Chudy-Laskowska et al. (2021) assessed the level of creativity and the ability of student youth to spot business opportunities, generate, assess and develop business ideas with an ethical and sustainable thinking approach. The youth surveyed felt that they were "innovative, curious, open and able to recognise the value of ideas, which were promising traits for their future business creation". Zizile and Tendai (2018:233) concurred that "entrepreneurial competencies are crucial for the survival and performance of SMMEs," and concluded that "an owner's ability to generate ideas plays a positive role in the success of their enterprises".

3.3.2 Resources

The 'Resources' competence area entails the materials that are required for transforming the opportunities and ideas into action (Bacigalupo *et al.* 2016:12). The 'self-awareness and self-efficacy' and 'motivation and perseverance' are associated with personal skills; mobilising resources' and 'financial and economic

literacy' are linked to managerial skills, while 'mobilising others' is related to social skills' (Bernado´ and Bratzke, 2024:23-24). Personal skills are the entrepreneur's attitude, which influences entrepreneurial intention and action; managerial skills are essential for business performance and growth, while a person with social skills is able to network and collaborate with others (Bernado´ & Bratzke, 2024:24).

Pulka *et al.* (2018:591) alluded to the importance of the Entrepreneurial network and Government Business Support (GBS) as some of the vital resources that can lead to the achievement of a better performance. They opined that through social, business and institutional contacts established, entrepreneurs are able to build interrelationships that will support them to acquire knowledge and skills that enable them to achieve high performance (Pulka *et al.* 2018:591). Their study found a positive relationship between GBS and entrepreneurial competencies. Therefore, this study echoes the sentiments of Zizile and Tendai (2018:233) that entrepreneurs "should always take advantage of skills development programmes offered by government agencies and institutions of higher learning" in order to "enhance their entrepreneurial competencies to improve performance of their growth-oriented businesses".

3.3.3 Into Action

The competencies in the 'Into action' area reflect the definition of entrepreneurship of the ability to turn ideas into action that generate value for someone other than oneself and are related to the starting, running and sustaining a business venture (Bacigalupo *et al.* 2016:10). Bernado´ and Bratzke (2024:24) observed that 'Taking the initiative' is key to initiating action and has been largely studied with the aim of identifying the determinant factors that lead to entrepreneurial action. These competencies are linked to Mitchelmore and Rowley (2013:136)'s entrepreneurial competencies such as innovative skills, risk-taking and creativity.

Pulka *et al.* (2018:591) associate them with Entrepreneurial Orientation (EO), which requires high levels of innovativeness, risk-taking and proactiveness. Their study observed that "SMEs with a high propensity towards innovativeness, proactiveness and risk-taking have a high propensity to achieve success and overall performance as compared to SMEs with low innovativeness, proactiveness and risk-taking". They allude to the fact that "EO aids SMEs to respond to the needs and demand of the customers in the market by introducing new product/services or modifying existing ones, initiating new and valuable ideas for the SMEs, support SMEs process management and enhance SMEs" (2018:591).

Zizile and Tendai (2018:233) add that entrepreneurs must be willing to take calculated risks and continuously improve their existing products or services through innovation for their firms to compete successfully locally and globally. Both these studies have found a relationship between entrepreneurial competencies and business performance. Pulka *et al.* (2018:591) assert that "entrepreneurial orientation is significantly and positively related to SMEs performance". In their study, Zizile and Tendai (2018:227-233) concluded that there is a relationship between owners' creativity and growth of enterprises; risk-taking has a positive

contribution to business performance; and there is a positive relationship between owners' innovation skills and the performance of entrepreneurial ventures.

The objective of the Improve Your Business (IYB) course is to enable existing entrepreneurs to develop their skills and improve plans for their businesses (NYDA 2025:3). However, Rivera (2021:37) observed that there is often a lack of post-start-up support and no follow-up after training, thus impacting negatively on business growth. Fotoyi & Ncwadi (2023:157)'s study also stressed the need for business support "in the growth or expansion stage".

4. Summary and Conclusion

Entrepreneurship development programmes (EDPs) present a platform for participants to develop and use their creative abilities, willingness to take initiatives, responsibilities and risks (Shetty *et al.*, 2024:2). Governments globally invest in EDPs to enhance entrepreneurial knowledge, skills, competencies and attitudes. These initiatives often include financial assistance, mentorship and training tailored to the needs of emerging entrepreneurs. South Africa's government, through institutions such as the NYDA and the Small Enterprise Development Agency (SEDA), has introduced several programmes targeting young entrepreneurs. However, failure rates and survival rates remain high. This study sought to evaluate the Business Management Training Programme as an EDP that is offered by the NYDA determine the extent to which it has been able to equip the participants with the ability to spot ideas and opportunities, utilise the resources at their disposal in order to take actions that will enhance the performance of their businesses. The results of the investigation will have policy implications for the government, the programme designers/developers and other stakeholders who might want to use them as a benchmark to enhance the impact of entrepreneurship training and support for youth and emerging entrepreneurs more effectively.

Entrepreneurship development programs, particularly those targeting youth, are essential for economic growth and employment generation. The impact assessment of the voucher programme for the 2014-2017 period has revealed that "the NYDA financial and non-financial interventions that are relevant to the programme beneficiaries are the grant, market linkages, entrepreneurship development and mentorship programmes" (NYDA, 2019:xi). The NYDA has played a crucial role in South Africa's youth entrepreneurship landscape; however, the agency needs to support businesses in the growth phase and provide assistance in accessing markets. The NYDA could "strengthen the training and re-training of young entrepreneurs in the areas of innovative marketing and sales pitching, as well as public procurement and tendering" (Fotoyi & Ncwadi 2023:158). EntreComp provides a valuable framework for entrepreneurial skills development and could be integrated into existing EDPs to improve their effectiveness.

Conference Disclaimer

Some part of this manuscript was previously presented in the conference: International Conference on Business and Management Dynamics (ICBMD) 2025, dated 29th October, 2025 in Cape Town, South Africa, Web Link of the proceeding: <https://www.icbmd.org.za>

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Competing Interests

Authors have declared that no competing interests exist.

References

- Ajuna, A., Ntale, J., & Ngui, T. (2018). Impact of training on the performance of women entrepreneurs in Kenya: Case of Meru Town. *International Academic Journal of Innovation, Leadership and Entrepreneurship*, 2(2), 93–112. http://www.iajournals.org/articles/iajile_v2_i2_93_112.pdf
- Akere, O. M., & Iwayemi, O. D. (2023). Graduates' entrepreneurship programme: A proper framework for national economic development in Nigeria. *American Journal of Education and Technology*, 2(3), 16–19. <https://doi.org/10.54536/ajet.v2i3.1537>
- Akinyemi, F. O., & Adejumo, O. (2019). Government policies and entrepreneurship phases in emerging economies: Nigeria and South Africa. *Journal of Global Entrepreneurship Research*, 8, 35. <https://doi.org/10.1186/s40497-018-0131-5>
- Ampadu-Ameyaw, R., Jumpah, E. T., Owusu-Arthur, J., Boadu, P., & Fatunbi, O. A. (2020). A review of youth employment initiatives in Ghana: Policy perspective. *FARA Research Report*, 5(5), 41. <https://research4agrinnovation.org/app/uploads/2021/03/a-review-of-youth-employment-initiatives-in-ghana-policy-perspective.pdf>
- Armuña, C., Ramos, S., Juan, J., Feijóo, C., & Arenal, A. (2020). From stand-up to start-up: Exploring entrepreneurship competences and STEM women's intention. *International Entrepreneurship and Management Journal*, 16, 69–92. <https://doi.org/10.1007/s11365-019-00627-z>

