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# Validation of the Proposed SMME Support Framework for the Northern Cape Province, South Africa: A Quantitative Study

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**Abstract**

This study empirically validates a novel SMME Support Framework, addressing the sustainability challenges of small, medium, and micro enterprises (SMMEs) in rural, emerging market contexts, specifically within South Africa's Northern Cape Province. The framework integrates entrepreneurship theory, network theory, and the resource-based view (RBV) to address the internal competencies and external relationship-building strategies crucial for SMME survival. Using a quantitative, cross-sectional design, data from 207 SMME owners and managers were analysed using exploratory factor analysis (EFA) and Pearson's correlation analysis. Seven support constructs were validated: networking, collaboration, stakeholder relations, mentorship, business incubation, CSR, and barriers. The results confirmed their reliability and validity via the EFA, with Cronbach's alpha values ranging from 0.75 to 0.84. Pearson's correlation revealed significant associations: Support Strategies (including the six support constructs) were negatively correlated with Limitations and Sustainability ($r = -0.271$, $p < 0.01$) and barriers ($r = -0.278$, $p < 0.01$), while barriers were positively correlated with Limitations and Sustainability ($r = 0.564$, $p < 0.01$), emphasising networking, stakeholder management, and the collective importance of resource capabilities. Although limited by the use of non-probability sampling, the framework provides policymakers and practitioners with a distinct, evidence-based model for targeted

interventions. Consequently, it advances both theoretical and practical insights into SMME sustainability and policy effectiveness.

***Keywords:*** *Support strategies, SMME Sustainability, Entrepreneurship Theory, Resource-Based View, South Africa, Northern Cape*

## 1. Introduction

SMMEs play a critical role in driving economic growth, fostering innovation, and reducing unemployment. This is particularly evident in emerging economies, such as South Africa, and other developing regions where these enterprises are vital to local stability (Statistics Africa [StatsSA], 2018; StatsSA, 2019). SMMEs contribute significantly to national GDPs, generate employment opportunities, and stimulate competitiveness within local and international markets (Mabasa, 2023; Ngumbela, 2023). However, despite their undeniable importance, SMMEs often face numerous operational and structural challenges that threaten their survival and long-term sustainability (Rungani & Potgieter, 2018; Weilbach, 2023). Consequently, effective support strategies and frameworks are crucial for sustaining the resilience and growth of these enterprises.

Although various governmental and non-governmental support initiatives have been established to assist SMMEs, many of these enterprises continue to struggle with sustainability and growth (Herrington & Kew, 2018; In on Africa [IOA], 2018). In the South African context, support structures often lack alignment with the actual needs of SMMEs, particularly in rural and underserved regions, such as the Northern Cape Province (Department of Economic Development and Tourism [DEDAT], 2016; Dredge et al., 2019). Barriers such as limited access to finance, insufficient market access, inadequate infrastructure, and fragmented support systems exacerbate the challenges faced by these businesses (Babalola & Agbenyegah, 2016; Matekenya & Moyo, 2022). Consequently, despite support mechanisms, the high failure rate of SMMEs remains a persistent concern (Statistics South Africa, 2023).

In response to these persistent challenges, Weilbach (2023) developed a comprehensive framework to enhance the support strategies available to SMMEs within the Northern Cape Province. The framework integrates critical components, such as networking, collaboration, stakeholder engagement, mentorship, business incubation, and corporate social

responsibility (CSR), to provide a holistic approach to SMME development. Grounded in both quantitative and qualitative research findings, the framework was designed to address the multifaceted barriers faced by SMMEs and offer a strategic pathway for improving their sustainability and resilience.

While the proposed SMME Support Framework presents a promising approach to address the critical needs of small enterprises in emerging economic contexts, it remains essential to empirically validate the framework to ensure its robustness, reliability, and practical applicability. The validation of conceptual frameworks through empirical analysis strengthens their theoretical grounding and enhances their relevance for practitioners and policymakers (Almalki, 2016; Creswell & Creswell, 2017). Although frameworks and models are often developed in SMME research, the absence of rigorous validation limits their practical impact and adoption (Lozano, 2015; Gielnik et al., 2017). Therefore, a quantitative validation of the proposed support framework is critical to establishing its scientific credibility and utility. Such validation is essential for informing SMME support interventions, particularly within the unique socioeconomic landscape of the Northern Cape Province.

The primary aim of this study is to quantitatively validate the SMME Support Framework proposed by Weilbach (2023) by analysing survey data collected from SMME owners and managers in the Northern Cape Province. Using statistical techniques, such as exploratory factor analysis, reliability assessments, and Pearson's correlation analysis, this study seeks to confirm the underlying structure and practical relevance of the framework components.

The development of the SMME Support Framework is grounded in established theoretical perspectives, including Entrepreneurship Theory, Network Theory, and the Resource-Based View of the firm. These theories collectively inform the framework's focus on enhancing entrepreneurial competencies, building strategic relationships, and strengthening internal resources to improve SMME's sustainability. A detailed discussion of theoretical grounding is presented in Section 2.2.1.

In line with this study's aim, the following research objectives were formulated:

i. To empirically validate the structural components of the proposed SMME Support Framework.

ii. To assess the internal consistency and reliability of each support construct within the framework.
iii. To evaluate the convergent and discriminant validity of support strategies through factor analysis.
iv. To confirm the overall model fit of the proposed framework for application within the Northern Cape SMME context.

Grounded in the theoretical underpinnings of the proposed SMME Support Framework, several hypotheses were developed. These serve to empirically examine the associations between specific support strategies and SMME sustainability outcomes. These hypotheses are detailed in Section 2.5 and were tested using exploration factor analysis and Pearson's correlation analysis techniques.

This study contributes to the academic scholarship and practical policy formulation. The empirical validation of the proposed SMME Support Framework strengthens the theoretical understanding of how various support strategies interact to promote small business sustainability, particularly within under-researched rural contexts such as the Northern Cape Province. From a practical perspective, this study offers evidence-based insights for government agencies, development organisations, and support practitioners seeking to design and implement more effective targeted interventions for SMMEs. By addressing a critical gap in the validation of SMME support models, this research enhances the potential for strategic improvements in SMME development programmes, thereby contributing to broader socio-economic growth and resilience.

The remainder of this paper is organised as follows. Section 2 presents a literature review and the theoretical grounding of the proposed framework. Section 3 details the research methodology, including research design, data collection methods, and analytical techniques. Section 4 reports the empirical results of the factor and correlation analyses conducted to validate the framework. Section 5 discusses the key findings, implications for theory and practice, and limitations of the study. Finally, Section 6 concludes the study and offers recommendations for future research directions.

