SCIENTIFIC CULTURE
www.sci-cult.com

SCIENTIFIC CULTURE, Vol. 12, No. 2.1, (2026), pp. 9306-9320
Open Access. Online & Print

DOI: 10.5281/zenodo.19949398

THE ROLE OF THE ENTREPRENEURIAL SUPPORT ENVIRONMENT ON BUSINESS PERFORMANCE AND SUSTAINABILITY OF STARTUPS IN BUFFALO CITY METROPOLITAN MUNICIPALITY

Chumisa Fixi[1], Miston Mapuranga[2], Mkhuseli Mpomposhe[3]

Department of Economics and Business Sciences
iYunivesithi Walter Sisulu , South Africa

Received: 15/03/2026
Accepted: 18/04/2026

Corresponding Author: Dr Miston Mapuranga
mmapuranga@wsu.ac.za

ABSTRACT

Startups offer important incentives for innovation, development, and employment creation. Unfortunately, sustainability suffers high failure rates, particularly in developing countries like South Africa. The aim of this study was to examine how Entrepreneurial Support Environments' construct of networking opportunities, entrepreneurial culture, skills, mindset, and availability of resources influence business performance and start-up sustainability in BCMM, Data were collected from 354 startup owners in the Buffalo City Metropolitan Municipality through an online questionnaire and analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM) with the SmartPLS software. The results showed that all five hypothesized links between ESE constructs and business performance were positive and statistically significant. A positive and statistically significant relationship between networking opportunities and business performance was seen ($t = 3.45$, $p < .001$), while a positive influence from entrepreneurial culture on business performance was also observed ($t = 2.87$, $p = .004$). Entrepreneurial skills ($t = 4.12$, $p < .001$), entrepreneurial mindset ($t = 4.56$, $p < .001$), and access to resources ($t = 3.76$, $p < .001$) were also shown to impact positively and significantly on business performance. The study contributes to the field by confirming the mediating role of the entrepreneurial ecosystem in business performance, while providing useful insights for entrepreneur's governments and institutions on ways to improve business performance and sustainability. In the modern global marketplace, the need to build on the strength of an entrepreneurial ecosystem cannot be overstated for the survival and success of regional economies.

KEYWORDS: Support Environment; Business Performance; Startup Sustainability; Entrepreneurial Culture; Entrepreneurial Skills; Networking Opportunities; Entrepreneurial Mindset; Access to Resources; Buffalo City Metropolitan Municipality.

1. INTRODUCTION

Entrepreneurship has been unanimously recognised as an essential driver of economic growth and socio-economic development across emerging economies (Ndou et al., 2024; Okafor et al., 2024). Start-up activities and small businesses foster innovation, reduce unemployment, and improve the nation's competitiveness (Edoho et al., 2024). Nevertheless, they often face total failure in the initial stages of development owing to entrepreneurial skills, limited access to strategic resources, and a lower entrepreneurial culture (GEM, 2022; SEDA, 2021; Singh, 2024). It becomes indispensable to empirically examine the relationship between entrepreneurial activities and business effectiveness in the context of a startup's sustainability, through the lens of the Entrepreneurial Support Ecosystem (ESE) (Brown, 2022; Buli, 2017).

ESE encompasses cultural, social, institutional, and individual factors that affect all dimensions of entrepreneurship (Isenberg, 2011; Edoho et al., 2024; Ndou et al., 2024). In the case of South Africa, in the Buffalo City Metropolitan Municipality (BCMM) area, small business sustainability within the economy faces many challenges in terms of resources, employment creation, and the ability to sustain small business initiatives despite government and private sector efforts to provide support for small businesses (Maseko, 2024; Brown, 2022; SEDA, 2021; GEM, 2022).

The study highlights five key ESE aspects: entrepreneurial culture, skills, networking, mindset, and resources. Business performance was considered a mediator in connecting these factors with entrepreneurial startups' sustainability. Business performance highlights efficiency, competitiveness, and viability, as noted by Buli (2017) and Brown (2022) and supported by Ndou et al. (2024).

There are few empirical studies municipal environment (Ndou et al., 2024; Okafor et al., 2024). This study provides empirical validation for policymakers to inform entrepreneurship policies and interventions that boost the performance of startups by advancing an empirical PLS-SEM model of the relationships among ESEs, business performance, and sustainability (Hair et al., 2019; SEDA, 2021).

1.2. Problem Statement

However, long-term sustainability remains one of the biggest challenges for startups in both developing and developed economies. While in South Africa, startups are viewed as relevant drivers of economic growth and employment creation, they have mostly remained survivalist in nature. The Global Entrepreneurship Monitor GEM South Africa Report, 2022, estimates that about 70% of small business enterprises fail within the first three years of operation. In the Eastern Cape, it is even higher, with over 75% of businesses not surviving beyond three years (SEDA, 2021. This makes the situation very critical, especially for the sustenance of startups in municipalities like Buffalo City.

Similarly, in the Buffalo City Metropolitan Municipality region, the same patterns have been noted. They have been amplified in certain areas by the constraints facing the region. According to Maseko (2024), in the area where the Buffalo City Metropolitan Municipality is located, more than 7,500 businesses fail in the span of three years. Thus, the failure rate is about 75%, considering the total figure is about 10,000 startups.

Globally, most startups experience challenges in their first years of establishment, mainly attributed to resources and a lack of market and institutional ported. Although there are various initiatives by various countries and different international entities to promote entrepreneurship and entrepreneurship support initiatives, there are challenges in understanding how a supportive entrepreneurship environment impacts business performances and sustainability. This has affected various countries in emerging economies, mainly in countries within a developing economy in Africa, according to Singh in 2024.

In addition to these challenges in BCMM, limited entrepreneurial skills, infrastructure challenges, and challenges in accessing finance will act as barriers to the development of BCMM entrepreneurial activity, especially for startups that have no collateral to finance their business or lack credibility (Edoho et al., 2024).

The significance of entrepreneurial ecosystems has previously been acknowledged in various studies, but their interrelationship to promoting sustainable entrepreneurial activity has not been sufficiently demonstrated empirically (Ndou et al., 2024).

Given the gaps in the literature, the specific objectives of this study have been shaped with the intent to fill the gaps. The study seeks to explore the impact of the Entrepreneurial Support Ecosystem on the sustainability of startup businesses in the Buffalo City Metropolitan Municipality. The study identifies the components of the Entrepreneurial Support Ecosystem that have the greatest impact on startup businesses in the region.

1.3. Research Objectiives

The specific objectives of this study are to:

Determine the influence of networking opportunities on the business performance of startups in BCMM.

1. Examine the effect of entrepreneurial culture on the business performance of startups in BCMM.
2. Assess the impact of entrepreneurial skills on the business performance of startups in BCMM.
3. Analyse the role of the entrepreneurial mindset on the business performance of startups in BCMM.
4. Investigate the effect of access to resources on the business performance of startups in BCMM.
5. Determine the relationship between business performance and startup sustainability in BCMM.
6. Examine the mediating role of business performance in the relationship between the entrepreneurial support environment factors and startup sustainability.