- Asmare, Y., & Mulatie, M. (2014). A tale of youth graduates unemployment. *Global Journal of Human-Social Science: Arts & Humanities – Psychology*, 14(4).
- Ayhan, F. (2016). Youth unemployment as a growing global threat. Retrieved May 7, 2024, from https://www.researchgate.net/publication/306208380_Youth_unemployment_as_a_grow
- Bacigalupo, M. (2019). The European Entrepreneurship Competence Framework (EntreComp): A conceptual model built and tested by the European Commission's joint research centre. *Journal of Creative Industries and Cultural Studies: JOCIS*, 4, 38–53.
- Bacigalupo, M., Kampylis, P., Punie, Y., & Van den Brande, G. (2016). EntreComp: The entrepreneurship competence framework. Luxembourg: Publications Office of the European Union, 10, 593884.
- Bakry, D., Khalifa, R., & Dabab, M. (2019). The effectiveness of entrepreneurship programs to reduce unemployment in developing countries: The case of Saudi Arabia. *Proceedings of PICMET '19: Technology Management in the World of Intelligent Systems*. <https://doi.org/10.23919/PICMET.2019.8893678>
- Bernadó, E., & Bratzke, F. (2024). Revisiting EntreComp through a systematic literature review of entrepreneurial competences: Implications for entrepreneurship education and future research. *The International Journal of Management Education*, 22(3), 101010. <https://doi.org/10.1016/j.ijme.2024.101010>
- Bose, V. (2013). An analysis of women entrepreneurship development programmes in the state of Kerala. Retrieved March 21, 2024, from <http://www.publishingindia.com>
- Botha, A., Smulders, S. A., Combrink, H. A., & Meiring, J. (2021). Challenges, barriers and policy development for South African SMMEs – Does size matter? *Development Southern Africa*, 38(2), 153–174. <https://doi.org/10.1080/0376835X.2020.1732872>
- Bowmaker-Falconer, A., & Herrington, M. (2019). *GEM South Africa Report 2019/2022: Igniting startups for economic growth and social change?* South Africa: Global Entrepreneurship Monitor.
- Bowmaker-Falconer, A., Meyer, N., & Samsami, M. (2023). Entrepreneurial resilience during economic turbulence 2022/2023. Stellenbosch University, South Africa.
- Bushe, B. (2019). The causes and impact of business failure among small to micro and medium enterprises in South Africa. *Africa's Public Service Delivery and Performance Review*, 7(1), 1–26. <https://hdl.handle.net/10520/EJC-141abef027>
- Cantamessa, M., Gatteschi, V., Perboli, G., & Rosano, M. (2018). Startups' roads to failure. *Sustainability*, 10(2346), 1–19. https://www.researchgate.net/publication/326242243_Startups
- Cassim, S., Soni, P., & Karodia, A. M. (2014). Entrepreneurship policy in South Africa. *Arabian Journal of Business and Management Review (OMAN Chapter)*, 3(9), 29.

- Chudy-Laskowska, K., Czyzewska, M., Jezierska, K., & Piecuch, T. (2021). Entrepreneurial competencies in research based on EntreComp among student youth in Poland. <https://www.um.edu.mt/library/oar/handle/123456789/83293>
- Czyzewska, M., & Mroczek, T. (2020). Data mining in entrepreneurial competencies diagnosis. *Education Sciences*, 10(8), 196. <https://doi.org/10.3390/educsci10080196>
- De Lannoy, A., Graham, L., Patel, L., & Leibbrandt, M. (2020). Why is youth unemployment so intractable in South Africa? A synthesis of evidence at the micro-level. *JAYS*, 3, 115–131. <https://doi.org/10.1007/s43151-020-00012-6>
- Devi, M.K., 2016. Assessment of entrepreneurship development programme in Salem District. *International Journal of Research in Social Sciences*, 6(12), pp.115-135. ISSN: 2249-2496 Impact Factor: 7.081
- Dube, I. P. (2020). Policy design and implementation: A case study of the Business Management Training Programme at the National Youth Development Agency (Unpublished Master's dissertation). University of South Africa, Pretoria.
- Dube, I. P. (2024). Entrepreneurship development and training challenges of the National Youth Development Agency to secure youth employment. *Administratio Publica*, 32(3), 159–180. <https://doi.org/10.61967/adminpub.2024.32.3.9>
- EBUS-TECH CONSULTING (PTY) LTD. (2020). Rapid Assessment on Entrepreneurship Development and Support. Final Report. Retrieved October 29, 2022, from <https://www.nyda.gov.za/Publications.html>
- European Union. (2018). *EntreComp: The European Entrepreneurship Competence Framework*. Luxembourg: Publications Office.
- Evbuomwan, N. F. O., & Mrwebi, S. (2017). Promoting job creation and economic growth through entrepreneurship and innovation in South Africa. Proceedings of 1st Annual Innovation Research Symposium, March 7, 2017, University of Nairobi. <https://www.researchgate.net/profile/Nosa-Evbuomwan/publication/297761018>
- Fatoki, O. (2014). The causes of the failure of new small and medium enterprises in South Africa. Retrieved October 17, 2024, from <http://www.mcser.org/journal/index.php/mjss/article/download/3816/3737>
- Ferdilan, R., Dhewanto, W., & Rustiadi, S. (2021). Evaluations of an entrepreneurship development program: A systematic literature review. *JEMA: Journal Ilmiah Bidang Akuntansi dan Manajemen*, 18(2), 107–136. <https://doi.org/10.31106/jema.v18i2.11461>
- Fergusson, R. (2021). International organizations' involvement in youth unemployment as a global policy field, and the global financial crisis. In K. Martens, D. Niemann, & A. Kaasch (Eds.), *International organizations in global social governance. Global dynamics of social policy*. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-65439-9_2
- FFE-YE. (2012). Impact of Entrepreneurship Education in Denmark - 2011. In L. Vestergaard, K. Moberg & C. Jørgensen (Eds.). Odense: The Danish Foundation for Entrepreneurship - Young Enterprise