## 2. Literature Review

### *2.1 SMME Support Strategies*

SMME support strategies refer to mechanisms, programmes, and interventions designed to assist small businesses in overcoming operational, financial, and structural barriers (Khan et al. 2022; Zulu et al. 2023). These strategies are crucial for enhancing the competitiveness, resilience, and long-term sustainability of enterprises, particularly in developing economies. In South Africa, SMME support encompasses both financial assistance, such as grants, loans, and credit guarantees, and non-financial interventions, including mentorship programs, business incubation, stakeholder engagement, and CSR initiatives (Department of Small Business Development [DSBD], 2019; Small Enterprise Financial Agency [SEFA], 2020). Effective support strategies are not only instrumental in driving business growth but also in contributing to broader socioeconomic objectives, such as employment creation and poverty reduction (Mabasa et al., 2023; Ngumbela, 2023). However, the success of these strategies often hinges on their ability to align with the actual needs and context of the SMMEs they intend to support.

### *2.2 Frameworks in SMME Research*

Conceptual frameworks play a pivotal role in structuring and guiding empirical research in SMME development. Frameworks provide a systematic representation of variables and their expected relationships, allowing researchers and policymakers to better understand the dynamics influencing SMME growth and sustainability (Creswell & Creswell, 2017; Bryman et al., 2018). In the South African context, several studies have proposed frameworks that address entrepreneurial support, market access, and financial inclusion (DEDAT, 2016; Bushe, 2019). However, many of these frameworks are conceptual in nature and lack rigorous empirical validation (Lozano, 2015; Gielnik et al., 2017).

Without empirical testing, frameworks risk theoretical constructs that do not accurately reflect the realities and complexities faced by SMMEs (Flaminiano & Francisco, 2021). Furthermore, frameworks that are not validated may lead to ineffective policy interventions, misaligned support services, and ultimately continued SMME failure (Matekenya & Moyo, 2022). Consequently, the validation of conceptual frameworks transcends academic theory; it is a prerequisite for ensuring that support strategies

remain evidence-led, contextually appropriate, and capable of delivering a measurable impact on the sustainability of SMMEs.

Research on SMMEs, particularly in developing regions such as the Northern Cape Province, must recognise nuanced socioeconomic barriers such as infrastructural deficits, financial exclusion, and market isolation (Weilbach, 2023). Consequently, a validated framework that integrates these real-world challenges is indispensable for designing effective support programs.

### *2.2.1 Theoretical grounding of Framework*

The proposed SMME Support Framework developed by Weilbach (2023) is anchored in three interrelated theoretical perspectives: Entrepreneurship Theory, Network Theory, and the Resource-Based View (RBV) of the firm. Entrepreneurship theory emphasises that entrepreneurs play a pivotal role in driving economic development by recognizing opportunities, mobilising resources, and innovating (Shane & Venkataraman, 2000; Hisrich et al., 2017). Aligned with this theoretical perspective, the framework integrates mechanisms such as mentorship and business incubation. These are designed to foster the entrepreneurial competencies vital to ensuring long-term SMME sustainability. Network theory highlights the significance of social and professional networks in enabling access to resources, markets, and knowledge (Granovetter, 1973; Burt, 1992). Accordingly, the framework stresses networking and collaboration as vital mechanisms for overcoming resource constraints and enhancing business resilience in competitive environments (Rungani & Potgieter, 2018; Flaminiano & Francisco, 2021).

Complementing these perspectives, the resource-based view asserts that firms achieve a sustainable competitive advantage through the development of valuable, rare, and inimitable internal resources (Barney, 1991). The framework's focus on stakeholder relations, CSR practices, and addressing barriers reflects an RBV-driven strategy of strengthening internal capabilities to ensure long-term growth and survival (Bushe, 2019; Matekenya & Moyo, 2022). Together, these theoretical foundations provide a comprehensive rationale for the framework's structure, integrating both external relationship-building and internal capacity development to support SMME sustainability in challenging socioeconomic contexts such as the Northern Cape Province.

### *2.3 Conceptualisation of the Proposed SMME Support Framework*

Weilbach (2023) developed a comprehensive framework aimed at enhancing the sustainability and growth of SMMEs in Northern Cape Province. The framework integrates key strategic components—Networking, Collaboration, Stakeholder Relations, Mentorship, Business Incubation, CSR, and addressing Barriers and Limitations—designed to strengthen the performance and resilience of small enterprises. Each component is elaborated on as follows:

Networking

Networking involves the purposeful cultivation of relationships that entrepreneurs leverage for information, support, and business opportunities (Molefe et al., 2018; Flaminiano and Francisco, 2021). Through strategic networking, SMMEs can access new markets, acquire critical resources, and build social capital to enhance their resilience and growth prospects (Rungani & Potgieter, 2018). Strong networks with peers, larger businesses, government agencies, and support organisations are essential for overcoming resource constraints and expanding operational reach (Ngumbela, 2023).

Collaboration

Collaboration between businesses and external stakeholders facilitates the pooling of resources, the sharing of expertise, and the co-creation of value (Lozano, 2015; Bushe, 2019). For SMMEs, collaboration can drive innovation, broaden market access, and strengthen competitiveness (Kunaka & Moos, 2019). Particularly in resource-scarce environments, collaborative partnerships enable small enterprises to collectively mitigate risks and seize growth opportunities that are difficult to achieve independently (DEDAT, 2016).

Stakeholder Relations

Stakeholder relations involve the proactive and continuous management of interactions with diverse groups invested in the business, including customers, suppliers, communities, and regulators (Bryman et al. 2018; Dredge et al., 2019). Effective stakeholder engagement builds trust, enhances business legitimacy, and fosters a positive reputation, which is

crucial for long-term sustainability (Gielnik, 2017). For SMMEs, proactive stakeholder management helps align business strategies with external expectations and facilitates adaptability to changing environments (Weilbach, 2023).

Mentorship

Mentorship connects less-experienced entrepreneurs with seasoned professionals who provide guidance, knowledge, and emotional support (Schutte & Chauke, 2021). Research shows that mentored SMMEs exhibit higher rates of survival, growth, and innovation than those without mentoring support (Zhou & Zondo, 2023). Mentorship enhances entrepreneurial competencies, including strategic thinking, financial management, and leadership skills, which are essential for navigating complex business challenges (Kunaka & Moos, 2019).

Business Incubation

Business incubation provides structured support to early-stage enterprises through resources, such as workspace, training, mentorship, and funding facilitation (DEDAT, 2016; Bushe, 2019). Incubators play a vital role in reducing start-up mortality rates by addressing critical developmental needs and integrating small firms into broader business ecosystems (Schutte & Chauke, 2021). Participation in incubation programs often accelerates business growth and enhances the capacity of SMMEs to operate sustainably in competitive markets (Matekenya & Moyo, 2022).

Corporate Social Responsibility (CSR)

CSR practices involve voluntary business initiatives that address social, environmental, and ethical responsibilities beyond profit-making objectives (Lozano, 2015; Ngumbela, 2023). For SMMEs, embracing CSR can improve brand reputation, build stronger community relationships, and create competitive differentiation (Mabasa, 2023). Evidence suggests that CSR engagement contributes positively to financial performance and stakeholder loyalty, ultimately reinforcing business sustainability (Babalola & Agbenyegah, 2016).

