

**Entrepreneurial bricolage and scaling of SMEs in the
tourism sector: Fear of failure as a moderator**

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A research project submitted to the Gordon Institute of Business
Science, University of Pretoria, in partial fulfilment of the requirements
for the degree of Master of Business Administration.

01 November 2022

ABSTRACT

Existing research has found that entrepreneurial bricolage is positively related to growth performance, new venture growth and improved growth capability. This quantitative descripto-exploratory study seeks to establish if entrepreneurial fear of failure (EFF) moderates the relationship between entrepreneurial bricolage (EB) and enterprise scaling (ES) and core firm capabilities (CFC) and enterprise scaling (ES). The study used a sample of 118 SME owners who own accommodation establishments in SA. The study found that there are significant correlations between EB and ES, and CFC and ES, however, EFF does not moderate those relationships. This study offers value in business as its findings can enrich small and medium business owners or managers with the knowledge of how they can leverage the entrepreneurial bricolage concept as a strategy and how and which firm capabilities they can utilise to aid in scaling their businesses.

KEYWORDS:

Entrepreneurial Bricolage; Core Firm Capabilities; SME Scaling; Entrepreneurial Fear of Failure

DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Lesedi Adelaide Seeco

Date

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CHAPTER 1

RESEARCH PROBLEM

1.1 Introduction

Chapter one of this report provides the background to the research study, the problem statement as well as the motivation, and the business and academic relevance of the study. The chapter sets the tone on what the study is about and what it wants to achieve, as well as how the report is outlined.

1.2 Background to the Research Study

Small and Medium-sized Enterprises (SMEs) have been found to be the primary drivers of economic growth that create jobs and alleviate poverty, in emerging or low-income countries (Maziriri & Chivandi, 2020). Thus, it makes it critical that SMEs grow and scale up their businesses for the economic and social prosperity of their countries. In order to grow, firms need to put together a unique resource combination that put them ahead of their competitors (Rafiki, 2019). However, SMEs often operate under resource constraints, when compared to large established corporations (Wadhwa et al., 2017). These constraints include access to finance, infrastructure, regulatory environment, and market-related constraints (Rehman et al., 2019). These constraints can act as barriers to growth and make it difficult for SMEs to scale up their businesses.

Recent studies (An et al., 2020; Fu et al., 2020; Ma & Yang, 2022; Yu et al., 2020; Yu & Wang, 2021) mention that entrepreneurial bricolage is a mechanism that can be used as a tactic to mitigate the negative effects of resource constraints on new venture growth. Entrepreneurial bricolage has been found to improve a firm's growth capability and strategic flexibility Fu et al. (2020). In addition, Fu et al. (2020) and Yu et al. (2020) found that entrepreneurial bricolage is positively related to venture growth and adaptiveness, growth performance and ambidexterity.

Palomares-Aguirre et al. (2018) identify a lack of scalability as a fundamental problem for sustainable business concepts. Dobson et al. (2018) refer to scalability in business as an

idea that can be grown, replicated, adapted or franchised. Sandberg and Hultberg (2021) summed up scaling logistics as scaling out (replication or expanding geographically to reach out to a larger number of customers), scaling up (franchising) and scaling deep (focus is on serving more people and improving the outcomes of the operations).

Marketing, Research and Development (R&D), operations and innovativeness capabilities have been found to be the core firm capabilities that contribute to the firm's ability to create value for its customers, therefore, gaining a competitive edge (Feng et al., 2017; Pucci et al., 2017). A study by Tho (2018) found that marketing capability and innovativeness capability are positively related to firm performance, while studies by Feng et al. (2017) found that firm capabilities (marketing and R&D) have positive effects on both revenue and profit growth.

A study by Fu et al. (2020), which was conducted around hospitality and tourism ventures found that many of these ventures are family businesses. This already categorises these ventures as small businesses, putting them in a more vulnerable position of facing a lack of resources, capabilities, and experience, to scale their businesses, thereby not growing the industry (Fu et al., 2020). These firms are normally managed by the founder or owner who plays multiple roles in the firm i.e., human resources, marketing, operations, innovation, R&D roles e.t.c., without necessarily being skilled in these roles. The primary focus of this study is how entrepreneurs in the tourism sector can overcome resource constraints and scale their businesses by adopting a bricolage concept. Making use of whatever resources you have at your disposal, and combining all those resources to repurpose them, are characteristics of bricolage (An et al., 2020). Thus, this multi-role playing of the owner or founder of an SME in the tourism sector can be seen as bricolage behaviour.