- Fotoyi, A., & Ncwadi, R. (2023). Optimizing the economic benefits of public spending from National Youth Development Agency grant funding. *Acta Economica*, 21(39), 149–160. <https://doi.org/10.7251/ACE2339149F>
- Galvão, A. R., Marques, C. S., & Ferreira, J. (2019). Evaluation of an entrepreneurship training programme: A proposal for new guidelines. *Education + Training*, 61(2), 136–152. <https://doi.org/10.1108/ET-11-2018-0228>
- Glaub, M., & Frese, M. (2011). A critical review of the effects of entrepreneurship training in developing countries. *Enterprise Development and Microfinance*, 22(4), 335–353.
- Graham, L., De Lannoy, A., Patel, L., & Leibbrandt, L. (2018). What drives youth unemployment and what interventions help? A systematic overview of the evidence and a theory of change. Retrieved March 22, 2024, from youth-unemployment-exec-summary-final-interactive.pdf (uj.ac.za)
- Gulzar, F., Dar, B. A., & Fayaz, A. (2020). Role of government support system in promoting entrepreneurship development programs (EDPs) in J&K: An empirical study. *Journal of Entrepreneurship and Management*, 9(2), 43–54. <http://publishingindia.com/jem/>
- Gunawardana, T.S.L.W. and Bandara, D.G.N., 2021. Effectiveness of Entrepreneurship Development Training Programmes on Business Growth of SMEs. *Asian Journal of Management Studies*, 1(2). DOI: 10.4038/ajms.v1i2.36
- Hanna, A. L. (2014). The global youth unemployment crisis: Exploring successful initiatives and partnering with youths (Honors Thesis). Sanford School of Public Policy, Duke University, Durham, NC.
- International Labour Organization. (2015). Training packages – SIYB entrepreneur level. Retrieved October 29, 2022, from https://www.ilo.org/empent/areas/start-and-improve/WCMS_192062/lang-en/index.htm
- International Labour Organization. (2017). ILO business management training programme has led to the creation of 9 million jobs globally. Retrieved October 29, 2022, from https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_560493/lang-en/index.htm
- Ismail, A., Adnan, W. N., Masek, A., Hassan, R., Hashim, S., & Ismail, M. E. (2019). Effectiveness of entrepreneurship programmes in developing entrepreneurship skills towards quality TVET graduates. *Journal of Technical Education and Training*, 11(1). <https://doi.org/10.30880/jtet.2019.11.01.010>
- Ismail, Z. (2018). Indicators and methods for assessing entrepreneurship training programmes. Birmingham, UK: University of Birmingham. <https://assets.publishing.service.gov.uk/media/5b237501ed915d2cd7a16667>
- Iwara, I. O., Netshandama, V. O., Kilonzo, B., & Zuwarimwe, J. (2019). Sociocultural issues contributing to poor youth involvement in entrepreneurial activities in South Africa: A prospect of young graduates in Thohoyandou. *AFFRIKA Journal of Politics, Economics and Society*, 9(2), 111–134. <https://hdl.handle.net/10520/EJC-1a80860648>

- Joensuu-Salo, S., Viljamaa, A., & Varamäki, E. (2022). Testing the EntreComp framework and its relation to start-up behaviour in seven European countries. *Journal of Small Business Enterprise and Development*, 29, 920–939. <https://doi.org/10.1108/JSBED-04-2021-0156>
- Kgotlhane, B. E., Mudau, T. J., & Ncube, D. (2018). An exploration of challenges faced by unemployed university graduate students: A case of a rural university in the Limpopo Province. Retrieved March 17, 2024, from <https://hdl.handle.net/10520/EJC-131e6ea038>
- Kithae, P. P. (2013). Impact of entrepreneurship training on performance of micro and small enterprises (MSEs) in Kenya: A case study of Embu. *International Journal of Business and Management Review*, 1(2), 1–17. <http://ir-library.ku.ac.ke/handle/123456789/8077>
- Kori, B. W., Muathe, S. M., & Maina, S. M. (2020). Financial and non-financial measures in evaluating performance: The role of strategic intelligence in the context of commercial banks in Kenya. *International Business Research*, 13(10), 130–142. <https://doi.org/10.5539/i.br.v13n10p130>
- Letshaba, R. K., Mahosi, B. N., & Sibiyi, A. (2025). Does entrepreneurship education invigorate opportunity recognition and exploitation? *The Southern African Journal of Entrepreneurship and Small Business Management*, 17(1), 1068. https://hdl.handle.net/10520/ejcsajesbm_v17_n1_a1068
- López-Núñez, M.I., Rubio-Valdehita, S., Armuña, C. and Perez-Urria, E., 2022. EntreComp questionnaire: A self-assessment tool for entrepreneurship competencies. *Sustainability*, 14(5), p.2983. <https://doi.org/10.3390/su14052983>
- Maka, L., Van Niekerk, J. A., De-Bruyn, M., & Pakela-Jezile, Y. P. (2021). Perceptions of agricultural postgraduate students on unemployment in South Africa. *International Journal of Social Sciences and Humanity Studies*, 13(1), 55–78. <https://doi.org/10.34109/ijssh.202114003>
- Mandengenda, L. P. R. (2016). A critical analysis of entrepreneurship training programmes for business start-ups and growth in Zimbabwe (Doctoral dissertation). University of Pretoria.
- Maulani, N., & Agwanda, B. (2020). Youth unemployment and government pro-employment policies in Zimbabwe. *Journal of Social Policy Conferences*, 78, 229–256. <https://doi.org/10.26650/jspc.2019.78.0039>
- Mazorodze, B. T. (2020). Youth unemployment and murder crimes in KwaZulu-Natal, South Africa. *Cogent Economics and Finance*, 8(1), 1799480. <https://doi.org/10.1080/23322039.2020.1799480>
- Melwani, R., 2018. Entrepreneurship development and economic development: A literature analysis. *Vol. XXIV Issue 1*. Retrieved May 12, 2023, from <https://www.welingkar.org/sites/default/files/pdf/>
- Mercy Corps. (2020). Youth unemployment: A global crisis. Retrieved February 29, 2024, from <https://mercycorps.org/blog/youth-unemployment-a-global-crisis>

- Mitchelmore, S., & Rowley, J. (2013). Entrepreneurial competencies of women entrepreneurs pursuing business growth. *Journal of Small Business and Enterprise Development*, 20(1), 125–142. <https://doi.org/10.1108/14626001311298448>
- Mncwango, S. I., Adanlawo, E. F., & Vezi-Magigaba, M. F. (2024). Training interventions that enhance entrepreneurship self-efficacy among unemployed youth: A South Africa perspective. *International Journal of Business Ecosystem & Strategy*, 6(4), 113–121. <https://www.bussecon.com/ojs/index.php/ijbes>
- Modise, K. (2025). The Role of NYDA in Fighting Youth Unemployment. Retrieved December 10, 2025 from <https://whatson.gauteng.net/the-role-of-nyda-in-fighting-youth-unemployment/>
- Morris, M. H., Santos, S. C., & Neumeyer, X. (2020). Entrepreneurship as a solution to poverty in developed economies. *Business Horizons*, 63(3), 377–390. www.sciencedirect.com
- Morselli, D., & Gorenc, J. (2022). Using the EntreComp framework to evaluate two entrepreneurship education courses based on the Korda Method. *International Journal of Management Education*, 20, 100591. <https://doi.org/10.1016/j.ijme.2021.100591>
- Motha, M., & Nenzhelele, T. E. (2018). The existence and effectiveness of youth entrepreneurship enabling incentives in Johannesburg South Africa. In *Mbali Conference Proceedings* (p. 314). University of Zululand. ISBN 978-1-86818-149-0
- Muhammad, S. M., Kaoje, N. A., & Adam, S. I. (2025). Trends and development of entrepreneurship development programmes: A systematic literature review and bibliographic analysis. *IIARD International Journal of Economics and Business Management*, 11(6). <https://doi.org/10.56201/ijebm.vol.11.no6.2025.pg1.14>
- Naik, A., & Patel, P. (2023). Government schemes for entrepreneurship programs. In N. Amaran, D. Dharumadurai, & O. O. Babalola (Eds.), *Agricultural microbiology based entrepreneurship* (Microorganisms for Sustainability, Vol. 39). Springer. https://doi.org/10.1007/978-981-19-5747-5_2
- Nakku, V. B., Agbola, F. W., Miles, M. P., & Mahmood, A. (2019). The interrelationship between SME government support programs, entrepreneurial orientation, and performance: A developing economy perspective. *Journal of Small Business Management*, 58(1), 2–31. <https://doi.org/10.1080/00472778.2019.1659671>
- Nkosi, M. (2023). Youth development agencies: A case study of young people's experiences in Ekurhuleni Municipality. <http://hdl.handle.net/11427/39794>
- Nor, A. I. (2024). Entrepreneurship development as a tool for employment creation, income generation, and poverty reduction for the youth and women. *Journal of the Knowledge Economy*, 15, 19387–19410. <https://doi.org/10.1007/s13132-024-01747-w>
- Penar, E. (2021). Youth unemployment dilemma in Africa: An examination of recent data. Retrieved March 20, 2024, from <https://www.lersrsofafrica.org/analysis/youth-unemployment-dilemma-in-africa-recent-data/>