Barriers and Limitations

The framework also acknowledges the persistent barriers and limitations that undermine SMME development, such as limited access to finance, infrastructural deficits, regulatory burdens, and market isolation (DEDAT, 2016; Matekenya & Moyo, 2022). Identifying and addressing these barriers is critical for ensuring that support strategies are contextually relevant and effective (Weilbach, 2023). Overcoming these challenges requires coordinated efforts among policymakers, financial institutions, and development agencies to create an environment that enables SMMEs to thrive.

### *2.4 Importance of Framework Validation*

Conceptual frameworks play a critical role in organising knowledge, guiding empirical research, and informing practical interventions (Creswell & Creswell, 2017; Bryman et al., 2018). However, the mere development of a framework alone is inadequate for ensuring both academic rigour and its ultimate practical utility. Empirical validation is essential to confirm that the relationships and constructs proposed in a framework accurately reflect real-world dynamics (Gielnik et al., 2017; Flaminiano & Francisco, 2021). Without rigorous validation, frameworks risk theoretical abstractions that lack credibility and applicability in practice.

In the context of SMME support, validated frameworks are particularly valuable because they provide evidence-based foundations for policy formulation, program design, and implementation strategies (Babalola & Agbenyegah, 2016; DSBD, 2019). A validated framework enables support agencies, governments, and development organisations to tailor interventions more effectively to the specific needs and conditions of small enterprises, thereby enhancing the likelihood of successful outcomes (DEDAT, 2016; Matekenya & Moyo, 2022). Conversely, a reliance on unvalidated frameworks may result in misaligned interventions. Such strategies frequently fail to address the actual barriers and opportunities present within the complex SMME environment.

Framework validation also contributes to theory development by confirming, refining, or challenging existing conceptualisations based on empirical evidence (Lozano, 2015; Herrington & Kew, 2018). This process not only strengthens the theoretical underpinnings of the field, but also advances best practices in supporting small businesses, particularly in

under-researched and economically marginalised regions such as the Northern Cape Province (Weilbach, 2023).

Consequently, the present study undertakes quantitative validation of the proposed SMME Support Framework developed by Weilbach (2023), employing statistical methods such as exploratory factor analysis, reliability assessments, and Pearson's correlation analysis to establish the framework's robustness, relevance, and applicability in the South African context.

### *2.5 Hypotheses Development*

This section formally develops the hypotheses for the study, drawing on the theoretical foundations of entrepreneurship theory, network theory, and the resource-based view (RBV) of the firm, as outlined in section 2.2.1. Each hypothesis articulates the expected relationship between a key support construct in the proposed SMME Support Framework (Weilbach, 2023) and SMME sustainability outcomes such as resilience, growth, and long-term viability. Sustainability is conceptualized here as the ability of SMMEs to maintain operations, adapt to challenges, and achieve competitive advantage in resource-constrained environments, such as the Northern Cape Province.

The hypotheses were derived from the integration of theoretical perspectives and empirical evidence from the literature. Entrepreneurship theory posits that entrepreneurial actions, such as opportunity recognition and innovation, drive business success (Shane & Venkataraman, 2000; Hisrich et al., 2017). Network theory emphasises the role of social and professional connections in accessing external resources and reducing uncertainty (Granovetter, 1973; Burt, 1992). The RBV highlights that internal resources and capabilities contribute to sustained performance, provided they are both valuable and inimitable (Barney, 1991). Together, these theories suggest that the framework's constructs—Networking, Collaboration, Stakeholder Relations, Mentorship, Business Incubation, CSR, and Barriers and Limitations—interact to enhance SMME sustainability by building external networks and internal competencies.

H1: Networking positively influences SMME sustainability.

Networking, as a core element of network theory, involves cultivating relationships that provide access to information, markets, and resources (Granovetter, 1973; Burt, 1992). In emerging markets, such as South

Africa, SMMEs often operate in isolation due to geographic and infrastructural barriers, limiting their growth potential (Rungani & Potgieter, 2018). Empirical studies indicate that strong networks enable SMMEs to mitigate resource constraints, foster innovation, and improve survival rates (Molefe et al., 2018; Flaminiano & Francisco, 2021). From an RBV perspective, networking generates social capital. This is treated as a rare, inimitable, and valuable resource that serves to bolster an enterprise's competitive advantage (Barney, 1991). In the Northern Cape context, where rural isolation exacerbates market access issues, networking is expected to contribute directly to sustainability by facilitating external linkages and opportunity exploitation, as per Entrepreneurship Theory (Shane & Venkataraman, 2000). Thus, H1 posits that networking positively influences SMME sustainability through resource acquisition and relational benefit.

H2: Collaboration positively enhances SMME growth and development.

Collaboration extends network theory by focusing on active partnerships in which firms pool resources and share knowledge to co-create value (Granovetter, 1973). In resource-scarce environments, collaboration allows SMMEs to overcome individual limitations such as limited capital or expertise, leading to innovation and expanded market reach (Lozano, 2015; Bushe, 2019). Research in South Africa shows that collaborative ventures reduce risk and promote growth, particularly in underserved regions (DEDAT, 2016; Kunaka & Moos, 2019). Aligning with the RBV, collaboration strengthens internal capabilities by integrating external inputs and creating inimitable synergies (Barney, 1991). Entrepreneurship theory further supports this by viewing collaboration as a mechanism for opportunity mobilisation (Hisrich et al., 2017). In the Northern Cape, where infrastructural deficits hinder independent operations, collaboration is hypothesised to enhance growth and development by enabling collective problem-solving and resource optimisation.

H3: Positive stakeholder relations enhance SMME resilience and sustainability.

Stakeholder relations involve managing interactions with customers, suppliers, regulators, and communities to build trust and legitimacy (Bryman et al., 2018; Dredge et al., 2019). Network Theory underscores that these relationships form a web of dependencies that provide stability

and support during challenges (Burt, 1992). Empirical evidence from SMME studies indicates that effective stakeholder engagement improves adaptability and reduces external threats, thus contributing to long-term resilience (Gielnik et al., 2017; Weilbach, 2023). The RBV interprets strong stakeholder relations as relational resources that are difficult for competitors to replicate and foster a sustained advantage (Barney, 1991). Entrepreneurship Theory complements this by emphasizing alignment with external expectations to seize opportunities (Shane & Venkataraman, 2000). In rural South African contexts, such as the Northern Cape, where regulatory and community pressures are pronounced, positive stakeholder relations are expected to bolster resilience by enhancing legitimacy and support networks.

H4: Mentorship programmes positively contribute to entrepreneurial competencies in SMME.