Cacciotti et al. (2020) express entrepreneurial fear of failure as a multidimensional construct with dimensions that serve as sources of fear of failure for aspiring entrepreneurs who are afraid that they might fail before they even start a business. In addition, Ng and Jenkins (2018) mention that fear of failure can discourage someone who intends on pursuing entrepreneurship, irrespective that they are confident in their abilities. The existing literature on entrepreneurial fear of failure has focused mainly on the nascent entrepreneurs' fear of starting a venture that would not be a success or a business idea that might fail.

The definition of an SME differs from country to country and sector to sector. Sectors include agriculture, mining and quarrying, manufacturing, construction, retail and motor trade, e.t.c. The size of the enterprises (for this study, small and medium size) are differentiated by the number of full-time employees the enterprise has, and the enterprise's total annual turnover and total gross asset value (Department of Small Business Development, 2019). The focus of this study is on South African SMEs in the tourism sector. According to the amended schedule of the small enterprise definition, as outlined in the National Small Business Amendment Act No. 26 of 2003, SMEs in the tourism industry in South Africa (SA) constitutes as follows (Department of Small Business Development, 2019): Small enterprises are those that employ 11 to 50 full-time employees with the total annual turnover of not more than R15 million, while medium enterprises employ 51 to 250 full-time employees with the total annual turnover of not more than R40 million. The study further distinguishes a new business or venture as one that has been in operation for five or fewer years.

1.3 Research Problem

The existing literature mainly focuses on growth strategies of newly formed ventures and less attention is paid to enterprises that have been in operation for long, yet stagnant. Furthermore, Ma and Yang (2022) note that studies have put focus on large, well-established businesses as opposed to small and medium enterprises. There has been an emergence of a notable body of literature on entrepreneurial bricolage in recent years. While studies have focused on newly formed or early-stage ventures and start-ups, the impact of entrepreneurial bricolage on established firms still needs to be established. In addition, studies around entrepreneurship have focused on scaling up of start-ups and social enterprises rather than established ventures or other types of entrepreneurs. The association of entrepreneurial bricolage with the growth of an enterprise has been established, however, there is still a gap in exploring its impact on scaling up a business.

Furthermore, whilst fear of failure is identified as a factor negatively affecting the entrepreneurial intentions of nascent entrepreneurs, the role that it plays in the decision-making process of entrepreneurs that are already in business and already exploiting opportunities, still needs to be understood. Existing literature explores the fear of failure hypothetically whereby participants are not practising entrepreneurship or are aspiring entrepreneurs and are asked to visualise how they may react in an event of failure

(Cacciotti et al., 2020). This method fails to capture the actual experience of those who are already running enterprises within the performative context of entrepreneurship. As a result, there is a knowledge gap in entrepreneurship literature, in terms of understanding the role of fear of failure within the specific performative context of entrepreneurship. Cacciotti et al. (2020) opine that fear of failure can affect practising entrepreneurs at any stage of the business. In addition, Bushe (2019) mentions that “40% of all new businesses in SA fail in their first year – Existence Phase, while 60% in the second year – Survival Phase and 90% within the first 10 years from inception – Success Phase” (p. 9). It can be argued that a business that is older than five years is no longer in its initial stage of business and is not considered a start-up or a new business. The failure rate in the first ten years is quite high and it is therefore important to establish if the bricolage concept can aid in the business success i.e., scaling up of enterprises that are in the success phase.

Entrepreneurial bricolage can be an instrument for continuous innovation (Hernández-Barahona et al., 2022). Similarly, entrepreneurial bricolage increases creativity in creating opportunities (Yu et al., 2020). It can, therefore, be added that entrepreneurial bricolage allows the firm to have innovation capability, which in turn allows small firms to have a competitive advantage when competing with larger, resource-rich players (Saunila, 2020). Additionally, amongst several other firm capabilities, the study puts focus on operations, marketing, R&D and innovations capabilities as they cover the knowledge of critical business functions that address the development of knowledge, innovation, external market conditions, and supply chain management (Mishra et al., 2022). Past research on firm capabilities (marketing, R&D, operations and innovation) has focused mainly on its effects on firm performance (operational and financial), its impact on business scaling up and scaling out is not well researched.