- Peprah, A. A., & Adekoya, A. F. (2020). Entrepreneurship and economic growth in developing countries: Evidence from Africa. *Business Strategy and Development*, 3(3), 388–394.
<https://doi.org/10.1080/00472778.2019.1659671>
- Pulka, B. M., Ramli, A., & Mohamad, A. (2021). Entrepreneurial competencies, entrepreneurial orientation, entrepreneurial network, government business support and SMEs performance: The moderating role of the external environment. *Journal of Small Business and Enterprise Development*, 28(4), 586–618. <https://doi.org/10.1108/JSBED-12-2018-0390>
- Rajaratne, M. (2024). Entrepreneurship development programs. In M. Rajaratne (Ed.), *Concepts, processes and practice of entrepreneurship* (Palgrave Studies in Global Entrepreneurship). Palgrave Macmillan.
https://doi.org/10.1007/978-981-97-6180-7_15
- Rajnikant, G. S., & Dave, R. K. (2020). A study on entrepreneurial development programs nurtures entrepreneurial career. *Journal of Modern Management & Entrepreneurship (JMME)*, 10(4), 135–140.
- Rana, S. S., Som, B., Jain, S. K., & Singh, R. (2018). An empirical analysis of entrepreneurship development program on potential entrepreneurs. *Universal Journal of Management*, 6(12), 491–496.
<https://doi.org/10.13189/ujm.2018.061203>
- Rivera, C. E. (2021). Business performance in the post-startup phase: The case of LATAM for-profit ventures participating in accelerator programs. *Multidisciplinary Business Review*, 14(1), 23–40.
<https://doi.org/10.35692/07183992.14.1.4>
- Shetty, G. S., Baliga, V., & Thomas Gil, M. (2024). Impact of entrepreneurial mindset and motivation on business performance: Deciphering the effects of entrepreneurship development program (EDPs) on trainees. *Cogent Business & Management*, 11(1), 2314733.
<https://doi.org/10.1080/20421338.2021.1917485>
- Sibani Consulting cc. (2018) NYDA Impact evaluation of the Entrepreneurship Development Programme. Retrieved October 29, 2022, from <https://www.nyda.gov.za/Publications.html>
- South Africa. Department of Small Business Development. (2022). Business viability programme. Retrieved October 29, 2022, from <https://www.dsbd.gov.za/programmes/business-viability-programme>
- South Africa. Department of Small Business Development. (2022). Retrieved October 29, 2022, from <https://www.gov.za/about-government/small-business-development>
- South Africa. Department of Social Development. (2025). The Rapid Assessment of the Implementation and Utilisation of the Special Covid-19 Social Relief of Distress Grant. Retrieved October 30, 2025, from <https://www.dsd.gov.za/index.php/latest-news>
- South Africa. National Youth Development Agency Act, 2008 (Act 54 of 2008). Retrieved October 29, 2022, from <https://www.gov.za/sites>

- South Africa. National Youth Development Agency (NYDA). (2022). Business management training small business development. Retrieved October 29, 2022, from <https://www.nyda.gov.za/Products-Services/Business-Management-Training.html>
- South Africa. National Youth Development Agency (NYDA). (2019). Impact Evaluation of the Voucher Programme. Retrieved October 29, 2022, from <https://www.nyda.gov.za > Portals >downloads> FINAL... PDF file>
- South Africa. National Youth Development Agency (NYDA). (2022). Small business development. Retrieved October 29, 2022, from <https://www.nyda.gov.za>
- South Africa. Small Enterprise Development Agency (SEDA). (2022). Small business development. Retrieved October 29, 2022, from <https://www.dsbd.gov.za/small-enterprise-development-agency-seda>
- South Africa. Small Enterprise Finance Agency (SEFA). (2022). Small business development. Retrieved October 29, 2022, from <https://www.sefa.org.za>
- South Africa. The Department of Trade Industry and Competition. (2025). About the Department of Trade, Industry and Competition. Retrieved June 30, 2025, from <https://www.thedtc.gov.z./department-of-trade-industry-and-competition/>
- South African Government. (2022). Government and opportunities for youth. Retrieved October 29, 2022, from <https://www.gov.za/issues/government-and-opportunities-youth>
- South Africa. Statistics South Africa. (2025). Quarterly Labour Force Survey (QLFS) – Q1:2025. Retrieved October 31, 2025, from <https://www.statssa.gov.za/?p=18398#:~:text=For%20youth%20aged%2015%20to,40%2C4%25%20over%20the%20same%20period.>
- South African Government News Agency, 2024. Government to extend and improve R350 grant for the unemployed | SAnews. Retrieved May 20, 2025, from <https://www.sanews.gov.za/south-africa/government-extend-and-improve-r350-grant-unemployed>
- Steenberg, R. (2017). The entrepreneurial spirit - Towards an education model for entrepreneurial success in South Africa (Doctoral dissertation, Texila American University in association with University of Central Nicaragua).
- Suminar, T., Arbarini, M., & Loretha, A. (2021). Management of entrepreneurship training program in literacy village. In *Proceedings of the 11th Annual International Conference on Industrial Engineering and Operations Management*, Singapore, March 7–11, 2021.
- Taiwo, I., & Tobias, E. (2022). Government entrepreneurship programmes and unemployment in Osun State, Nigeria. *Journal of International Business and Management*, 5(1), 1–14. <https://doi.org/10.37227/JIBM-2021-12-3284>
- Tshefuta, T. (2024). A critical review of youth employment programmes in South Africa: Challenges and solutions (Master's thesis, University of the Witwatersrand, Johannesburg, South Africa).
- Verick, S. S. (2023). The challenge of youth employment: New findings and approaches. *The Indian Journal of Labour Economics*, 66. <https://doi.org/10.1007/s41027-023-00438-5>

Zizile, T., & Tendai, C. (2018). The importance of entrepreneurial competencies on the performance of women entrepreneurs in South Africa. *Journal of Applied Business Research*, 34(2).

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Peer-Review History:

This chapter was reviewed by following the Advanced Open Peer Review policy. This chapter was thoroughly checked to prevent plagiarism. As per editorial policy, a minimum of two peer-reviewers reviewed the manuscript. After review and revision of the manuscript, the Book Editor approved the manuscript for final publication. Peer review comments, comments of the editor(s), etc. are available here: <https://peerreviewarchive.com/review-history/6771.8>

Investigating the Relationship between Project Success and Entrepreneurial Performance within Project-oriented Organisations

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DOI: <https://doi.org/10.9734/bpi/mono/978-81-998711-1-3/CH9>

Peer-Review History:

This chapter was reviewed by following the Advanced Open Peer Review policy. This chapter was thoroughly checked to prevent plagiarism. As per editorial policy, a minimum of two peer-reviewers reviewed the manuscript. After review and revision of the manuscript, the Book Editor approved the manuscript for final publication. Peer review comments, comments of the editor(s), etc. are available here: <https://peerreviewarchive.com/review-history/6771.9>

Abstract

Organisations frequently encounter entrepreneurial pressures when identifying and pursuing new project initiatives. Although the practical execution of project management differs from entrepreneurial activity, both domains rely on coordinating time, scope, and resource constraints within temporary, goal-driven settings. This conceptual overlap, however, has often limited the development of distinct knowledge streams in each field. Despite the clear presence of project-related practices in entrepreneurial work, contemporary research addressing the intersection between the two domains remains scarce. Investigating entrepreneurial performance within a project context may therefore enhance empirical insights into entrepreneurship. Yet, literature examining how entrepreneurial outcomes relate to project practices—particularly the performance implications of those practices—remains limited. The study aimed to examine the relationship between project success and entrepreneurial performance within project-oriented organisations. This study employed a qualitative research design using an electronic questionnaire administered to 50 individuals across five project-oriented organisations. The data were analysed using descriptive statistics. Findings demonstrate a positive association between project success and entrepreneurial performance within these organisations.