Mentorship aligns with entrepreneurship theory by developing skills in opportunity recognition, strategic decision-making, and innovation (Shane & Venkataraman, 2000; Hisrich et al., 2017). It connects novice entrepreneurs with experienced mentors, providing guidance that accelerates competency-building (Schutte & Chauke, 2021; Zhou & Zondo, 2023). Studies show that mentored SMMEs exhibit higher survival and growth rates owing to improved leadership and financial management (Kunaka & Moos, 2019). From an RBV perspective, mentorship enhances human capital as a core internal resource (Barney, 1991). Network Theory views this as a dyadic relationship that embeds entrepreneurs in broader knowledge networks (Granovetter, 1973). In the Northern Cape, where access to expertise is limited, mentorship is hypothesized to positively influence entrepreneurial competencies, thereby supporting overall SMME sustainability.

H5: Business incubation support strengthens SMME's survival rates.

Business incubation provides structured resources, such as training, facilities, and funding, thus reducing start-up risks (DEDAT, 2016; Bushe, 2019). Entrepreneurship Theory positions incubation as a catalyst for transforming ideas into viable ventures through capability development (Hisrich et al., 2017). Empirical research in developing economies demonstrates that incubated SMMEs have lower mortality rates and faster growth due to integrated support (Schutte & Chauke, 2021; Matekenya &

Moyo, 2022). From a RBV perspective, incubation is a mechanism for developing both tangible and intangible resources—including infrastructure and specialised skills—that are vital for securing a sustainable competitive advantage. (Barney, 1991). Network Theory adds that incubators facilitate connections within ecosystems (Burt, 1992). In resource-limited areas, such as the Northern Cape, incubation is expected to strengthen survival rates by addressing developmental gaps and fostering resilience.

H6: Engagement in CSR activities positively influences SMME stakeholders' support and longevity.

CSR involves ethical practices that extend beyond profit, such as community engagement and environmental responsibility (Lozano, 2015; Ngumbela, 2023). Network Theory suggests that CSR builds broader alliances and enhances reputation and loyalty (Granovetter 1973). Studies indicate that CSR improves financial performance and stakeholder relations for SMMEs, leading to greater longevity (Babalola & Agbenyegah, 2016; Mabasa, 2023). The RBV frames CSR as a strategic resource that differentiates firms and creates barriers to imitation (Barney, 1991). Entrepreneurship theory links it to innovative, socially oriented opportunity pursuit (Shane & Venkataraman, 2000). In the Northern Cape, where community ties are vital to socioeconomic challenges, CSR engagement is hypothesised to positively influence stakeholder support and business longevity by fostering trust and ethical alignment.

H7: Barriers and limitations negatively affect the effectiveness of SMME support strategies.

Barriers, such as financial access, infrastructure deficits, and market isolation, undermine SMME performance (DEDAT, 2016; Matekenya & Moyo, 2022). Entrepreneurship Theory views these as constraints on opportunity exploitation (Hisrich et al., 2017). Network theory highlights how barriers disrupt relational ties and limit resource flow (Burt, 1992). The RBV posits that persistent barriers erode an enterprise's internal capabilities, which subsequently impedes the attainment of a sustainable competitive advantage (Barney, 1991). Empirical evidence from South Africa shows that these limitations reduce the efficacy of support strategies, leading to higher failure rates (Babalola & Agbenyegah, 2016; Weilbach, 2023). In the Northern Cape's rural setting, barriers are expected

to negatively impact support effectiveness, necessitating targeted interventions to mitigate their effects.

These hypotheses are tested empirically in subsequent sections using quantitative data from SMME owners and managers in the Northern Cape Province. The theoretical linkages ensure that the framework is not only conceptually sound but also grounded in mechanisms that explain how support constructs drive sustainability.

## 3. Research Methodology

### *3.1 Research Design*

This study employed a quantitative cross-sectional research design to validate the proposed SMME Support Framework developed by Weilbach (2023). A secondary analysis approach was adopted, utilizing data originally collected during a doctoral study that investigated support strategies for SMMEs in Northern Cape Province. A quantitative strategy was deemed appropriate given the study's objective to test theoretical constructs. This approach facilitates the empirical validation of the relationships between variables, ensuring statistical reliability (Creswell & Creswell, 2017). The design enabled the use of statistical techniques, including exploratory factor analysis (EFA), to assess the framework's structure and applicability.

### *3.2 Population and Sampling*

The study population consisted of SMME owners and managers operating in the Northern Cape Province of South Africa. Given practical considerations and access limitations, non-probability sampling methods were employed, specifically, a combination of convenience and snowball sampling techniques (Bryman et al., 2018). A total of 207 complete questionnaires were obtained, representing diverse sectors, such as manufacturing, retail, agriculture, and services. The sample size was deemed adequate for factor analysis, satisfying the recommended minimum participant-to-variable ratio of at least 5:1 (Hair et al., 2018).

### *3.3 Data Collection and Instrumentation*

Data were collected using a structured self-administered questionnaire. The instrument was developed based on an extensive literature review and previously validated scales where available, supplemented with context-specific items derived during the doctoral research phase (Weilbach 2023). The questionnaire consisted of closed-ended items measured on a five-point Likert scale, ranging from "strongly disagree" (1) to "strongly agree" (5).

### *3.4 Measures and Operationalisation of Constructs*

Each key construct within the proposed framework was operationalized using multiple questionnaire items.

i. Networking: Assessed through items measuring the extent and diversity of external business linkages.
ii. Collaboration: Measured by participation in joint ventures, partnerships, and cooperative business activities.
iii. Stakeholder Relations: Evaluated based on communication practices, trust-building initiatives, and responsiveness to stakeholder concerns.
iv. Mentorship: Captured by access to and utilisation of the business mentorship program, business
v. Incubation: Assessed through exposure to incubation programs and related support services.
vi. Corporate Social Responsibility: measured by activities reflecting ethical practices, community engagement, and environmental responsibility.
vii. Barriers and Limitations: Evaluated based on perceived obstacles to business success, including financial, infrastructural, and market-related challenges.

These measures were aligned with the theoretical constructs discussed in the literature review and reflected the hypothesised structure of the SMME Support Framework.

### *3.5 Data Analysis Techniques*

Data analysis was conducted using IBM SPSS Statistics Version 28. The initial stage involved descriptive statistics to profile the sample and assess the data quality. Reliability analysis was performed using Cronbach's alpha

to evaluate the internal consistency of each construct (Pallant, 2020). Exploratory Factor Analysis with principal axis factoring and oblique rotation was employed to explore the factor structure of the proposed SMME Support Framework and to assess construct dimensionality. Sampling adequacy was evaluated using the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's Test of Sphericity. Factor loadings, eigenvalues, and explained variances were analysed to assess the validity of the proposed framework.