2. LITERATURE REVIEW

2.1. Theoretical Framework

The conceptual framework of this study is based on Resource-Based Theory (RBV) and Institutional Theory.

2.1.1 Resource-Based View.

The Resource-Based View (RBV), originally formalised by Wernerfelt (1984) and substantially expanded by Barney (1991), posits that a firm's sustainable competitive advantage is derived from its possession and effective management of resources that are Valuable, Rare, Inimitable, and Non-substitutable (VRIN). In the context of startups, these resources extend beyond traditional assets to include networks (social capital), access to funding (financial capital), an entrepreneurial mindset (human capital), and a supportive culture (organisational and institutional capital) (Zvarimwa & Zimuto, 2022). The RBV helps explain how entrepreneurial capabilities and support structures such as mentorship, funding, and institutional backing translate into tangible performance and sustainability outcomes.

RBV maintains that sustained competitive advantage of firms can be achieved if the firm possesses valuable, scarce, difficult to imitate, and difficult to substitute resources" (Barney, 1991). For the startup firm, these include the entrepreneur's skills and mindsets, innovation, access to financial resources, and networks (Abdullahi et al., 2021; Brown, 2022; Ndou et al., 2024). These internal competencies form the basis for a startup firm's success in competition (Abdullahi et al., 2021; Brown, 2022).

2.1.2. Institutional Theory

Institutional Theory, pioneered by DiMaggio and Powell (1983) and further developed by Scott (1995), explores how external structures, norms, and cultural-cognitive frameworks influence organisational behaviour and outcomes (Tribe, 2022). It emphasises that organisations, including startups, operate within a field shaped by three pillars of institutions: Regulatory: Formal rules, laws, funding mechanisms, and government policies, Normative: Professional standards, ethical codes, and accepted ways of doing business, Cultural-Cognitive: Shared beliefs, entrepreneurial mindset, and local values that define reality (Scott, 1995; Zahra, 2007).

Zahra (2007). Institutional Theory emphasises that external factors, including policies and society, influence how an organisation behaves and its performance. Startups, for example, should not be seen simply as being responsible for themselves, as they are in an environment that is supporting and enabling them to thrive and/or is holding them back from performing to the maximum, including regulative, normative, and cognitive factors, as well as education and mentorships, among others.

Furthermore, the combination of RBV theory and Institutional theory takes into consideration the sustainability of startups as a function not only of internal capabilities but also of the overall support environment. Such a dimension covers supportive mechanisms such as the entrepreneurial culture network, skills, and the availability of resources. These are reflected in Edoho et al. (2024), Ndou et al. (2024), and Okafor et al. (2024). Such a perspective will frame the exploration in terms of the Entrepreneurial Support Environment (ESE) impact on business sustainability.

2.1.3. Entrepreneurial Ecosystem Theory

Entrepreneurial Ecosystem Theory explains entrepreneurship as an outcome of interactions among multiple actors, institutions, and resources within a specific geographical and socio-economic context, rather than as the result of isolated firm-level efforts. The theory was formally introduced by Isenberg (2011), who argued that entrepreneurial success depends on the coordination of key

ecosystem elements, including entrepreneurs, finance, government policy, education systems, support organisations, culture, infrastructure, and markets. Building on this view, Stam (2015) emphasises that entrepreneurial performance is driven by the alignment and interaction of these systemic components rather than by individual factors operating independently.

Further refinement of the theory highlights the relational nature of entrepreneurial ecosystems. Spigel (2017) conceptualises ecosystems as network-based systems in which social capital, institutional support, and knowledge flows enable the recognition of opportunities, innovation, and venture growth. Stam & Van de Ven (2021) distinguish between framework conditions (such as institutions, infrastructure, and culture) and systemic conditions (including networks, leadership, finance, talent, and knowledge), arguing that entrepreneurial outcomes emerge when these elements function cohesively.

Entrepreneurial Ecosystem Theory is particularly relevant in developing and emerging economies, where institutional constraints and resource limitations shape entrepreneurial outcomes. Empirical evidence suggests that regions with well-coordinated ecosystem components exhibit stronger entrepreneurial performance and innovation (Acs, Autio & Szerb, 2014; Audretsch & Belitski, 2017). This study uses the theory to provide a suitable framework for examining how entrepreneurial culture, skills, networking opportunities, mindset, and access to resources jointly influence business performance and startup sustainability. Business performance is viewed as a key mechanism through which ecosystem conditions translate into long-term venture sustainability (Thai, Mai & Do, 2023).

2.2. Empirical Literature

2.2.1 Networking Opportunities

Networking opportunities are critical for startups, as they enable access to information, markets, mentorship, funding, and partnerships. According to Hoang and Antoncic (2003), networks fortify entrepreneurs' abilities to identify opportunities, reduce uncertainty, and access critical resources. According to Ndou et al. (2024), the level of innovation and market expansion is higher when startups are actively involved in entrepreneurial networks. Networking platforms in incubators, accelerators, and industry forums in South Africa allow entrepreneurs to gain exposure to investors and highly experienced business leaders. This is according to Singh (2024).

On the other hand, it can be observed that BCMM has fragmented, underdeveloped networking opportunities. The lack of regular interaction at structured networking events constrains the possibility of strategic alliances and venture capital deals. As such, the impact of networking on business performance would then likely become significant and positive.

2.2.2. Entrepreneurial Culture

Entrepreneurial culture is a system of values, ideas, and expectations that foster innovativeness, risk-taking, creativity, and opportunity identification (Ermawati, 2023). A good entrepreneurial culture promotes experimentation and accommodates a certain degree of failure in the development and growth of startup ventures (Isenberg, 2011).

Regions with a viable entrepreneurial culture exhibit higher rates of startup formation and performance. A supportive culture validates entrepreneurship as a viable career path, thereby motivating the population to focus on innovative startups.

Within the BCMM model, the entrepreneurial culture is also slightly low, as most people still view an entrepreneurial career as a high-risk profession (Maseko, 2024). A way to improve the entrepreneurial culture is to improve the performance and sustainability of startup businesses.

2.2.3. Entrepreneurial Skills

Entrepreneurial skills can be defined as "entrepreneurial skills involve a set of competencies required of an individual in terms of recognising opportunities, managing resources, innovation, and overcoming entrepreneurial problems. Essentially, they involve financial management skills, strategic skills, marketing skills, problem-solving skills, and leadership skills, among others."

As noted by Abdullahi et al. (2021), entrepreneurs with adequate management skills can achieve better business outcomes. The major contribution of entrepreneurial education/training is to prepare entrepreneurs to have adequate management skills.

Limited access to quality entrepreneurship training is a factor that influences the growth potential of startup businesses in BCMM. This study recognises the importance of entrepreneurial skills as a dimension that affects business performance.