Keywords: Project success; entrepreneurial performance; entrepreneurship, project management; project-oriented organisations.

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1. Introduction

There is a growing consensus that global commerce has transitioned from industrial modes of production to a project-centred organisational landscape, where project-based work has become instrumental to ongoing competitiveness (Martens et al., 2018). Modern organisations increasingly regard project methodologies as essential mechanisms for implementing change, strengthening competitiveness, and ensuring sustainable organisational outcomes (Fonrouge et al., 2019). Entrepreneurship research, which traditionally emphasises the proactive pursuit of profitable opportunities, highlights two key behavioural components: opportunity recognition and the capacity to transform those opportunities into viable ventures (Audretsch, 2017). Although entrepreneurship and project management appear to stem from different traditions, their operational realities share more similarities than commonly assumed (Trokić, 2016). Over several decades, scholarship in both areas has underscored the need for innovative, change-oriented responses to environmental uncertainty (Shane, 2012).

Shenhar and Dvir (2007) argue that project-based initiatives focused on business outcomes can generate a competitive advantage by enabling innovation and strategic responsiveness. Simultaneously, customer expectations for quality and efficiency have intensified, forcing organisations to prioritise long-term innovation rather than short-term optimisation. Martens et al. (2018) argue that project success directly influences organisational capability, resource efficiency, and long-term growth. Yang (2019) further contends that the ability to manage projects effectively has become indispensable for organisational competitiveness.

Several foundational studies view entrepreneurial endeavours as temporary, resource-bounded, and unique—mirroring the nature of projects (Putniņš & Sauka, 2020). Kuura and Lundin (2019) assert that entrepreneurship and project management frequently converge in practice, even if they appear institutionally separate. Kuura et al. (2014) illustrate that although the fields coexist, they typically operate as parallel communities with limited theoretical integration. In such settings, organisations often struggle to behave “ambidextrously,” balancing the competing demands of market exploration and exploitation (Vicentini et al., 2021).

Turner (2018) distinguishes between project-based organisations that fundamentally operate through projects and project-oriented organisations that view projects as strategic vehicles shaping overall organisational philosophy. Within project-oriented environments, organisations must select projects that deliver sustainable results and generate stakeholder value (Gemünden et al., 2018). Morris and Geraldi (2011) argue that managers must cultivate conditions that support effective project work both internally and externally. Pinto and Winch (2016) note that current project management practice still reflects outdated assumptions, lacking alignment with broader strategic concerns.

Despite the inherent connection between projects and entrepreneurial processes, scholarship has historically treated them as separate fields (Kuura et al., 2014). The present study, therefore, explores how project success influences entrepreneurial performance and whether project risk alters this relationship (Shad et al., 2019).

This research contributes to the South African literature by examining how project success relates to entrepreneurial performance within project-oriented organisations. The findings provide insights for both project and entrepreneurship practitioners seeking to enhance strategic competitiveness.

2. Literature Review

Entrepreneurship: The field of entrepreneurship draws on three primary intellectual traditions: the German school, built on theorists such as von Thünen and Schumpeter; the Chicago school, represented by Knight and Schultz; and the Austrian school, associated with von Mises, Kirzner, and Shackle (Audretsch, 2012). Historically, entrepreneurship received limited academic attention; however, its relevance grew substantially during the post-industrial era as it became central to economic and social inquiry (Wiklund et al., 2011). Thomassen et al. (2020) observe that the concept of context within entrepreneurship remains contested, given the multifaceted environments in which entrepreneurial activity occurs. Contemporary research continues to expand beyond traditional theoretical frames, resulting in a more diverse and mature discipline (Audretsch, 2012).

Entrepreneurship within Organisations: Aldrich and Martinez (2010) argue that analysing the formation of new organisations requires attention to entrepreneurial actors and the organisational structures they create. Audretsch (2017) suggests that organisational context alone is sufficient to classify an entity as entrepreneurial, regardless of the specific behaviours exhibited. Traditional organisational indicators—such as size, age, or ownership structure—offer incomplete definitions of entrepreneurship (Audretsch, 2012). Instead, an organisation’s classification often rests on contextual characteristics rather than observed behaviours (Davies & Van Vuuren, 2021).

Performance-Based Entrepreneurship: Another perspective assesses entrepreneurship through performance outcomes, particularly innovation and growth (Audretsch, 2012; 2017). Entrepreneurs contribute to economic progress by initiating innovative activities (Wasdani & Mathew, 2014), which enhance competitiveness and development (Estrin et al., 2022). Because innovation is difficult to measure directly, growth is frequently used as a proxy, often reflected in employment or sales expansion. Venture capital funding may also indicate expected performance (Audretsch, 2017). Substantial evidence supports innovation and growth as core indicators of entrepreneurial performance (Garud et al., 2014).

Entrepreneurial Behaviour: Schumpeter's framework positions entrepreneurial behaviour around opportunity identification and exploitation (Kuckertz et al., 2017). Opportunity recognition involves continual interaction between individuals, context, and cognition (Wasdani & Mathew, 2014). Entrepreneurial activity can emerge in any organisational setting, with behavioural orientation shaping the ability to identify opportunities (Audretsch, 2012). According to Krueger and Day (2010), entrepreneurial cognition centres on recognising future opportunities. Patriotta and Siegel (2019) emphasise that entrepreneurial behaviour evolves through interactions among individuals and organisational systems.

Corporate Entrepreneurship: Corporate entrepreneurship describes activities that enable innovation within established firms, regardless of resource constraints (Ireland et al., 2006). It revitalises organisations by stimulating new business creation and strategic renewal. Organisations increasingly rely on corporate entrepreneurship to enhance performance and adaptability (Kuratko & Morris, 2018). These activities may take the form of corporate venturing or strategic entrepreneurship (Anderson et al., 2015).

Entrepreneurial Performance: Entrepreneurial performance is commonly evaluated through entrepreneurial intensity, which reflects both the magnitude and frequency of entrepreneurial actions (Kuratko & Morris, 2018). Measuring performance remains challenging due to inconsistent definitions across contexts (Gupta & Wales, 2017). Performance metrics help organisations assess growth, competitive positioning, and adaptability (Davies & Van Vuuren, 2021). Entrepreneurship is widely recognised as integral to economic growth, though recent attention has shifted to examining the impact of different types of entrepreneurs. Innovation remains central to high-impact entrepreneurial performance (Kapepa & Van Vuuren, 2019).

Project Success: Project success within project-oriented organisations extends beyond traditional constraints to include team dynamics, organisational factors, resource utilisation, and process effectiveness (Al-Shaaby & Almessabi, 2018). Success must also be evaluated across appropriate time horizons (Korbijn, 2014). Zidane and Olsson (2017) argue that project success reflects both leadership effectiveness and project efficiency.