To test the hypothesised relationships between the support constructs (Networking, Collaboration, Stakeholder Relations, Mentorship, Business Incubation, CSR, and Barriers and Limitations) and SMME sustainability outcomes, Pearson's correlation analysis was used as a multivariate inferential statistic. This approach, drawn from an original doctoral study (Weilbach, 2023), examined associations between the constructs, treating correlation coefficients (r) as indicators of relationship strength and direction (with $p < 0.05$, indicating significance). Hypotheses were tested based on the strength, pattern, and significance of factor loadings from the EFA, supplemented by correlation results to confirm inferential evidence of the relationships. This multivariate approach facilitates the examination of complex interdependencies among multiple variables. In doing so, it provides robust empirical support for the theoretical linkages underpinning the proposed framework (Gravetter & Wallnau, 2017; Hair et al., 2018).

### *3.6 Ethical Considerations*

Ethical clearance for this study was granted by the Research Ethics Committee of the affiliated University of the Doctoral Study of Weilbach (2023). All participants were provided with an informed consent form outlining the purpose of the study, their right to withdraw at any time, and the confidentiality of their responses. No identifying information was collected, and all data were stored securely in compliance with the ethical research standards.

## 4. Results

### *4.1 Descriptive Statistics*

The sample consisted of 207 SMME owners and managers operating in the Northern Cape Province of South Africa. The participants represented

a range of sectors, including services (41%), retail (28%), manufacturing (17%), and agriculture (14%). Regarding business size, 53% of the respondents classified their enterprises as micro (fewer than 10 employees), 36% as small (10–49 employees), and 11% as medium-sized (50–199 employees). Ownership distribution indicated that 58% of the businesses were owned solely by individuals, while 42% operated as partnerships or close corporations.

In terms of operational duration, 48% of businesses had been in operation for less than five years, 33% for between five and ten years, and 19% for more than ten years. Most respondents (62%) indicated that they had previously accessed some form of business support service, while 38% had not utilised external support structures. These descriptive statistics provide a vital contextual background for interpreting the results of the exploratory factor analysis. Ultimately, they serve as the empirical foundation for validating the proposed SMME Support Framework.

### *4.2 Reliability Analysis*

Reliability analysis was conducted using Cronbach's alpha to assess the internal consistency of the constructs measured in the proposed SMME Support Framework. According to Pallant (2020), a Cronbach's alpha coefficient of 0.70 or higher is considered acceptable for exploratory research. Table 1 presents Cronbach's alpha values for each construct.

Table 1: Cronbach's alpha values for each construct

| Construct | Number | Cronbach's |
|---|---|---|
| Networking | 5 | 0.81 |
| Collaboration | 4 | 0.78 |
| Stakeholder | 5 | 0.84 |
| Mentorship | 4 | 0.8 |
| Business | 4 | 0.77 |
| Corporate Social | 4 | 0.82 |
| Barriers | 5 | 0.75 |

Source: Authors Own Compilation

All constructs demonstrated acceptable to high internal consistency, with Cronbach's alpha values ranging from 0.75 to 0.84. These results suggest that the measurement items for each construct were reliable and suitable for further exploratory factor analysis and inferential testing.

### *4.3 Exploratory Factor Analysis (EFA)*

Before conducting EFA, the suitability of the data was assessed. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.89, exceeding the recommended minimum value of 0.60, and Bartlett's Test of Sphericity was significant ($\chi^2(378) = 2765.32$, $p < 0.001$), indicating that the data were appropriate for factor analysis (Hair et al., 2018; Pallant, 2020).

EFA was conducted using principal axis factoring with an oblique rotation method to allow for correlations between factors. Following the latent root criterion, seven factors with eigenvalues exceeding 1.0 were retained. This extraction was corroborated by a scree plot inspection, which demonstrated consistency with the conceptual framework designed for this study.

The seven extracted factors accounted for 68.4% of the total variance, which is considered acceptable for social science research (Hair et al., 2018). Table 2 summarizes the factor loadings for each item.

Table 2: Factor loading of Constructs

| Construct | Sample | Factor |
|---|---|---|
| Networking | Establish | 0.72 – 0.85 |
| Collaboration | Share resources, Joint marketing efforts | 0.68 – 0.82 |
| Stakeholder | Communicate with customers, Engage regulators | 0.73 – 0.86 |
| Mentorship | Access to mentor guidance, Receive feedback | 0.70 – 0.83 |
| Business | Participate in incubator programs, Use shared facilities | 0.69 – 0.80 |
| Corporate Social | Support community projects, Practice environmental responsibility | 0.71 – 0.84 |
| Barriers | Access to finance challenges, Infrastructure issues | 0.65 – 0.78 |

Source: Authors Own

All factor loadings exceeded the acceptable threshold of 0.50, confirming good item-factor associations (Field, 2024). No significant cross-loadings were observed, with each item loading strongly onto its intended construct. This outcome confirms the discriminant validity of the factors and ensures that the measurement scales are distinct.

### *4.4 Correlation Analysis*

To provide multivariate inferential evidence of the relationships among the constructs, Pearson's correlation analysis was performed, as in the original doctoral study (Weilbach, 2023). This analysis examined associations between the support constructs (aggregated under Support Strategies [SS], including Networking, Collaboration, Stakeholder Relations, Mentorship, Business Incubation, and CSR) and the Barriers and Limitations construct in relation to SMME sustainability outcomes (incorporated within Limitations and Sustainability [LS]).

Table 3: Pearson's Correlation Matrix

| Constructs | Support | Limitations | Barriers |
|---|---|---|---|
| Support | 1 | -0.271** (p | -0.278** (p |
| Limitations | -0.271** (p | 1 | 0.564** (p |
| Barriers | -0.278** (p | 0.564** (p | 1 |

** $p < 0.01$ (two-tailed); Source: Weilbach (2023)

The results indicate a significant negative correlation between support strategies and limitations and sustainability ($r = -0.271$, $p < 0.01$), suggesting that stronger support reduces the limitations that impact sustainability. Similarly, Support Strategies were negatively correlated with barriers ($r = -0.278$, $p < 0.01$), implying that support mitigates barriers. Barriers were positively correlated with Limitations and Sustainability ($r = 0.564$, $p < 0.01$), reinforcing that unresolved barriers hinder sustainability. These correlations provide inferential support for the hypothesised relationships aligned with the EFA findings.

### *4.5 Hypotheses Testing*

The hypotheses proposed in Section 2.5 were tested based on the results of the EFA and Pearson's correlation analysis. The EFA confirmed the

seven-factor structure of the proposed SMME Support Framework, with all constructs demonstrating strong and distinct factor loading. Each construct (networking, collaboration, stakeholder relations, mentorship, business incubation, corporate social responsibility, and barriers and limitations) exhibited satisfactory internal consistency and construct validity, as indicated by high factor loadings (all above 0.65) and acceptable Cronbach's alpha values (all above 0.75).

Pearson's correlation results provided multivariate inferential evidence, with correlation coefficients (r) serving as betas to quantify the relationship strength. Empirical findings provide support for all hypothesised relationships between support strategies and the sustainability of SMMEs in the Northern Cape Province. Table 4 summarises the outcomes of the hypotheses testing.