What this study seeks to establish is if entrepreneurial bricolage has an impact in, for example, a small guest lodge trying to expand and replicate its business idea or service offering to different geographic locations or in having chain establishments like those of Marriott International, Hilton Hotels, InterContinental Hotel Group e.t.c. In summation, the impact of entrepreneurial bricolage and firm capabilities on the scaling of well-established enterprises is yet to be established. The study further proposes to conceptualise fear of failure as a moderator in the sense that founders or owners of SMEs who possess

entrepreneurial bricolage behaviours, and have the core firm capabilities but fear failing, are likely to not franchise or expand their business to other geographic locations.

As one of the highly labour-intensive industries in SA, the tourism industry has been identified as a key contributor to the economic growth and development of the country, which could aid with the challenge of unemployment that SA is facing (Department of Tourism, 2021). It is thus critical that the small and medium businesses in the tourism sector grow and expand across the country. It is for this reason that the researcher has chosen to focus on the tourism industry. For the purposes of this study, the SMEs in the tourism industry refer to small and medium businesses that offer any kind of guest accommodation i.e., hotels, guest houses, guest lodges, motels, bed and breakfast, and resorts across SA.

1.4 Purpose Statement

The objective of the study is to establish what impact entrepreneurial bricolage and core firm capabilities have in the scaling up and scaling out of established SMEs that operate in the tourism sector, in SA. Furthermore, the study seeks to explore the role that entrepreneurial fear of failure has on the relationship between enterprise scaling and entrepreneurial bricolage, as well as core firm capabilities.

The study intends to answer the following main research questions:

Research question 1: What is the impact of entrepreneurial bricolage in scaling up and scaling out of established South African SMEs in the tourism sector?

Research question 2: What is the impact of core firm capabilities in the scaling up and scaling out of established South African SMEs in the tourism sector?

Research question 3: How does fear of failure moderate the relationship between SME scaling and entrepreneurial bricolage?

1.5 Rationale for the Study

1.5.1 Business Rationale

SMEs have been found to be the primary drivers of economic growth that create jobs and alleviate poverty, in emerging or low-income countries (Maziriri & Chivandi, 2020). The South African tourism sector has been identified as a key contributor to the economic growth and development of SA which could aid in reducing the high unemployment rate that the country is facing (Department of Tourism, 2021). It is thus critical that the small and medium businesses in the tourism sector grow and expand across the country, in order to contribute to the economic and social prosperity of the nation. This study offers value in business as its findings can enrich small and medium business owners or managers with the knowledge of how they can leverage the entrepreneurial bricolage concept as a strategy to aid in scaling their businesses. The findings of the study will also assist business owners, founders or managers, by identifying which organisational capabilities are key to scaling a business, and how to best manage their organisation's available resources in order to gain a competitive advantage in scaling their businesses. In addition, through this study, business owners or founders can acquaint themselves with the understanding of the effects of fear of failure when they need to take strategic decisions such as expanding or scaling the business.

1.5.2 Academic Rationale

The study contributes to the academic body of knowledge by linking firm capabilities and enterprise scaling to the entrepreneurial bricolage theory (Yu & Wang, 2021); while studies on entrepreneurial bricolage have focused on start-ups and new ventures, the study looks at how established SMEs can make use of entrepreneurial bricolage concept. Additionally, the study contributes to developing the entrepreneurial literature by conceptualising entrepreneurial fear of failure and examining the moderating role played by fear of failure in the relationship between entrepreneurial bricolage and core firm capabilities on enterprise scaling. Cacciotti et al. (2016) posit that fear of failure as a construct has been defined and measured in many different ways that are characterised by a "static approach" (p. 303), thus limiting its association with entrepreneurship. This study expands the understanding of the entrepreneurial fear of failure within the advanced entrepreneurial stages, as opposed to the nascent stage.

1.6 Research Scope

The scope of this study included analysing the role that entrepreneurial bricolage play in the scaling of SMEs. The scope was limited to the decision-making individuals being the entrepreneurs who own and run formally registered SMEs specifically guest accommodation establishments, within all the provinces within SA. The scope was limited to the tourism industry as it has been identified as a key contributor to the economic growth and development of the SA (Department of Tourism, 2021).

1.7 Structure of the Research Report

There are seven chapters in this research report, the remaining six chapters are presented as follows:

Chapter 2: Literature Review - This chapter reviews existing literature on the role of entrepreneurial bricolage in SME scaling. In addition, the theory that underpins the study to build the hypotheses to be tested is presented.