Evaluating Project Success: Shenhar and Dvir (2007) propose a five-dimensional framework assessing project efficiency, customer impact, team impact, organisational/business benefits, and future preparedness. This multidimensional perspective enhances stakeholder communication and supports improved project outcomes (Shenhar & Dvir, 2007). Shenhar and Dvir (2007) suggest the framework can be applied to assess both short-term and long-term project performance.

3. Problem Statement

Organisations regularly confront entrepreneurial pressures when evaluating new project opportunities (Urbano & Aparicio, 2016). Although project

management and entrepreneurship operate differently, the temporary and resource-bound character of each creates conceptual overlap (Kuura et al., 2014). Empirical studies investigating the relationship between entrepreneurial practices and project environments remain limited (Oosthuizen, 2018). This study, therefore, aims to address this gap through qualitative inquiry.

4. Conceptual Framework and Summary of Premises

The conceptual framework guiding this study is presented in Fig. 1.

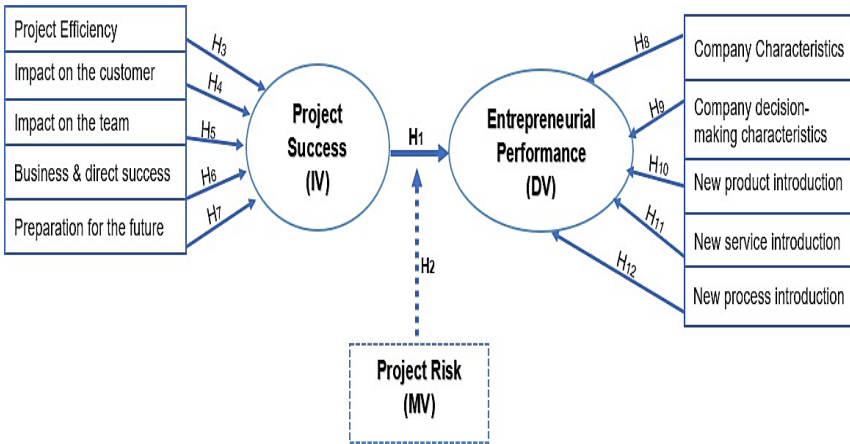


Fig. 1. Conceptual Framework
(Source: Snyman, 2023)

5. Hypotheses

The study assessed the following hypotheses derived from the conceptual model:

H1: Project success and entrepreneurial performance are positively related, as shown in Fig. 1.

H2: Project risk moderates the relationship between project success and entrepreneurial performance, as depicted in Fig. 1.

H3-H7: There is a positive relationship between project efficiency, customer impact, team impact, business and direct success, and preparation for the future, all concerning project success, as illustrated in Fig. 1.

H8-H12: Company characteristics, top-level decision-making characteristics, new product introductions, new service introductions, and new process introductions positively influence entrepreneurial performance, as shown in Fig. 1.

6. Research Aim and Objectives

6.1 Aim

To examine the relationship between project success and entrepreneurial performance within project-oriented organisations.

6.2 Objectives

Primary Objectives

- Conduct a literature study on project success.
- Conduct a literature study on entrepreneurial performance.

Secondary Objective

- Provide recommendations for future research.

7. Research Question

Does project success influence entrepreneurial performance within project-oriented organisations?

8. Research Methodology

The research applied a qualitative design using an electronic questionnaire distributed to 50 participants across five project-oriented organisations. Descriptive analysis was performed on the dataset. Reliability was assessed using Cronbach's alpha, and content validity was established through pre-testing. Hypotheses were evaluated using Structural Equation Modelling (SEM).

9. Results and Discussion

9.1 Structural Equation Modelling Outcomes

Table 1 summarises the hypothesis testing results for the SEM analysis.

Table 1. Premises for the conceptual model

Relationship	Beta coefficients	T-statistics	P < 0.05	Premise	Result
Project success è EP [Project success → Entrepreneurial performance (EP)]	0.572	4.782	0.000	1	Accept
Project risk x project success è EP (<i>moderator relationship</i>) [Project risk × Project success → Entrepreneurial performance (EP) (<i>moderating relationship</i>)]	-0.163	1.648	0.099	2	Reject
Customer perception è project success [Customer perception → Project success]	1.009	19.687	0.006	3	Accept
Project characteristics è project success [Project characteristics → Project success]	1.014	18.467	0.000	4	Accept
Project performance è project success [Project performance → Project success]	1.004	13.702	0.256	5	Reject
Project team è project success [Project team → Project success]	0.963	17.281	0.005	6	Accept
Company characteristics è EP [Company characteristics → Entrepreneurial performance (EP)]	0.891	14.846	0.000	7	Accept
Improved entrepreneurial action è EP [Improved entrepreneurial action → Entrepreneurial performance (EP)]	1.077	43.294	0.000	8	Accept

Source: Snyman (2023)

The table showed that the first hypothesis (H1) was supported. The results reveal a positive and statistically significant relationship between project success and entrepreneurial performance at the 95% confidence interval ($p < 0.000$). This indicates that higher levels of project success—captured through multidimensional indicators—are associated with enhanced entrepreneurial performance within project-oriented organisations. Mir and Pinnington (2014) argue that project success comprises a set of actionable and measurable activities related to customer perception, project characteristics, project performance, and team dynamics. The present findings lend empirical support to this view by demonstrating that organisations capable of executing projects effectively stand to benefit from improved entrepreneurial outcomes. This outcome is consistent with a broad body of literature which emphasises that successful projects improve organisational performance, stimulate innovation, and enhance profitability by advancing strategic objectives. On the other hand, the second hypothesis (H2) was rejected. Results show that project risk did not moderate the relationship between project success and entrepreneurial performance at the 95% confidence interval ($p < 0.099$). Although the direction of the moderating effect suggested a potential influence, the relationship failed to reach the conventional threshold of statistical significance. Several contextual explanations may account for the non-significant moderation. First, the use of a stringent test statistic ($\alpha = 0.05$) may have reduced sensitivity to detect smaller effects; a less conservative confidence interval (e.g., 90% with $\alpha = 0.10$) may have produced different results. Second, descriptive analysis revealed that 27.4% of respondents had fewer than five years of experience in project-oriented settings. Limited practical exposure may have resulted in insufficient capability to meaningfully assess or integrate risk considerations into project decision-making. Furthermore, 29.5% of participants reported involvement in relatively small projects valued below R10 million. Such projects typically entail lower complexity and reduced exposure to risk, which may diminish the salience of risk as a moderating factor. These contextual dynamics suggest that the role of risk might be more pronounced in environments characterised by larger, more complex, and higher-stakes projects.

The third hypothesis (H3) was accepted as findings indicate a statistically significant relationship between customer perception and project success at the 95% confidence interval ($p < 0.006$). This reinforces the widely held view that customer satisfaction, expectations, and perceptions of value delivery are central determinants of project success. Positive customer perceptions signal alignment between project outputs and user needs, thereby contributing to both operational and strategic success metrics. The fourth hypothesis (H4) was supported, as results show a positive and highly significant relationship between project characteristics and project success ($p < 0.000$). This finding corroborates Rolstadås et al. (2014), who assert that each project possesses unique contextual and structural attributes that evolve across stages of the project lifecycle. These characteristics—ranging from complexity and scope to stakeholder configuration and resource constraints—can directly or indirectly influence project outcomes. The current study affirms that an understanding of

these contextual nuances enhances the likelihood of achieving successful project execution.