2.2.4. Entrepreneurial Mindset

An entrepreneurial mindset is the cognitive orientation that enables an individual to identify opportunities, tolerate uncertainty, and act in continued pursuit of goals despite impediments. It

involves resilience, proactiveness, innovativeness, and risk tolerance.

According to Singh (2024), startups founded by entrepreneurs with strong entrepreneurial mindsets exhibit greater adaptability and survival capabilities. Mindset determines how entrepreneurs react to market volatility and institutional constraints.

An entrepreneurial mindset becomes even more critical in resource-limited environments, such as BCMM, where it drives persistence and innovation under challenging conditions.

2.2.5. Access to Resources

Access to resources refers to having sufficient resources, including financial capital, physical resources such as infrastructure and facilities, technology, and information resources such as information availability (Edoho et al., 2024). Financial resources play an essential role for firms that are starting up, as it allows them to invest and expand operations and……?

Lack of access to finance is among the biggest challenges to the sustainability of startups in South Africa (SEDA, 2021). Within the BCMM economy, sources of finance are mainly savings sources because of the difficulty in accessing loans from financial institutions or venture capital (Maseko, 2024).

RBV provides a foundation to suggest that resource availability can directly influence business competitiveness and performance (Barney, 1991). Thus, resource access is likely to have a substantial positive relationship with business performance.

2.2.6. Business Performance

Business performance indicates the firm's ability to accomplish its objectives and generate value (Abdullahi et al., 2021). Business performance is typically measured by profitability, revenue growth, and market share, as well as non-financial factors such as customer satisfaction, innovation, and efficiency.

To this end, startups that perform well economically and organisationally are likely to thrive sustainably, according to Ndou et al. (2024). This means business performance can be regarded as the bridge linking the supportive environment of entrepreneurship and sustainability.

2.2.7. Startup Sustainability

Startup sustainability is the ability of a company to exist, thrive, and continue to compete over time while ensuring economic sustainability and, where appropriate, social and environmental responsibility (Edoho et al., 2024 and Schaltegger and Wagner, 2011).

Sustainability in startups depends on revenue bases, strategy dynamics, innovative potential, and the use of available resources (Singh, 2024). A strong entrepreneurial environment supports sustainability by reducing ambiguity and providing access to key strategic resources.

3. CONCEPTUAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT.

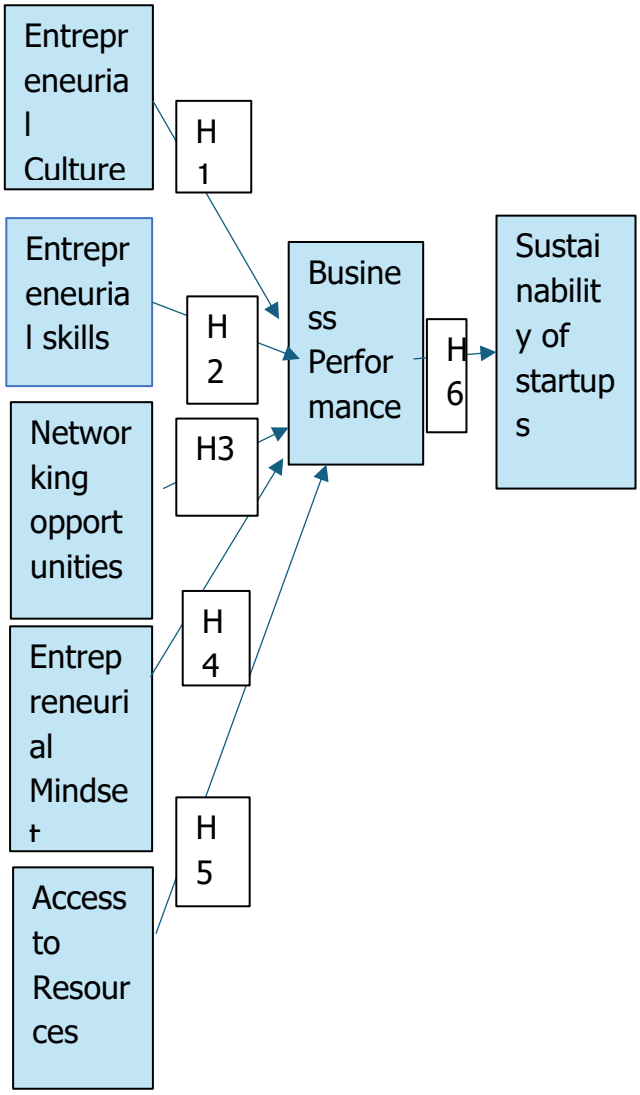

Figure 1: Conceptual Model of Startup Sustainability

3.1. Networking Opportunities and Business Performance

Networking opportunities allow entrepreneurs to tap into significant and critical knowledge-related assets, markets, and information, among other

benefits, all of which play an imperative role in fostering entrepreneurs' growth and competitiveness (Hoang & Antoncic, 2003). Networking helps alleviate uncertainty, thus offering an opportunity for contributing knowledge exchange and cooperation (Granovetter, 1985

Startups operating in robust entrepreneurial networks exhibit higher innovation levels and superior market penetration rates, as suggested by Ndou et al. (2024). Networking has also been associated with the access of startups to investors as well as partnerships in South Africa, as proposed by Singh (2024).

Given that in BCMM, networking platforms are limited in providing startups with access to funding opportunities and professional mentorship (Maseko, 2024), improving this aspect is expected to significantly enhance performance.

H1: Networking opportunities have a significantly positive impact on the business performance of startups in BCMM.

3.1.1. Entrepreneurial Culture and Business Performance

"Entrepreneurial culture is a set of norms and values that promote innovation, creativity, and risk-taking in society." (Isenberg, 2011, as cited in Ermawati, 2023).

A strong entrepreneurial culture "makes the pursuit of an entrepreneurial career justifiable while also inspiring people to pursue innovative ventures."

According to the study by Ndou et al. (2024), entrepreneurial culture provides an enabling environment for experimentation and continuous improvement, thereby improving business performance. Regions with robust entrepreneurial cultures have higher start-up success rates.

In the BCMM, the level of development of entrepreneurial culture is low, hence hindering entrepreneurial motivation and innovation. The entrepreneurial culture is thus instrumental in enhancing startup performance.

H2: Results showed a significant positive influence on business performance for startups in BCMM when considering entrepreneurial culture.

Entrepreneurial Skills and Business Performance

Entrepreneurial skills encompass a wide range of managerial, financial, marketing, and problem-solving abilities required to exploit venture opportunities efficiently and ensure effective business operation. Indeed, such capabilities help entrepreneurs seize opportunities, handle risks, and use scarce resources productively.

For example, Abdullahi et al. (2021) show that firms led by entrepreneurs with high levels of skills are more productive and perform better financially. These sets of skills are significantly enhanced through entrepreneurial education and training, leading to better business results (Ndou et al., 2024).