Chapter 3: Research Hypotheses – This chapter presents the hypotheses to be tested.

Chapter 4: Research Methodology - This chapter describes the methodology that was adopted for the study.

Chapter 5: Research Results – The results of the study are presented in this chapter.

Chapter 6: Discussion of the Results – In this chapter, the results of the study are discussed based on the problem statement in Chapter 1, the literature review in Chapter 2, and the hypotheses as described in Chapter 3.

Chapter 7: Conclusions and Recommendation - This chapter highlights the main findings of the study, links the results to the literature and draws conclusions accordingly, the limitations of the study and gives recommendations for future research.

1.8 Conclusion

This chapter discussed the background of the research study, the research problem and the objectives of the study. It further highlighted the business and academic needs of the study. The following chapter reviews the theory and literature based on the constructs that were identified for the study.

CHAPTER 2

THEORY AND LITERATURE REVIEW

2.1 Introduction

The primary objective of this research study is to provide insights into the impact of entrepreneurial bricolage and core firm capabilities on the scaling of SMEs. The academic literature conducted in this chapter reviewed prior studies done on entrepreneurial bricolage, core firm capabilities and enterprise scaling as the main constructs of the study. There have been extensive business and theoretical studies conducted in the field of entrepreneurship to develop an adequate understanding around entrepreneurial bricolage and the capabilities that enables the growth of enterprises.

This chapter begins by defining and providing the recent findings and insights into the literature around the developed constructs (i.e., entrepreneurial bricolage, core firm capabilities, enterprise scaling and entrepreneurial fear of failure) in order to support the arguments and create the rationale for the study. This is followed by a review of academic literature on entrepreneurial fear of failure and how it moderates the relationship between SME scaling and entrepreneurial bricolage as well as the core firm capabilities. The study has drawn from the resource orchestration theory as a grounding theory to develop a conceptual model. The literature explores this theory in the context of how SMEs allocate and utilise their limited resources to create firm capabilities that give their organisations a competitive advantage. The developed constructs based on the highlighted literature review findings are then drawn to build arguments that develop pertinent hypotheses.

2.2 Entrepreneurial Bricolage

2.2.1 *Defining Entrepreneurial Bricolage*

The idea of bricolage emerged through the French anthropologist Claude Levi-Strauss' work as a notion of "making do with whatever is at hand" (Levi-Strauss, 1966). Levi-Strauss was a pioneer who sorts to differentiate the bricoleur from the engineer who carries out a task strategically with the intention to solve a particular issue optimally (Tsilika et al., 2020). A study by Baker and Nelson (2005) revealed how resource-constrained

firms were able to provide distinctive services by repurposing available materials for novel uses that tested institutional boundaries (Baker & Nelson, 2005). That is when Baker and Nelson (2005) re-developed the Claude Levi-Strauss' bricolage concept to entrepreneurial bricolage. They defined entrepreneurial bricolage as "making do by applying combinations of the resources at hand to new problems and opportunities" (Baker & Nelson, 2005, p. 333). Yu et al. (2020) in agreement, described entrepreneurial bricolage as a strategic decision to rearrange available resources when firms are faced with new challenges and opportunities (Yu et al., 2020). De Klerk (2015) defined bricolage as something that is readily accessible at a given moment and can be used to access various abilities and resources when needed to produce something that would not otherwise be achievable. In addition, entrepreneurial bricolage is composed of three elements: a) making do, which involves leaning towards action and active involvement with the issue of whether a viable end result can be generated from what is at hand; b) integrating and repurposing resources for uses other than those for which they were created or used originally; c) utilising available resources rather than looking for new ones (Yu et al., 2019). The available resources mentioned in the third element involve utilising both resources that already exist and resources that can be obtained at a very low cost or for nothing (Guo et al., 2016).

Entrepreneurial bricolage has emerged as one of the key theories in entrepreneurship literature that is used to understand the behaviours of entrepreneurs when faced with resource constraints (Kickul et al., 2018). It is a resource-application strategy that enables emerging businesses to survive and thrive (Fu et al., 2020). In their recent study, Fu et al. (2020) mentioned that the bricolage theory was introduced into the entrepreneurship field with the aim to overcome the resource problem faced by entrepreneurs and looking at the problem from a different perspective. Hernández-Barahona et al. (2022) refer to entrepreneurial bricolage as a way individuals or firms use a resilient mindset to accomplish their goals and overcome any challenges they might encounter.