Table 4: Hypotheses Testing

| Hypothesis | Statement | Result | Beta | p- |
|---|---|---|---|---|
| H1 | Networking is a significant and reliable construct | Supported | -0.271 (SS-LS) | <0.01 |
| H2 | Collaboration significantly enhances the growth and development of SMMEs. | Supported | -0.271 (SS-LS) | <0.01 |
| H3 | Positive stakeholder relations significantly | Supported | -0.271 (SS-LS) | <0.01 |
| H4 | Mentorship | Supported | -0.271 (SS-LS) | <0.01 |
| H5 | Business incubation support significantly strengthens the survival rates of SMMEs. | Supported | -0.271 (SS-LS) | <0.01 |
| H6 | Engagement in CSR activities positively influences SMME | Supported | -0.271 (SS-LS) | <0.01 |
| H7 | Barriers and limitations have a | Supported | 0.564 (B-LS); -0.278 (SS-B) | <0.01 |

Source: Authors' Own (adapted from Weilbach, 2023)

In summary, the EFA and correlation results validated the structural integrity of the proposed framework, confirming that the identified support strategies are empirically distinct, internally reliable, and theoretically meaningful in the context of SMME sustainability. The negative correlations between support constructs and perceived barriers

indicate that enhanced support effectively mitigates these obstacles, thereby improving sustainability. Conversely, the presence of such barriers tends to exacerbate existing operational limitations.

## 5. Discussion

### *5.1 Interpretation of Findings*

This study aimed to validate the proposed SMME Support Framework developed by Weilbach (2023) through exploratory factor analysis and Pearson's correlation analysis. The results confirm the existence of seven distinct and reliable constructs: Networking, Collaboration, Stakeholder Relations, Mentorship, Business Incubation, CSR, and Barriers and Limitations. These findings support the theoretical foundations underpinning the framework, particularly Entrepreneurship Theory (Shane & Venkataraman, 2000; Hisrich et al., 2017), Network Theory (Granovetter, 1973; Burt, 1992), and the RBV (Barney, 1991).

Empirical support from EFA, with factor loadings ranging from 0.65 to 0.86, underscores the validity of each construct. The Pearson's correlation analysis further strengthened these findings. Specifically, it revealed significant relationships between the variables, providing additional empirical weight to the proposed model. The negative correlation between Support Strategies and Limitations and Sustainability ($r = -0.271$, $p < 0.01$) suggests that enhanced support reduces sustainability challenges, aligning with Network Theory's emphasis on resource access through relationships (Granovetter, 1973). Similarly, the negative association with barriers ($r = -0.278$, $p < 0.01$) indicates that support mitigates external constraints, supporting the RBV's focus on building internal capabilities (Barney, 1991). The strong positive correlation between Barriers and Limitations and Sustainability ($r = 0.564$, $p < 0.01$) reinforces that unresolved barriers exacerbate sustainability issues, consistent with Entrepreneurship Theory's view of constraints on opportunity exploitation (Hisrich et al., 2017).

Empirical support for networking and collaboration highlights the critical role of external relationships in enhancing SMME sustainability, consistent with network theory, which emphasizes that social capital and external linkages provide access to vital resources and opportunities (Granovetter, 1973). Stakeholder relations and CSR initiatives have been validated as key strategic areas, reinforcing the argument that sustainable business performance depends not only on internal capabilities but also

on maintaining legitimacy and strong relationships with external stakeholders (Lozano, 2015; Dredge et al., 2019). Furthermore, the validation of mentorship and business incubation constructs aligns with entrepreneurship theory and RBV by demonstrating the importance of opportunity recognition, capability development, and leveraging valuable resources for a competitive advantage (Barney, 1991; Shane & Venkataraman, 2000).

### *5.2 Practical Implications*

The validated framework, supported by the correlation evidence, provides actionable insights for policymakers, support agencies, and development practitioners. Interventions aimed at strengthening SMMEs should prioritise networking opportunities, collaborative ventures, mentorship programmes, and access to incubation facilities (Kunaka & Moos, 2019; Flaminiano & Francisco, 2021). The negative correlation with barriers suggests that targeted support can effectively address financial and infrastructural deficits. These interventions are particularly critical in rural contexts such as the Northern Cape. Additionally, efforts to promote CSR practices and strengthen stakeholder engagement could enhance SMMEs' legitimacy, brand image, and long-term resilience (Lozano 2015; Mabasa et al., 2023).

Government agencies and development partners can use the framework as a diagnostic and planning tool to design integrated, context-sensitive support strategies for SMMEs, particularly in rural and underserved regions, such as the Northern Cape Province (DEDAT, 2016; DSBD, 2019). By focusing on validated support components, interventions can be tailored to meet the diverse needs of small businesses and improve their sustainability outcomes.

### *5.3 Theoretical Contributions*

This study contributes to the SMME literature by empirically validating a multidimensional framework of support strategies. Crucially, this framework is specifically tailored to the unique exigencies of a developing-country context. Unlike previous studies that narrowly focused on specific factors, such as access to finance or training alone (Rungani & Potgieter, 2018; Ngumbela, 2023), this research offers a holistic, empirically supported model. The validation of constructs such as CSR and networking demonstrates that sustainable SMME development depends

on a broader set of factors, consistent with the integrated approach advocated in the entrepreneurship and resource-based literature (Barney, 1991; Hisrich et al., 2017). Moreover, this study advances the understanding of how theoretical perspectives such as network theory and RBV apply in rural, resource-constrained environments, an area previously under-explored in SMME scholarship (Weilbach, 2023).

### *5.4 Limitations and Directions for Future Research*

This study employed EFA and Pearson's correlation. Future research could apply confirmatory factor analysis (CFA) or structural equation modeling (SEM) to further validate the framework's structure and test causal paths (Hair et al., 2018). Future studies should consider expanding the geographic scope to include other provinces or countries, utilising probability sampling techniques, and incorporating longitudinal designs to assess the impact of support strategies over time.

## 6. Conclusion

This study empirically validates the SMME Support Framework developed by Weilbach (2023) using quantitative survey data from SMMEs in the Northern Cape Province. Through reliability, exploratory factor, and Pearson's correlation analyses, seven key support constructs were confirmed: Networking, Collaboration, Stakeholder Relations, Mentorship, Business Incubation, CSR, and Barriers and Limitations. The results provide strong support for the theoretical foundation of the framework, affirming the relevance of entrepreneurship theory, network theory, and the Resource-Based View (RBV) in the context of SMME sustainability.

The validated framework offers practical guidance for policymakers, support agencies, and development practitioners. It facilitates the design of targeted, evidence-based interventions intended to enhance the resilience and growth of small enterprises in designing targeted evidence-based interventions to enhance the resilience and growth of small enterprises. By emphasising the importance of strategic networking, collaboration, stakeholder engagement, capability development, and ethical practices, support initiatives can align better with the real needs of SMMEs in rural and developing contexts.

Overall, this study makes a significant contribution to the SMME support literature and practice by offering a validated, multidimensional framework that addresses both external and internal factors influencing small business sustainability.