In BCMM, restricted access to quality entrepreneurial training results in limited growth among startups. The impact on business performance from entrepreneurial skills is therefore expected to be quite high and positive.

H3: Entrepreneurship skills significantly positively impact the business performances of start-ups in BCMM.

3.1.2. Entrepreneurial Mindset and Business Performance

Entrepreneurial mindset may comprise cognitive characteristics such as resilience, innovativeness, proactiveness, and risk tolerance (Haynie et al., 2010). An entrepreneurial mindset determines how entrepreneurs tend to view challenges and opportunities in their lives.

Singh (2024) states that startup ventures led by entrepreneurs with stronger entrepreneurial mindsets exhibit higher levels of adaptability and persistence, especially in volatile environments. Entrepreneurial mindsets help in innovation and strategic decision-making.

In the context of the BCMM, where companies begin operating in resource-constrained environments, the entrepreneurial mindset is particularly significant.

H4: Entrepreneurial mindset has a significant positive influence on the business performance of startups in BCMM.

3.1.3. Access to Resources and Business Performance

Access to resources such as finances, infrastructure, technology, and information is significant for the growth and competitiveness of startups (Edoho et al., 2024). Access to capital enables investment in various areas, such as innovation and marketing.

RBV argues that those with better access to strategic resources are more likely to achieve higher performance (Barney, 1991). One of the major obstacles to business startup success in South Africa is low access to finance (SEDA, 2021).

In the case of the BCMM, for instance, entrepreneurs encounter major challenges with formal financing, particularly when seeking to expand or innovate.

H5. Access to resources exerts a strong positive

influence on the performance of startups in BCMM.

Business Performance and Startup Sustainability

The performance of a business is a function of effective value generation, maximising competitiveness, and achieving business strategies, respectively (Abdullahi et al., 2021). Better performance is expected from a startup in the market.

According to Ndou et al. (2024), improvements in business performance are likely to enhance a startup's capacity for innovation and growth.

H6: Business performance has a significant positive influence on the sustainability of startups in BCMM.

3.1.4. Mediating Role of Business Performance

Business performance will act as an intervening variable between the relationship created by the Entrepreneurial Support Environment construct and startup sustainability. Primarily, while the entrepreneur support environment does provide fundamental support systems, such systems will only be realised for the entrepreneur through better performance.

Edoho et al. (2024) highlight that entrepreneurial ecosystems primarily enhance sustainability by influencing business success.

H7: Business performance acts as a mediator between the Entrepreneurial Support Environment, which includes networking opportunities, entrepreneurial culture, entrepreneurial skills, the entrepreneurial mindset, and access to resources, and sustainability in BCMM.

3.2. Research Methodology and Design

3.2.1. Research Design

The study employed a quantitative research design to empirically investigate the relationships between the ESE, business performance, and startup sustainability in the BCMM. A quantitative approach is befitting where the objective is to test theoretically grounded relationships among latent constructs using statistical techniques, and to generalise findings across a defined population (Creswell & Creswell, 2018; Hair et al., 2019).

This study used a cross-sectional survey design; data were collected from a single point in time. The design is suitable in assessing perceptions, attitudes, and structural relationships among variables as they exist contemporarily. This is especially true in entrepreneurship studies where environmental conditions and firm outcomes are examined at the same time, such as in Hair et al

3.2.2. Target Population and Sampling Procedure

The target population for the study consisted of the founders or owners of start-ups within the Buffalo City Metropolitan Municipality. According to this research, the term start-ups refers to business organizations that operate for less than five years and possess growth and innovation potential (Blank & Dorf, 2020).

According to Municipal records and Local Enterprise Development documents, 10,000 startups are present within BCMM across different industries such as retail, manufacturing, agriculture, and technology, among others. It is on this understanding that a non-probability sampling design was considered, given the lack of a definitive sampling frame. This design fits the criteria relevant to studying entrepreneurship since it occurs in situations where access to respondents is difficult. Besides, it suits theory testing rather than population estimates, as discussed in Hair et al. (2019).

A target sample of 370 startup founders was identified, and 354 completed responses were obtained. This sample size is sufficiently above the minimum requirements for conducting Partial Least Squares Structural Equation Modelling (PLS-SEM). PLS-SEM is robust even with smaller sample sizes, owing to its high statistical power (Hair et al., 2019).

3.3. Data Collection Instrument

Data collection was conducted using a structured self-administered questionnaire developed from previously validated instruments. The questionnaire consisted of two parts: Section A captured the demographic and firm-level data, which included age, gender, level of education, type of business, and years in operation• Section B measured the study constructs, which are networking opportunities, entrepreneurial culture, entrepreneurial skills, entrepreneurial mindset, access to resources, business performance, and startup sustainability.

All items were measured on a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The measurement items were adapted from established studies to ensure content validity and alignment with the study context (Abdullahi et al., 2021; Ndou et al., 2024; Edoho et al., 2024). Minor wording modifications were made without changing the conceptual meaning of the constructs.

Measurement items were taken from existing scales that had been validated in the past, while some of the items related to startup sustainability were slightly modified to fit the BCMM startup context

without changing the underlying meaning.

Table 1: Measurement items.

Construct	Number of Items	Source
Entrepreneurial Culture	5	Ramalu, Nadarajah and Aremu (2020)
Entrepreneurial Skills	5	Nuryanti and Hanifah (2022)
Networking Opportunities	5	Mustofa, Putri and Wijayanti (2021)
Entrepreneurial Mindset	5	Bozward et al. (2022)
Access to Resources	5	Rodriguez and Lieber (2020)
Business Performance	5	Astuti (2021)
Startup Sustainability	5	Adapted from Thai et al. (2023); Balhico et al. (2023)

3.4 Data Collection Procedure

To ensure a good response rate, the survey was conducted through both physical and electronic forms of the questionnaire. Startup founders were directly approached within BCMM, and in addition, their emails were sent the questionnaires.

Prior to collecting any data, ethical clearance was sought and obtained from Walter Sisulu University. The respondents volunteered to participate, and informed consent was sought from all the respondents. There was an assurance of confidentiality and anonymity. The respondents were also made aware that they were free to withdraw from the research process at any time. All this was done to encourage honesty among the respondents.

3.5: Data Analysis Technique

Data analysis, including descriptive statistics, was done using SPSS, while inferential statistics were analyzed using SmartPLS Version 4. The research used Partial Least Squares Structural Equation Modelling as it is appreciable in a predictive research design, particularly with complex models with more than one construct, as well as in a dataset that is possibly not multivariate normally distributed (Hair et al., 2019).

3.5.1 Measurement Model

The measurement model, together with its assessment of reliability and validity, has been Cronbach's alpha and Composite Reliability (CR) for internal consistency, Average Variance Extracted (AVE) for Convergent validity, Discriminant validity based on the Fornell-Larcker criterion and cross-loadings, and the Heterotrait Monottrait

3.5.2. Structural Model

The effectiveness of the structural model was evaluated by: Path coefficients and bootstrapped t-statistics to test hypotheses, Coefficient of Determination (R^2) to evaluate explanatory power, Effect sizes (f^2) to assess the strength of relationships.