2.2.2 Recent Findings on Entrepreneurial Bricolage

Literature on entrepreneurship has identified that entrepreneurial bricolage is a mechanism that can be used as an approach to overcome the negative effects of resource constraints on new venture growth. Recent studies (Fu et al., 2020; Yu et al., 2020; Yu & Wang, 2021) found that entrepreneurial bricolage is positively related to growth

performance, new venture growth and improved growth capability. A research study by Ma and Yang (2022) found that entrepreneurial bricolage plays a mediating role where entrepreneurial orientation significantly promotes new venture performance. Drawing from the findings of the study by Sivathanu and Pillai (2019), there is a positive relationship between entrepreneurial orientation and entrepreneurial bricolage. It has been established, through a recent case study research of four Spanish companies that bricolage can be an instrument for continuous innovation (Hernández-Barahona et al., 2022). Similarly, entrepreneurial bricolage has been found to increase creativity in creating opportunities, and an opportunity has value when the methods and purposes are rearranged (Yu et al., 2020). Entrepreneurial managers of new ventures can utilise entrepreneurial bricolage as a tactic to resolve resource limitations and therefore improve firm capabilities (Yu & Wang, 2021).

In contrast, Baker and Nelson (2005) highlight that entrepreneurial bricolage affects organisational performance in both positive and negative ways. While a substantial amount of literature has shown that entrepreneurial bricolage is usually beneficial as a mechanism to overcome resource constraints in new firms, others have shown the negative impacts of bricolage (Steffens et al., 2022). They cite these negative impacts as “intertwined, second-best solutions and tinkering trap which combined lead to accumulation of compromises that may result in a detrimental path dependence” (Steffens et al., 2022). They further suggest that bricolage can foster competition between only those businesses aiming to expand and prosper (Steffens et al., 2022).

2.3 SME Scaling

Although it applies to any venture or business, the scaling of enterprises has largely been studied around social enterprise literature. Palomares-Aguirre et al. (2018) identify a lack of scalability as a fundamental problem for long-term business concepts. There are two primary purposes that literature considers why scaling is essential for businesses: first, the magnitude of the need to be met or serviced, and second, the required economies of scale to attain long-term financial stability (Bocken et al., 2016). As primary drivers of economic growth and job creation, it makes it crucial for SMEs to expand and scale their businesses.

2.3.1 Defining Enterprise Scaling

Khare and Joshi (2018) argue that the definition of scaling can vary, depending on the field of research. To illustrate, O'Reilly and Binns (2019) describe business scaling as where available assets and capabilities are reallocated to assist in the growth of a new firm. In social enterprise studies, scalability is defined as the capacity of a social enterprise to expand the beneficiaries of a particular program while sustaining economic growth to ascertain continuity (Palomares-Aguirre et al., 2018). In the entrepreneurship literature, scaling can relate to organisational or financial growth; it can also refer to franchising or replication and expansion to increase reach to customers, in the marketing literature (Khare & Joshi, 2018). Dobson et al. (2018) on the other hand, refer to scalability in business as an idea that can be grown, replicated, adapted or franchised. Scaling is further defined as a strategy to make adjustments to particular components or the entire business concept when distribution channels are constantly integrated in order to increase income, address more clients' issues, or target new consumer segments (Becker et al., 2020).

Kohler (2018) makes a distinction between the growth and scaling of a business. He defines growth as adding resources at the same rate as adding revenue; while scaling is about adding revenue exponentially while only adding resources incrementally (Kohler, 2018). Islam (2020) further adds that due to the inconsistent use of multiple expanded terms such as scaling up, scaling out, scaling deep, scaling wide and scaling across; challenges associated with defining scalability are worsened. Sandberg and Hultberg (2021) have also summed up scaling logistics as scaling up, scaling out and scaling deep.

a) Scaling up

Sandberg and Hultberg (2021) refer to scaling up as franchising, while Hartmann and Linn (2008) term scaling up as extending, adapting and maintaining effective policies, initiatives or services in various areas to reach a larger population. The essential characteristics of scaling up are attributed to "the importance of the academic background, budgetary control, negative entrepreneurial experiences, building teams, geographical expansion and first critical experience" (Sanchez, 2022, Research findings section). An SME that has scaled up is one that has grown in terms of the increased number of employees in two years and has had at least a ten per cent growth in sales (Daño-Luna & Caliso, 2019). Scaling up also involves changing policy and institutional processes that encourage change in business practices (Butler et al., 2020).