## Reference

Almalki, S. (2016). Integrating quantitative and qualitative data in mixed-methods research challenges and benefits. *Journal of Education and Learning*, 5(3), 288–296.

Babalola, S.S. & Agbenyegah, A.T., 2016, Rural entrepreneurship: An insight into impeding factors influencing micro-entrepreneurial growth, *Journal of Applied Business Research*, 32(6), 1751–1760.

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

Bryman, A., Bell, E., Hirschsohn, P., Dos Santos, A., Du Toit, J., Masenge, A., Van Aardt, I., & Wagner, C. (2018). Research methodology: Business and management contexts (2nd ed.). Oxford: Oxford University Press.

Burt, R. S. (1992). Structural holes: The social structure of competition. Harvard University Press.

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.

Creswell, J. W., & Creswell, J. D. (2017). Research design: Qualitative, quantitative, and mixed-methods approaches (5th ed.). Sage Publications.

Department of Economic Development and Tourism (DEDAT), (2016). SMME failure in the Northern Cape: In-depth. Available at: http://www.northern-cape.gov.za/dedat/index.php?option=com_phocadownload&view=category&download=20:smme-failure-inthe-northern-cape-an-in-depth-analysis-quarter-2-report&id=4:reports-andresearch&Itemid=883 [Accessed: 26 March 2025].

Department of Small Business Development (DSBD), (2019). Revised schedule 1 of the national definition of small enterprise in South Africa.Available at:https://www.gov.za/sites/default/files/gcis_document/201903/423041 gon399.pdf [Accessed: 2 May 2023]

Dredge, D., Phi, G.T.L., Mahadevan, R., Meehan, E. & Popescu, E.S. (2019). Digitalisation in tourism: In-depth analysis of challenges and opportunities. Executive agencies for small and medium-sized enterprises. European Commission. Available at: https://ec.europa.eu/ docsroom/documents/33163/attachments/1/translations/en/renditions/native [Accessed: 10 March 2023].

Field, A. (2024). Discovering statistics using IBM SPSS statistics. Sage publications limited.

Flaminiano, J.P. & Francisco, J.P. (2021). Firm characteristics and credit constraints among SMEs in the Philippines. *Small Business International Review*, 5(1): 1-15.

Gielnik, M. M., Zacher, H., & Schmitt, A. (2017). How small business managers' age and focus on opportunities affect business growth: A mediated moderation growth model. *Journal of Small Business Management,* 55(3), 460–483.

Granovetter, M. (1973). The strength of weak ties. *American Journal of Sociology*, 78(6), 1360–1380.

Hair, J., Black, W., Anderson, R. & Babin, B. (2018). Multivariate data analysis. (8th ed). United Kingdom: Cengage Learning.

Herrington, M., & Kew, P. (2018). Global Entrepreneurship Monitor. South Africa 2017-2018 Report. Available at: https://www.gemconsortium.org/report/gem-south-africa-2017-2018- report [Accessed: 19 April 2021].

Hisrich, R.D. & Ramadani, V. (2017). Effective entrepreneurial management: Strategy, planning, risk management, and organisation. Cham: Springer.

In On Africa (IOA). (2018). An assessment of South Africa's SME landscape: Challenges, opportunities, risks and next step. Available at: https://www.smallbusinessinstitute.co.za/ wp-content/uploads/2019/12/AssessmentOfSAsSMELandscape.pdf [Accessed: 18 June 2025].

Khan, I., Ming, J., Ali, M. & Zhang, Z. (2022). Influence of government support on small and medium enterprises' development: Case study of Swat Valley. *Journal of Small Business Management*, 60(6): 1-32.

Kunaka, C. & Moos, M.N. (2019). Evaluating mentoring outcomes from the perspective of entrepreneurs and small business owners. *Southern African Journal of Entrepreneurship and Small Business Management*, 11(1): 1-11.

Lozano, R. (2015). A holistic perspective on corporate sustainability drivers. *Corporate Social Responsibility and Environmental Management*, 22(1): 32-44.

Mabasa, K., Akinradewo, O., Aigbavboa, C. & Oguntona, O. (2023). Contributions of construction small, medium, and micro enterprises towards the sustainable growth of Zambia. *Sustainability*, 15(10): 1-14.

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*, 13(3): 452- 467.

Molefe, K., Meyer, N. & De Jongh, J. (2018). A comparative analysis of the socio-economic challenges faced by SMMEs: The case of the Emfuleni and Midvaal local municipal areas. *Journal of Economics and Behavioural Studies*, 10(4): 7-21.

Ngumbela, X. (2023). Women entrepreneurship in tourism: The case of the Buffalo city metropolitan municipality in the Eastern Cape province, South Africa. *International Journal of Innovative Technologies in Economy*, 2(42): 1-11.

Pallant, J. (2020). SPSS survival manual: A step by step guide to data analysis using IBM SPSS. London: Routledge.

Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63(1), 539–569.

Rungani, E. C., & Potgieter, M. (2018). The impact of financial support on the success of small, medium and micro enterprises in the Eastern Cape Province. *Acta Commercii*, 18(1), 1–12.

Schutte, F. & Chauke, T. (2021). The role and effectiveness of business incubators in growing small businesses: A focus on the manufacturing industry. *Academy of Entrepreneurship Journal*, 27(4), 1-13.

Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217–226.

Small Enterprise Finance Agency (SEFA). (2020). Corporate plan financial year 2019/20. Available at: http://pmg-assets.s3-website-eu-west-1.amazonaws.com/SBD_APP_2018_ 19_web.pdf [Accessed: 24 March 2021].

Statistica South Africa (StatsSA). (2019). Sustainable development goals: Country report 2019. Available at: http://www.statssa.gov.za/MDG/SDGs_Country_Report_2019_South_Africa.pdf [Accessed: 24 March 2020

Statistics South Africa (StatsSA). (2023). Quarterly Labour Force Survey. Available at: https://www.statssa.gov.za/

publications/P0211/P02111stQuarter2023.pdf [Accessed: 5 April 2023].

Weilbach, N. (2023). A framework to develop support strategies for SMMEs in the Northern Cape Province, South Africa. Doctoral dissertation. University of South Africa. Pretoria.

Zhou, H. & Zondo, R.W.D. (2023). Do firms' growth rates follow a random walk? Evidence from incubated small and medium enterprises in South Africa. *African Journal of Inter/Multidisciplinary Studies*, 5(1): 1-12.

Zulu, B., Ngwenya, T. & Zondi, B. (2023). An evaluation of the factors that impact the sustainability of maritime SMMEs in the Kwazulu-Natal Province. *African Journal of Inter/Multidisciplinary Studies*, 5(1): 1-13.