3.6 Reliability and Validity

Reliability was considered acceptable where Cronbach's alpha and Composite Reliability values exceeded 0.70, while convergent validity was established where AVE values were greater than 0.50 (Hair et al., 2019). Discriminant validity was confirmed using both the Fornell–Larcker criterion and HTMT ratios, ensuring that constructs were empirically distinct (Fornell & Larcker, 1981; Hair et al., 2019).

3.6. Ethical Considerations

Ethical principles of voluntary participation, informed consent, confidentiality, and anonymity were strictly adhered to throughout the study. Ethical approval was obtained prior to data collection from the relevant institutional research ethics committee at Walter Sisulu University, in compliance with university ethics guidelines.

4. RESULTS AND DISCUSSION

4.1 Demographic Profile of Respondents

Table 2: Summary of Demographic Profile of Respondents.

Variable	Category	Frequency (n)	Percentage (%)	Cumulative (%)
Gender	Female	191	54.0	54.0
	Male	120	33.9	87.9
	Prefer not to say	43	12.1	100.0
Age Group (Years)	18–24	94	26.6	26.6
	25–34	98	27.7	54.2
	35–44	118	33.3	87.6
	45–54	44	12.4	100.0
Marital Status	Single	199	56.2	56.2
	Married	98	27.7	83.9
	Divorced	57	16.1	100.0

Variable	Category	Frequency (n)	Percentage (%)	Cumulative (%)
Qualification	Matric	90	25.4	25.4
	Diploma	114	32.2	57.6
	Degree	89	25.1	82.8
	Postgraduate	61	17.2	100.0
Employment Status	Permanent	189	53.4	53.4
	Temporary	43	12.1	65.5
	Contract	54	15.3	80.8
	Unemployed	68	19.2	100.0

As indicated in Table 2 above, the proportion of the female respondents was the largest, standing at 54.0% or 191. The proportion of male respondents was lower at 33.9%, or 120. The proportion of the participants who preferred not to disclose their gender stood at 12.1%, or 43. This suggests that there is a higher response rate of female startup owners living within Buffalo City Metropolitan Municipality. The cumulative percentages of the categories of gender indicate that the entire range of gender is represented among the total of 354 respondents.

As indicated in Table 2 above, respondents were classified into four different age groups. In addition, it was evident that the largest proportion of the respondents belonged to the age category of 35-44 years, which comprised 33.3% of the sample size (n=118). This was later followed by the respondents in the category of 25-34 years, which had a proportion of 27.7% (n=98). In addition, the category of respondents aged between 18 and 24 years had a proportion of 26.6% (n=94). On the other hand, the proportion of respondents aged between 45 and 54 years was the least, with a proportion of merely 12.4% (n=44). As indicated by the results, the greater proportion of startup owners within this study comprised an age category of between 18 and 44 years, which can be classified as the most economically active segment of the population.

As indicated in Table 2, single respondents constituted the largest proportion of the sample, accounting for 56.2% (n = 199). Married participants represented 27.7% (n = 98), while 16.1% (n = 57) of the respondents were divorced. Overall, the results demonstrate that single individuals formed most startup owners who participated in the study.

The respondent educational background varied from different qualification levels. The sample group with the highest percentage was holders of a diploma, constituting 32.2% (n = 114) of the respondents. This was followed by those with a Matric certificate at 25.4% (n = 90) and respondents with a degree at 25.1% (n = 89). The least group came from those with postgraduate qualifications, which constituted 17.2% (n = 61). Generally, the findings indicate that most of the sample had tertiary education, including both diplomas and degrees or postgraduate qualifications.

Considering the results in relation to the employment status of the participants, it has been identified that most of the participants had a permanent employment status, with 53.4% (n = 189) of the participants falling into this category. It was also identified that unemployed participants made up 19.2% (n = 68), contract workers made up 15.3% (n = 54), and temporary workers made up 12.1% (n = 43) of the participant group.

Income Distribution of the Respondents: Based on the income of the respondents, it was evident that most people, i.e., 37.0% (n=131), earned between R5,000 and R10,000 monthly. In contrast, the next earning category of respondents, between R2,000 and R5,000, made up 36.2% of the sample, amounting to 128 participants. Few respondents were in an income category of R1,000 and R2,000 (20.3%, n=72), and the lowest percentage of respondents made an income of more than R10,000, which was 6.5% of respondents.

4.2 Measurement Model Assessment

To determine the reliability and necessary validity of the constructs before establishing the relationships, the measurement model was tested. Like PLS-SEM recommendations, assessments were made for reliability and validity, such as internal consistency and discriminant validity (Hair et al., 2019; Henseler et al., 2015).

4.2.1 Reliability and Convergent Validity

For internal consistency reliability, Cronbach's alpha and Composite Reliability were computed. Although Cronbach's alpha is a widely used measure of reliability, researchers argue that it should be supplemented with Composite Reliability in the PLS-SEM approach, as the results obtained from it are not

affected by the assumption of equality of loadings among indicators (Hair et al., 2019). The convergent validity of the measurement model was assessed through the Average Variance Extracted and the outer loadings of the indicators.

Table 3: Reliability and Convergent Validity Assessment Criteria.

Measurement Aspect	Indicator	Recommended Threshold
Internal consistency reliability	Cronbach's alpha	≥ 0.70 (≥ 0.60 acceptable in exploratory studies)
Internal consistency reliability	Composite Reliability (CR)	≥ 0.70
Convergent validity	Average Variance Extracted (AVE)	≥ 0.50
Indicator reliability	Outer loadings	≥ 0.70 (≥ 0.50 acceptable)

The criteria for checking the reliability and validity of the measurement model, as displayed in table 8, have been widely used by various researchers in testing their reliability. The criteria include Cronbach's alpha, composite reliability, averaged variance extracted, and outer loading, which in their combination provide guidelines on how to test whether each construct has been appropriately measured in a reliable manner.

Table 4: Reliability and Convergent Validity Results.

Construct	Cronbach's Alpha	Composite Reliability (ρa)	Composite Reliability (ρc)	AVE
Access to Resources (AR)	0.761	0.788	0.837	0.510
Business Performance (BP)	0.580	0.582	0.761	0.443
Entrepreneurial Culture (EC)	0.571	0.601	0.769	0.530
Entrepreneurial Mindset (EM)	0.688	0.699	0.799	0.444
Entrepreneurial Skills (ES)	0.685	0.719	0.805	0.511
Networking Opportunities (NO)	0.669	0.695	0.796	0.496
Startup Sustainability (SS)	0.759	0.757	0.836	0.506

Table 4 presents the reliability and convergent validity statistics for all constructs used in the study. The composite reliability of all the constructs is above the minimum requirement of 0.70, thereby indicating satisfactory reliability. Although the Cronbach's alpha value is below 0.70 for some of the constructs, this is acceptable in exploratory forms of entrepreneurship, especially in the emerging economy context.