However, the fifth hypothesis (H5) was rejected since the relationship between project performance and project success was not statistically significant at the 95% confidence interval ($p < 0.256$). This result is particularly noteworthy, as it challenges the conventional assumption that performance metrics—such as efficiency, adherence, and schedule compliance—serve as straightforward predictors of success. The disconnect observed here suggests that project success may be influenced by a broader array of intangible or contextual variables not fully captured by traditional performance measures. Further investigation is warranted to uncover possible mediating or confounding factors, such as stakeholder dynamics, organisational culture, or non-financial value creation.

The sixth hypothesis (H6) was accepted, although the relationship between project team dynamics and project success exhibited only modest statistical significance at the 95% confidence interval ($p < 0.005$). While the effect was weaker than expected, it nonetheless indicates that the competence, cohesion, and collaborative behaviour of project teams contribute meaningfully to project outcomes. Given that the p-value was marginally above the standard significance threshold, it is plausible that using a less stringent α level (e.g., 0.10) might have strengthened the statistical evidence. This finding resonates with broader research emphasising the importance of human factors and team effectiveness in determining project success.

The seventh hypothesis (H7) was accepted. Results demonstrate a positive and statistically significant relationship between company characteristics and entrepreneurial performance ($p < 0.000$). This suggests that firms with strong entrepreneurial profiles—such as innovativeness, proactiveness, adaptability, and strategic flexibility—tend to achieve superior entrepreneurial outcomes. The finding reinforces scholarly assertions that organisational infrastructure and culture play critical roles in shaping entrepreneurial capabilities and performance trajectories. The eighth hypothesis (H8) was supported, with results showing a strong, positive, and statistically significant relationship between improved entrepreneurial action and entrepreneurial performance at the 95% confidence interval ($p < 0.000$). This aligns with Lerner et al. (2018), who conceptualise entrepreneurship as an inherently action-driven process, whereby sustained entrepreneurial behaviours directly contribute to performance outcomes. In addition, Mir and Pinnington (2014) emphasise that organisational performance remains the ultimate benchmark for assessing entrepreneurial success or failure. The findings of this study therefore provide empirical confirmation that deliberate entrepreneurial actions meaningfully enhance organisational performance.

9.2 Summary of Results

Taken together, the results provide strong evidence of a positive and significant relationship between project success and entrepreneurial performance within

project-oriented organisations. The findings collectively suggest that successful project execution, supported by favourable customer perceptions, strong organisational characteristics, and purposeful entrepreneurial action, contributes to enhanced entrepreneurial outcomes. While certain expected relationships—such as the moderating role of project risk and the direct influence of project performance—did not materialise, these deviations offer valuable insights and avenues for future research.

10. Conclusions and Recommendations

The findings confirm a significant positive relationship between project success and entrepreneurial performance within project-oriented organisations. However, project risk did not moderate this relationship. Umrani et al. (2018) emphasise that competitive pressures require organisations to adopt entrepreneurial strategies, while Hanisch and Wald (2011) and Mir and Pinnington (2014) highlight that project outputs should contribute to organisational advancement. Viewing corporate entrepreneurship and project management as complementary may unlock growth opportunities. Practitioners and scholars should focus on shared attributes between the two fields and leverage their differences to stimulate development within the South African context.

11. Limitations and Future Research

The study faced limitations, including insufficient local literature, a narrow conceptual scope centred on project-oriented organisations, and a respondent group with limited project experience. These factors may have influenced the interpretation of project success and entrepreneurial performance. Future research should adopt longitudinal and cross-national approaches to deepen understanding of these relationships.

Conference Disclaimer

Some part of this manuscript was previously presented in the conference: International Conference on Business and Management Dynamics (ICBMD) 2025, dated 29th October, 2025 in Cape Town, South Africa, Web Link of the proceeding: <https://www.icbmd.org.za>

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Competing Interests

Author has declared that no competing interests exist.

References

- Aldrich, H. E., & Martinez, M. A. (2010). Entrepreneurship as social construction: A multilevel evolutionary approach. In *Handbook of Entrepreneurship Research*. https://doi.org/10.1007/978-1-4419-1191-9_15
- Al-Shaaby, A., & Ahmed, A. (2018). How do we measure project success? A survey. *Journal of Information Technology & Software Engineering*, 8(2), 1–5. <https://doi.org/10.4172/2175-7866.1000229>
- Anderson, B. S., Kreiser, P. M., Kuratko, D. F., Hornsby, J. S., & Eshima, Y. (2015). Reconceptualizing entrepreneurial orientation. *Strategic Management Journal*, 36(10), 1579–1596. <https://doi.org/10.1002/smj.2298>
- Audretsch, D. B. (2012). Entrepreneurship research. *Management Decision*, 50(5), 755–764. <https://doi.org/10.1108/00251741211227384>
- Audretsch, D. B. (2017). Entrepreneurship and universities. *International Journal of Entrepreneurship and Small Business*. <https://doi.org/10.1504/IJESB.2017.083802>
- Davies, C., & Van Vuuren, J. J. (2021). Entrepreneurship orientation and business discontinuance: A relationship analysis of total early-stage activities in the BRICS countries. *Journal of Contemporary Management*, 18(1), 455–481. <https://doi.org/10.35683/jcm20078.113>
- Estrin, S., Korosteleva, J., & Mickiewicz, T. (2022). Schumpeterian entry: Innovation, exporting and growth aspirations of entrepreneurs. *Entrepreneurship Theory and Practice*, 46(2), 269–296. <https://doi.org/10.1177/1042258720909771>
- Fonrouge, C., Bredillet, C., & Fouché, C. (2019). Entrepreneurship and project management relationships: So far so good? Dialogic conversation and Luhmannian perspective. *International Journal of Managing Projects in Business*, 12(1), 6–24. <https://doi.org/10.1108/IJMPB-01-2018-0013>
- Garud, R., Gehman, J., & Giuliani, A. P. (2014). Contextualizing entrepreneurial innovation: A narrative perspective. *Research Policy*, 43(7), 1177–1188. <https://doi.org/10.1016/j.respol.2014.04.015>
- Gemünden, H. G., Lehner, P., & Kock, A. (2018). The project-oriented organization and its contribution to innovation. *International Journal of Project Management*, 36(1), 147–160. <https://doi.org/10.1016/j.ijproman.2017.07.009>
- Gupta, V. K., & Wales, W. J. (2017). Assessing organisational performance within entrepreneurial orientation research: Where have we been and where can we go from here? *The Journal of Entrepreneurship*, 26(1), 51–76. <https://doi.org/10.1177/0971355716677389>
- Hanisch, B., & Wald, A. (2011). A project management research framework integrating multiple theoretical perspectives and influencing factors. *Project Management Journal*, 42(3), 4–22. <https://doi.org/10.1002/pmj.20241>
- Ireland, R. D., Kuratko, D. F., & Morris, M. H. (2006). A health audit for corporate entrepreneurship: Innovation at all levels: Part I. *Journal of Business Strategy*, 27(1), 10–17. <https://doi.org/10.1108/02756660610640137>