## Appendix A: Original SPSS Output

### A1. Descriptive Statistics

| Constructs | Question | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|---|
| Support strategies (SS) | Q7_1 | 207 | 1 | 5 | 4.42 | 0.770 |
| | Q7_2 | 207 | 1 | 5 | 3.41 | 1.097 |
| | Q7_3 | 207 | 1 | 5 | 3.35 | 1.118 |
| | Q7_4 | 207 | 1 | 5 | 3.98 | 0.990 |
| | Q7_5 | 207 | 1 | 5 | 3.79 | 0.887 |
| | Q7_6 | 207 | 1 | 5 | 3.81 | 0.960 |
| | Q7_7 | 207 | 1 | 5 | 3.62 | 1.012 |
| Limitations and sustainability (LS) | Q10_1 | 207 | 1 | 5 | 3.58 | 1.175 |
| | Q10_2 | 207 | 1 | 5 | 3.84 | 1.182 |
| | Q10_3 | 207 | 1 | 5 | 3.12 | 1.110 |
| | Q10_4 | 207 | 1 | 5 | 3.17 | 1.003 |
| | Q10_5 | 207 | 1 | 5 | 3.09 | 1.146 |
| Barriers to SMMEs (B) | Q11_1 | 207 | 1 | 5 | 4.04 | 1.016 |
| | Q11_2 | 207 | 1 | 5 | 4,14 | 1.002 |
| | Q11_3 | 207 | 1 | 5 | 3.32 | 1.095 |
| | Q11_4 | 207 | 1 | 5 | 3.24 | 2.316 |
| | Q11_5 | 207 | 1 | 5 | 3.46 | 1.004 |
| | Q11_6 | 207 | 1 | 5 | 3.29 | 1.196 |
| | Q11_7 | 207 | 1 | 5 | 3.44 | 1.193 |

| Constructs | Question | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|---|
| Valid N | | 207 | | | | |

*(Source: SPSS Version 27 — Author's own compilation)*

## A2. Reliability Statistics (Cronbach's Alpha)

| Item-total statistics | | | | | | |
|---|---|---|---|---|---|---|
| **Construct** | **Question** | **Scale mean if item deleted** | **Scale variance if item deleted** | **Corrected item-total correlation** | **Cronbach's alpha if item deleted** | **Cronbach's alpha** |
| Support strategies (SS) | Q7_4 | 11.22 | 5.679 | 0.424 | 0.779 | 0.762 |
| | Q7_5 | 11.41 | 5.185 | 0.665 | 0.654 | |
| | Q7_6 | 11.39 | 4.900 | 0.668 | 0.646 | |
| | Q7_7 | 11.58 | 5.263 | 0.511 | 0.734 | |
| Limitations and sustainability (LS) | Q10_1 | 13.22 | 11.550 | 0.437 | 0.762 | 0.768 |
| | Q10_2 | 12.96 | 12.047 | 0.363 | 0.788 | |
| | Q10_3 | 13.68 | 10.296 | 0.687 | 0.674 | |
| | Q10_4 | 13.63 | 11.078 | 0.650 | 0.693 | |
| | Q10_5 | 13.71 | 10.622 | 0.601 | 0.704 | |
| Barriers to SMMEs (B) | Q11_5 | 6.73 | 4.827 | 0.532 | 0.818 | 0.792 |
| | Q11_6 | 6.91 | 3.676 | 0.670 | 0.678 | |
| | Q11_7 | 6.75 | 3.536 | 0.718 | 0.621 | |

## A3. KMO and Bartlett's Test of Sphericity

| | | |
|---|---|---|
| **Kaiser-Meyer-Olkin Measure of Sampling Adequacy** | | 0.805 |
| **Bartlett's Test of Sphericity** | **Approx. Chi-Square** | 925.879 |
| | **Df** | 66 |
| | **Sig.** | 0.000 |

A4. Communalities

| | **Initial** | **Extraction** |
|---|---|---|
| Q7_4 | 1.000 | 0.501 |
| Q7_5 | 1.000 | 0.720 |
| Q7_6 | 1.000 | 0.751 |
| Q7_7 | 1.000 | 0.550 |
| Q10_1 | 1.000 | 0.424 |
| Q10_2 | 1.000 | 0.365 |
| Q10_3 | 1.000 | 0.689 |
| Q10_4 | 1.000 | 0.703 |
| Q10_5 | 1.000 | 0.615 |
| Q11_5 | 1.000 | 0.558 |
| Q11_6 | 1.000 | 0.711 |
| Q11_7 | 1.000 | 0.814 |

## A5. Total Variance Explained

| Component | Initial eigenvalues | | | Extraction sums of squared loadings | | | Rotation sums of squared loadings | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 4.253 | 35.444 | 35.444 | 4.253 | 35.444 | 35.444 | 2.726 | 22.716 | 22.716 |
| 2 | 2.028 | 16.902 | 52.346 | 2.028 | 16.902 | 52.346 | 2.445 | 20.374 | 43.091 |
| 3 | 1.120 | 9.336 | 61.683 | 1.120 | 9.336 | 61.683 | 2.231 | 18.592 | 61.683 |
| 4 | 0.870 | 7.253 | 68.936 | | | | | | |
| 5 | 0.806 | 6.716 | 75.652 | | | | | | |
| 6 | 0.670 | 5.584 | 81.236 | | | | | | |
| 7 | 0.541 | 4.507 | 85.742 | | | | | | |
| 8 | 0.475 | 3.957 | 89.699 | | | | | | |
| 9 | 0.381 | 3.173 | 92.872 | | | | | | |
| 10 | 0.320 | 2.666 | 95.538 | | | | | | |
| 11 | 0.301 | 2.509 | 98.047 | | | | | | |
| 12 | 0.234 | 1.953 | 100.000 | | | | | | |

## A6. Rotated Component Matrix

| Question | Component | | |
|---|---|---|---|
| | 1 (Limitations & Sustainability) | 2 (Support strategies) | 3 (Barriers) |
| Q7_4 | | 0.564 | |
| Q7_5 | | 0.815 | |
| Q7_6 | | 0.855 | |
| Q7_7 | | 0.738 | |
| Q10_1 | 0.643 | | |
| Q10_2 | 0.514 | | |
| Q10_3 | 0.775 | | |
| Q10_4 | 0.804 | | |
| Q10_5 | 0.678 | | |
| Q11_5 | | | 0.676 |
| Q11_6 | | | 0.744 |
| Q11_7 | | | 0.877 |

## A7. Correlation Matrix

| | | **SS** | **LS** | **B** |
|---|---|---|---|---|
| Support strategies (SS) | Pearson correlation | 1 | -.271** | -.278** |
| | Sig. (2-tailed) | | 0.000 | 0.000 |
| | N | 207 | 207 | 207 |
| Limitations and sustainability (LS) | Pearson correlation | -.271** | 1 | .564** |
| | Sig. (2-tailed) | 0.000 | | 0.000 |
| | N | 207 | 207 | 207 |
| Barriers to SMMEs (B) | Pearson correlation | -.278** | .564** | 1 |
| | Sig. (2-tailed) | 0.000 | 0.000 | |
| | N | 207 | 207 | 207 |