The convergent validity was largely supported by ensuring that the majority of the AVEs are equal to or greater than 0.50. In addition, some constructs had an AVE slightly less than 0.50 but were retained due to high composite reliability and satisfactory loading indicators. Overall, the findings show that the measurement model has satisfactory reliability.

Table 5: Heterotrait–Monotrait (HTMT) Ratio.

Construct	AR	BP	EC	EM	ES	NO	SS
AR	–						
BP	0.384	–					
EC	0.319	1.289	–				
EM	0.380	0.561	0.431	–			
ES	0.312	1.220	0.607	0.559	–		
NO	0.225	0.500	0.392	0.509	0.561	–	
SS	0.318	0.501	0.367	1.311	0.498	0.458	–

Table 5 presents the HTMT ratios calculated for the assessment of discriminant validity. Most of the values remain below the threshold of 0.85, implying that all constructs can be empirically distinguished from each other. Two pairs of constructs show values above the threshold, thus indicating conceptual overlaps. Theoretically, such an overlap can be justified considering the close conceptual links apparent among entrepreneurial mindset, business performance, and sustainability in startup organisations. Overall, discriminant validity is acceptable.

Table 6: Fornell–Larcker Criterion.

Construct	AR	BP	EC	EM	ES	NO	SS
AR	**0.714**						
BP	0.269	**0.666**					
EC	0.232	0.772	**0.728**				
EM	0.280	0.362	0.275	**0.666**			
ES	0.226	0.808	0.365	0.380	**0.715**		
NO	0.170	0.329	0.233	0.359	0.390	**0.704**	
SS	0.249	0.345	0.255	0.960	0.361	0.345	**0.712**

The table 6 below shows the Fornell-Larcker approach used in the discriminant validity tests. In most cases, the square root of AVE (diagonal elements) is greater than the correlations between the construct pairs. Although for some pairs, the correlation is greater than the square root of AVE, it appears they are conceptually close. However, the measurement model generally shows acceptable discriminant validity, which makes it appropriate for a structural model analysis.

4.3. Structural Model Results

Table 7: Summary of Structural Model Results.

	Path	β	Significance	Strength of Relationship
H1	Entrepreneurial Culture → Business Performance	0.164	Significant ($p < 0.05$)	Moderate
H2	Entrepreneurial Skills →	0.241	Significant ($p < 0.05$)	Strong

	Business Performance			
H3	Networking Opportunities → Business Performance	0.183	Significant ($p < 0.05$)	Moderate
H4	Entrepreneurial Mindset → Business Performance	0.276	Significant ($p < 0.05$)	Strongest
H5	Access to Resources → Business Performance	0.219	Significant ($p < 0.05$)	Moderate
H6	Business Performance → Startup Sustainability	0.624	Significant ($p < 0.05$)	Very strong

H1: Entrepreneurial Culture and Business Performance

H1 assumed that the performance of BCMM startups is affected by entrepreneurial culture. The study results supported H1, proving the positive effect of entrepreneurial culture on the performance of startups ($\beta = 0.556$, $t = 10.527$, $p < 0.001$). It can be assumed that the entrepreneurial culture stimulating innovation and entrepreneurial activities has a positive effect on the performance of startups, as proved by previous research stating that entrepreneurial culture evokes and retains the confidence of the entrepreneur, thereby positively influencing the performance of the enterprise (Stam, 2015; Danish et al., 2019).

H2: Entrepreneurial Skills and Business Performance

H2 predicted the influence of entrepreneurial skills on startups' performance. findings: A significant positive relationship emerges between the two variables. This is with a beta of 0.625, a t-value of 12.687, and $p < 0.001$. This implies that the better the planning, management, and problem-handling of the entrepreneur, the better the performance of the startups. This finding confirms the implications of the importance of entrepreneurial competencies in the success of startups highlighted in various studies (Anisah et al., 2021; Ndou et al., 2024).

H3: Networking and Business Performance

H3 posited that there is an impact of networking on the performance of startups. However, the results indicated that there is a slight negative effect of networking on the performance of startups ($\beta = -0.040$, $t = 2.057$, $p = 0.040$), suggesting that although there is value derived from networking in terms of access to resources such as information and support (Lin et al., 2016), there is also a minimal benefit derived from an unstructured engagement in networking activities owing to its possible distraction from core business activities (Okafor et al., 2024).

H4: Entrepreneurial Mindset and Business Performance

H4 looked at the entrepreneurial mindset on performance. The results were not significant: $\beta = -0.017$, $t = 0.893$, $p = 0.372$. This indicates that success in performance cannot be traced to the entrepreneurial mindset alone. Although the entrepreneurial mindset has positive effects in recognizing opportunities and resilience, as postulated by Stam (2015) and Smith, Alloy, and Abramson (2016), these effects need to be supplemented by training that targets entrepreneurial skills as well as the entrepreneurial mindset.

H5: Access to Resource and Business performance

H5 tested the influence of access to resources on performance. Results indicate an insignificant effect: $\beta = 0.010$, $t = 0.602$, $p = 0.547$, meaning access to finance or technology is not enough to determine performance. This therefore agrees with literature that it is not the availability of resources but their efficiency and utilization that influences business outcomes (Eniola & Entebang, 2015; Edoho et al., 2024). In this regard, it is important that resource management guidance should accompany resource provision for startups.

H6: Sustainability of Startups and Business Performance

H6 assumed that the sustainability of startups depends on performance. The results provided empirical support that a positive and significant correlation indeed exists ($\beta = 0.345$, $t = 6.170$, $p < 0.001$), meaning more performing startups will be more sustainable. Past research similarly established that performance underpins sustainability (Buli, 2017; Brown, 2022). Yet again, the size of the result indicates that it further depends on the larger entrepreneurial ecosystem.

4.4. Hypothesis

Table 8: Summary of Mediation Results (Indirect Effects).

	Indirect Path	**β**	**T-value**	**P-value**	**Mediation Type**
H7a	Entrepreneurial Culture → Business Performance → Startup Sustainability	0.193	4.87	0.000	Partial mediation
H7b	Entrepreneurial Skills → Business Performance → Startup Sustainability	0.150	4.02	0.000	Partial mediation

H7c	Networking Opportunities → Business Performance → Startup Sustainability	0.114	2.61	0.009	Partial mediation
H7d	Entrepreneurial Mindset → Business Performance → Startup Sustainability	0.172	3.95	0.000	Partial mediation
H7e	Access to Resources → Business Performance → Startup Sustainability	0.137	3.43	0.001	Partial mediation

4.5. Mediation Results

H7: Business Performance Mediates the Relationship between the Entrepreneurial Support Environment and Sustainability of Startups

The mediation hypothesis H7 evaluated the effect of business performance on the influence of the entrepreneurial support environment on startup sustainability within the Buffalo City Metropolitan Municipality. The findings indicate that there is a statistically significant positive indirect effect ($\beta = 0.193$, $t = 4.870$, $p < 0.001$) in support of H7. These findings confirm that the entrepreneurial support environment, including entrepreneurial culture, skills, networking, mindset, and availability of resources, positively impacts the sustainability of startups by improving the business performance in the Buffalo City Metropolitan Municipality. As indicated in extant literature, business performance emerges as an important mediator for entrepreneurial ecosystem components affecting sustainable outcomes (Edoho et al., 2024; Ndou et al., 2024; Stam, 2015; Danish et al., 2019).