- Kapepa, O., & Van Vuuren, J. (2019). The importance of tolerance for failure and risk-taking among insurance firms in hyperinflationary Zimbabwe. *The Southern African Journal of Entrepreneurship and Small Business Management*. <https://doi.org/10.4102/sajesbm.v11i1.142>
- Korbijn, G. (2014). Success criteria and critical success factors for contractors of urgent and unexpected projects: A multiple case study within the maintenance & repair sector. Erasmus University. <http://hdl.handle.net/2105/17800>
- Krueger, N. F., & Day, M. (2010). Looking forward, looking backward: From entrepreneurial cognition to neuroentrepreneurship. In *Handbook of Entrepreneurship Research*. https://doi.org/10.1007/978-1-4419-1191-9_13
- Kuckertz, A., Kollmann, T., Krell, P., & Stöckmann, C. (2017). Understanding, differentiating, and measuring opportunity recognition and opportunity exploitation. *International Journal of Entrepreneurial Behaviour & Research*, 23(1), 78–97. <https://doi.org/10.1108/IJEBR-12-2015-0290>
- Kuratko, D. F., & Morris, M. H. (2018). Corporate entrepreneurship: A critical challenge for educators and researchers. *Entrepreneurship Education and Pedagogy*, 1(1), 42–60. <https://doi.org/10.1177/2515127417737291>
- Kuura, A., & Lundin, R. A. (2019). Process perspectives on entrepreneurship and projects. *International Journal of Managing Projects in Business*, 12(1), 25–47. <https://doi.org/10.1108/IJMPB-12-2017-0165>
- Kuura, A., Blackburn, R. A., & Lundin, R. A. (2014). Entrepreneurship and projects—Linking segregated communities. *Scandinavian Journal of Management*, 30(2), 214–230. <https://doi.org/10.1016/j.scaman.2013.10.002>
- Lerner, D. A., Hunt, R. A., & Dimov, D. (2018). Action! Moving beyond the intendedly-rational logics of entrepreneurship. *Journal of Business Venturing*, 33(1), 52–69. <https://doi.org/10.1016/j.jbusvent.2017.10.002>
- Martens, C. D. P., Machado, F. J., Martens, M. L., Silva, F. Q. P. O., & Freitas, H. M. R. (2018). Linking entrepreneurial orientation to project success. *International Journal of Project Management*, 36(2), 255–266. <https://doi.org/10.1016/j.ijproman.2017.10.005>
- Mir, F. A., & Pinnington, A. H. (2014). Exploring the value of project management: Linking project management performance and project success. *International Journal of Project Management*, 32(2), 202–217. <https://doi.org/10.1016/j.ijproman.2013.05.012>
- Geraldi, J., & Morris, P. W. G. (2011). Managing the institutional context for projects. *Project Management Journal*, 42(6), 20–32. <https://doi.org/10.1002/pmj.20271>
- Oosthuizen, A. (2018). Predicting the benefits that small business owners obtain from their accounting practitioners (Doctoral thesis). University of Pretoria. <http://hdl.handle.net/2263/67864>
- Patriotta, G., & Siegel, D. (2019). The context of entrepreneurship. *Journal of Management Studies*, 56(6), 1194–1196. <https://doi.org/10.1111/joms.12440>

- Pinto, J. K., & Winch, G. (2016). The unsettling of "settled science": The past and future of the management of projects. *International Journal of Project Management*. <https://doi.org/10.1016/j.ijproman.2015.07.011>
- Putniņš, T. J., & Sauka, A. (2020). Why does entrepreneurial orientation affect company performance? *Strategic Entrepreneurship Journal*, 14(4), 711–735. <https://doi.org/10.1002/sej.1325>
- Rolstadås, A., Tommelein, I., Schiefloe, P. M., & Ballard, G. (2014). Understanding project success through analysis of project management approach. *International Journal of Managing Projects in Business*, 7(4), 638–660. <https://doi.org/10.1108/IJMPB-09-2013-0048>
- Shad, M. K., Lai, F. W., Fatt, C. L., Klemeš, J. J., & Bokhari, A. (2019). Integrating sustainability reporting into enterprise risk management and its relationship with business performance: A conceptual framework. *Journal of Cleaner Production*. <https://doi.org/10.1016/j.jclepro.2018.10.120>
- Shane, S. (2012). Reflections on the 2010 AMR Decade Award: Delivering on the Promise of Entrepreneurship As a Field of Research. *Academy of Management Review*, 37(1), 10–20. <https://doi.org/10.5465/AMR.2011.0078>
- Shenhar, A. J., & Dvir, D. (2007). *Reinventing project management: The diamond approach to successful growth and innovation*. Harvard Business School Press. <https://hbsp.harvard.edu/product/8002-PDF-ENG>
- Snyman, A. E. (2023). Investigating the relationship between project success and entrepreneurial performance (Doctoral thesis). University of Pretoria. <https://search.proquest.com/openview/e7a3858e9ab5b6a1b0d26839355fe5/1?pq-origsite=gscholar&cbl=2026366&diss=y>
- Thomassen, M. L., Middleton, K. W., Ramsgaard, M. B., Neergaard, H., & Warren, L. (2020). Conceptualizing context in entrepreneurship education: A literature review. *International Journal of Entrepreneurial Behaviour & Research*, 26(5), 863–886. <https://doi.org/10.1108/IJEBr-04-2018-0258>
- Trokić, A. (2016). Entrepreneurial project management – Cross-fertilization between the fields. *Project Management World Journal*, 5(2), 1–5. <https://pmworldlibrary.net/wp-content/uploads/2016/02/pmwj44-Feb2016-Trokic-Entrepreneurial-Project-Management-Commentary.pdf>
- Turner, J. R. (2018). The management of the project-based organization: A personal reflection. *International Journal of Project Management*, 36(1). <https://doi.org/10.1016/j.ijproman.2017.08.002>
- Umrani, W. A., Kura, K. M., & Ahmed, U. (2018). Corporate entrepreneurship and business performance: The moderating role of organizational culture in selected banks in Pakistan. *PSU Research Review*, 2(1), 59–80. <https://doi.org/10.1108/PRR-12-2016-0011>
- Urbano, D., & Aparicio, S. (2016). Entrepreneurship capital types and economic growth: International evidence. *Technological Forecasting and Social Change*. <https://doi.org/10.1016/j.techfore.2015.02.018>
- Vicentini, F., Peruffo, E., Meissner, D., & Mueller, J. (2021). Unpacking entrepreneurial intensity and individual ambidexterity in small project-based enterprises: A new perspective for the TV drama industry. *IEEE Transactions on Engineering Management*, 68(2), 387–395. <https://doi.org/10.1109/TEM.2019.2914662>

- Wasdani, K. P., & Mathew, M. (2014). Potential for opportunity recognition: Differentiating entrepreneurs. *International Journal of Entrepreneurship and Small Business*, 23(3), 336–362. <https://doi.org/10.1504/IJESB.2014.065526>
- Wiklund, J., Davidsson, P., Audretsch, D. B., & Karlsson, C. (2011). The future of entrepreneurship research. *Entrepreneurship Theory and Practice*, 35(1), 1–9. <https://doi.org/10.1111/j.1540-6520.2010.00420.x>
- Yang, J. (2019). Research on improvement of entrepreneurship project management ability. *IOP Conference Series: Materials Science and Engineering*, 688(5). <https://doi.org/10.1088/1757-899X/688/5/055087>
- Zidane, Y. J. T., & Olsson, N. O. E. (2017). Defining project efficiency, effectiveness and efficacy. *International Journal of Managing Projects in Business*, 10(3), 621–641. <https://doi.org/10.1108/IJMPB-10-2016-0085>

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Peer-Review History:

This chapter was reviewed by following the Advanced Open Peer Review policy. This chapter was thoroughly checked to prevent plagiarism. As per editorial policy, a minimum of two peer-reviewers reviewed the manuscript. After review and revision of the manuscript, the Book Editor approved the manuscript for final publication. Peer review comments, comments of the editor(s), etc. are available here: <https://peerreviewarchive.com/review-history/6771.9>

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