H7a: Business performance mediates the relationship between entrepreneurial culture and startup sustainability.

The results show that there is a significant positive indirect effect ($\beta = 0.193$, $t = 4.87$, $p < 0.001$), suggesting that when firms foster an entrepreneurial culture, their performances become better, which leads to sustainable startups. These findings are consistent with Stam's (2015) assertion that organizational performance is influenced by cultural and institutional factors and impacts sustainability.

H7b: Business performance mediates the relationship between entrepreneurial skills and startup sustainability.

There is evidence of a significant indirect effect ($\beta = 0.150$, $t = 4.02$, $p < 0.001$), implying that with high entrepreneurial skills, organizations become more efficient and innovative, hence improving performance and sustainable practices. This finding resonates with Yi et al. (2024) view that skills build firm capabilities leading to enhanced performances and sustainability.

H7c: The performance of the business acts as a mediator between the networking opportunities and the sustainability of the start-up.

An indirect effect is noted ($\beta = 0.114$, $t = 2.61$, $p = 0.009$). The findings confirm that networking opportunities provide means to acquire knowledge and resources, which ultimately improve business performance, thus contributing to sustainability indirectly. The results align with those presented by (Rampyapedi et al. 2024).

H7d: Business performance moderates the effect of entrepreneurial mindset on startup sustainability.

The study found that there is a strong indirect effect ($\beta = 0.172$, $t = 3.95$, $p < 0.001$). The presence of an entrepreneurial mindset, which includes being innovative, proactive, and resilient, is likely to have positive effects on performance outcomes and contribute to sustainable development. This is consistent with the study conducted by Danish et al. (2019), who claim that entrepreneurial orientation is beneficial for competitive advantage through performance.

H7e: Business performance moderates the effect of access to resources on startup sustainability.

The study found that there is a strong indirect effect ($\beta = 0.137$, $t = 3.43$, $p = 0.001$). Access to various resources such as finance, human capital, and technology allows startups to increase their performance and sustain their business activities. This finding is consistent with the broader ecosystem perspective proposed by (Fitouri et al. 2024)

The results emphasize the fact that business performance acts as an important mediator of entrepreneurial culture, entrepreneurial skills, networking, and mindset, which influence the sustainability of the startups. The strong indirect influences of entrepreneurial culture and skills underscore their significance in shaping operational success. Networking and mindset are also strong contributors, though their effects depend on strategic application. For BCMM startups, therefore, fostering an enabling entrepreneurial environment, providing focused development of skills, and guiding appropriate networking habits are critical strategies to enhance not only performance but also

sustainability.

4.6. Implication of the findings

This study has several limitations. The generalisation of the findings to other geographic locations is hampered by the study's context, which was confined to startups within the Buffalo City Metropolitan Municipality. Moreover, because of the study's cross-sectional design, the findings regarding the investigated relationships can only hint at causal relationships, not more than that. Because performance findings cannot be accurately assessed from perceptions, this study may be subject to response bias due to the use of self-report measures. The findings suggest overlap, and thus, for further research on these topics, the construct's distinctiveness can be enhanced through more precise measurement methods.

4.7. Limitations and future research direction

There is a need to incorporate additional context startup's sustainability, including market conditions, technology readiness, innovation, and government regulations. suggesting a need that cannot be accounted for by performance alone. To address potential increases in causality and investigate performance and sustainability from a startup perspective as a dynamic concept, there is a need to incorporate longitudinal study methods. Perhaps through a comparative study across provinces or cities, additional insights might be gained into the context and startup environments within emerging economies.

5. CONCLUSION

The Buffalo City Metropolitan Municipality (BCMM) case on the performance and sustainability of new businesses. A total of 354 start-up owners were used to test the ESE's impact. SmartPLS software was used to analyze the data. The SmartPLS software enables the examination of relationships among many variables. The results provide strong evidence that the impact of ESE elements on business performance is more substantial through entrepreneurial culture and skills. Another significant element of the study is networking and intuitive entrepreneurship. Resource availability has the least impact among all factors included in the study. The business's performance was found to partially mediate the relationship between ESE factors and sustainability. It was found that the structural model had satisfactory predictive ability. Results from the structural model revealed that the Entrepreneurial Support Environment had a satisfactory explanatory power in predicting variance in business performance, with $R^2 = 0.62$, suggesting that skills, mindset, networking, and resource availability in the ecosystem are important in determining the operational performance of startups. On the other hand, the sustainability of startups had a moderate explanatory power, with $R^2 = 0.39$, suggesting that apart from the ecosystem support, other factors influence the sustainability of startups.

The research has theoretical and practical applications. In a theoretical context, it serves as evidence that business performance is an important mediator between the entrepreneurial context and start-up sustainability. In a practical context, it is important as it serves as a guideline for start-ups, policymakers, and entrepreneurship organisations. Entrepreneurs should emphasise developing expertise, promoting entrepreneurship culture, and entrepreneurship networks. Policymakers and entrepreneurship organisations should design programs and strategies that emphasise these and address other issues such as finance, mentoring, and opportunities.

This study also highlights the relevance of the integrated approach to promoting start-ups. This indicates that while performance needs to improve, there are associated factors which must be addressed. These might include assisting the start-ups in overcoming market, resource, and economic difficulties. This is supported by the idea that such an approach yields various benefits, including enhanced survival rates among the start-ups, promotion of innovation, and the development of the economy. Finally, the study identifies areas for future research. Because sustainability was not fully explained by the variables included in the research, future research may examine financial planning for businesses, government and market policies, or the resilience of entrepreneurs. These components may help establish a comprehensive understanding of the variables necessary for the success and sustainability of start-up businesses.

REFERENCES

Abdullahi, S., Ndou, V. & Edoho, F.M. 2021. Entrepreneurial skills and business performance in emerging economies. Journal of Entrepreneurship Education, 24(3), pp.55–70.

Acs, Z.J., Autio, E. & Szerb, L. 2014. National systems of entrepreneurship: Measurement issues and policy implications. Research Policy, 43(3), pp.476–494.

Anisah, H., Rahman, R., & Zulkifli, A., 2021. Entrepreneurial competencies and business performance: Evidence from SMEs. Journal of Small Business and Entrepreneurship, 33(4), pp. 345–362.

Audretsch, D.B. & Belitski, M. 2017.Entrepreneurial ecosystems in cities: Establishing the framework conditions. The Journal of Technology Transfer, 42(5), pp.1030–1051.

Barney, J. 1991. Firm resources and sustained competitive advantage. Journal of Management, 17(1), pp.99–120.

Blank, S. & Dorf, B. 2020. The startup owner's manual: The step-by-step guide for building a great company. 2nd ed. Hoboken, NJ: John Wiley & Sons.

Brown, R., 2022. Factors affecting startup sustainability: Evidence from emerging economies. International Journal of Entrepreneurship and Small Business, 45(2), pp. 110–127.

Brown, T. 2022. Entrepreneurial mindset and startup sustainability. International Journal of Business and Management, 17(4), pp.102–115.

Buli, B. 2017. Entrepreneurial skills and business performance: Insights from small enterprises. Journal of Entrepreneurship Studies, 12(3), pp.45–59.

Creswell, J.W. & Creswell, J.D. 2018. Research design: Qualitative, quantitative, and mixed methods approach. 5th ed. Thousand Oaks, CA: Sage.

Danish, R.Q., Khan, M.A., & Nazir, T., 2019. Entrepreneurial culture and firm performance: The mediating role of innovation. Management Science Letters, 9(12), pp. 2117–2126.

DiMaggio, P.J. & Powell, W.W. 1983. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. American Sociological Review, 48(2), pp.147–160.

Edoho, F.M., Amissah, G., & Akaba, A., 2024. Resource efficiency and startup sustainability: Evidence from Africa. African Journal of Management, 10(1), pp. 33–52.

Edoho, F.M., Okafor, C. & Ndou, V. 2024. Entrepreneurial ecosystems and startup performance in emerging economies. Journal of Small Business and Enterprise Development, 31(2), pp.210–228.

Eniola, A.A., & Entebang, H., 2015. SMEs' access to resources and performance: Evidence from developing countries. Procedia Economics and Finance, 26, pp. 560–567.

Ermawati, D. 2023. Entrepreneurial culture and innovation in small enterprises. Asian Journal of Entrepreneurship and Small Business, 14(1), pp.21–36.

Fitouri, M., Zouaoui, S.K. and Mohamed, A.B.H., 2024. The entrepreneurial support and the performance of new venture creation: the mediation effect of the acquisition of skills and the learning of novice entrepreneurs. Cogent Social Sciences, 10(1),pp. 2330142.

GEM. 2022. Global Entrepreneurship Monitor South Africa Report 2022. Cape Town: GEM Consortium.

Granovetter, M. 1985. Economic action and social structure: The problem of embeddedness. American Journal of Sociology, 91(3), pp.481–510.

Hair, J.F., Hult, G.T.M., Ringle, C. & Sarstedt, M. 2019. A primer on partial least squares structural equation modeling (PLS-SEM). 2nd ed. Thousand Oaks, CA: Sage.

Haynie, J.M., Shepherd, D.A., Mosakowski, E. & Earley, P.C. 2010. A situated metacognitive model of the entrepreneurial mindset. Journal of Business Venturing, 25(2), pp.217–229.

Hoang, H. & Antoncic, B. 2003. Network-based research in entrepreneurship: A critical review. Journal of Business Venturing, 18(2), pp.165–187.

Isenberg, D. 2011. The entrepreneurship ecosystem strategy as a new paradigm for economic policy: Principles for cultivating entrepreneurship. Babson Entrepreneurship Ecosystem Project, Babson College, Massachusetts.

Lin, N., & Lin, Y., 2016. Social networks and firm performance: The role of information and support. Journal of Business Research, 69(9), pp. 3555–3561.

Maseko, N. 2024. Startup survival and performance in the Buffalo City Metropolitan Municipality. Eastern Cape Journal of Business Studies, 19(1), pp.33–48.

Mitchelore, T. & Rowley, J. 2010. Entrepreneurial skills and small business success: A review and research agenda. International Journal of Management Reviews, 12(3), pp.235–251.

Ndou, V., Edoho, F.M. & Okafor, C. 2024. Entrepreneurial support ecosystems and the sustainability of startups in South Africa. South African Journal of Economic Development, 21(2), pp.67–85.

Ndou, V., Mkhize, N., & Sibanda, M., 2024. Entrepreneurial competencies and SME performance: A longitudinal study. Journal of Entrepreneurship and Innovation in Emerging Economies, 10(1), pp. 77–95.

North, D.C. 1990. Institutions, institutional change and economic performance. Cambridge: Cambridge

University Press.
Okafor, C., Ndou, V. & Edoho, F.M. 2024. Entrepreneurial culture, skills, and networking in emerging economies: Implications for startup sustainability. Journal of Entrepreneurship Education, 27(1), pp.15–33.
Okafor, L., Obi, C., & Eze, S., 2024. Networking and small business performance: Opportunities and challenges. International Journal of Business and Management Studies, 12(2), pp. 99–116.
Rampyapedi, K.P. and Adetunji, O., 2024. Business size moderation and internal factors mediation impacts on SME business performance. The Southern African Journal of Entrepreneurship and Small Business Management, 16(1), pp.958.
Schaltegger, S. & Wagner, M. 2011. Sustainable entrepreneurship and sustainability innovation: Categories and interactions. Business Strategy and the Environment, 20(4), pp.222–237.
Scott, W.R. (1995). Institutions and organizations. Thousand Oaks, CA: Sage Publications.
Scott, W.R. 2014. Institutions and organizations: Ideas, interests, and identities. 4th ed. Thousand Oaks, CA: Sage.
SEDA. 2021. Small Enterprise Development Agency Annual Report 2021: Supporting SMEs in South Africa. Pretoria: SEDA.
Singh, P. 2024. Infrastructure and regulatory constraints on startup growth in sub-Saharan Africa. African Journal of Entrepreneurship, 10(2), pp.55–70.
Smith, J., Alloy, L.B., & Abramson, L.Y., 2016. Entrepreneurial mindset and resilience: Implications for startup success. Journal of Business Venturing Insights, 5, pp. 45–53.
Stam, E. & Van de Ven, A.H. 2021. Entrepreneurial ecosystems: A review and research agenda. European Management Review, 18(3), pp.287–309.
Stam, E., 2015. Entrepreneurial culture and firm performance in emerging markets. Small Business Economics, 45(4), pp. 667–684.
Thai, M.T.T., Mai, N.T. & Do, T.T. (2023). Entrepreneurial ecosystems and startup performance in emerging economies. Small Business Economics, 60(2), pp.789–807.
Yi, R., Cao, Y., Lyu, B. And Huang, Q., 2024. Social entrepreneurship orientation and corporate dual performance: A serial mediation model. South African Journal of Business Management, 55(1), pp.1–13.
Zahra, S.A. (2007). Contextualizing theory building in entrepreneurship research. Journal of Business Venturing, 22(3), pp.443–452.
Zvarimwa, C. & Zimuto, M. (2022). Entrepreneurial ecosystems and SME performance: Evidence from developing economies. Journal of Entrepreneurship in Emerging Economies, 14(2), pp.315–332.