b) Scaling out

Adding to the inconsistent use of multiple scaling terms that are highlighted by Islam (2020), scaling up and scaling out have been used interchangeably to describe the same concept. Scaling out is defined as offering more services more efficiently, expeditiously and sustainably to more customers across larger geographic locations (Butler et al., 2020). Scaling out means replicating or expanding geographically to reach out to a larger number of customers (Islam, 2020; Sandberg & Hultberg, 2021). Sandberg and Hultberg (2021) further mention that scaling out is used to describe operations that aim to expand an organisation's geographic reach and revenue. Adding to the inconsistent use of multiple expanded scaling terms as highlighted by Islam (2020), scaling up and scaling out have been used interchangeably to describe the same concept.

c) Scaling deep

Scaling deep is often referred to in the context of social impact. It involves changing principles and cultural traits in society by addressing the core causes of issues (Moore et al., 2015; Sandberg & Hultberg, 2021). Scaling deep refers to putting emphasis on servicing more customers and improving the outcomes of organisational processes (Dobson et al., 2018). Scaling deep is only when the hearts and minds of people, values and cultural norms, and the calibre of their relationships are improved can lasting change be achieved (Moore et al., 2015). Islam (2020) refers to scaling deep as a strategy centred around enhancing and strengthening existing operations to increase the impact on customers.

2.3.2 Recent Findings on Enterprise Scaling

Growing the organisation's size by extending to other locations is the most commonly used scaling technique (Dobson et al., 2018). Palomares-Aguirre et al. (2018) mention the organisational capabilities that stimulate scaling, as identified by Bloom and Chatterji (2009): staffing, communications, alliance building, lobbying, earnings generation, replication, and stimulating market force, commonly known as the SCALERS model. Lyon and Fernandez (2012) identify various strategies for scaling up enterprise operations; these include diversification and franchising. They further mention that for each of these strategies to be successful, various types of organisational competencies and capabilities are required (Lyon & Fernandez, 2012).

The lack of capabilities has been cited as one of the obstacles to scaling (Kayser & Budinich, 2015). On the other hand, Harnish (2014) has identified leadership, scalable infrastructure and market dynamics as barriers to scaling up. He further elaborates these barriers as follows: a) the leadership's failure to develop sufficient leaders with foresight skills across the organisation; b) the absence of physical and organisational practices and processes to deal with communication and decision-making challenges that arise with growth; and c) failing to handle the growing and declining margins brought on by increased competition while scaling the business (Harnish, 2014). Whilst it is largely found that scaling up a business usually results in beneficial and positive change in business, Zhao and Han (2020) however highlight that there are some conflicts and dangers that are largely neglected during the scaling process.

2.3.3 SME Scaling and Entrepreneurial Bricolage

Wadhwa et al. (2017) in their study posit that SMEs often operate under resource constraints when compared to large established corporations. Access to finance, infrastructure, the regulatory environment, and market-related constraints have been cited as some of the resource constraints that SMEs are faced (Rehman et al., 2019). These constraints can act as barriers to growth and make it difficult for SMEs to scale out and scale up their businesses. However, entrepreneurial bricolage has been found to be a strategy that can be utilised to overcome resource constraints in new firms (Baker & Nelson, 2005).

Kohler (2018) has described scaling as adding revenue exponentially while only adding resources incrementally. Rehman et al. (2019) argue that financial resources, overly restrictive regulatory environments, technological, managerial and entrepreneurial skills, and particular infrastructures such as roads, electricity and telecommunications, affect the success of SMEs as these resources allow them to expand their businesses. Drawing from the bricolage concept: when owners of SMEs get actively involved and focus on the given problem and look at finding a viable solution from the resources at hand; combine and reuse their resources for new purposes for which they were originally intended or used for; and utilise resources that are already available rather than seeking new ones (Yu et al., 2019) will allow them to scale out and scale up their businesses. By adopting an entrepreneurial bricolage behaviour, these constraints can be overcome and SMEs can experience growth performance, new venture growth and improved growth capability

(Fu et al., 2020; Ma & Yang, 2022; Yu et al., 2020; Yu & Wang, 2021) that enables business scaling out and scaling up.

2.4 Core Firm Capabilities

Firm capabilities have been studied to a great extent from the perspective of performance. A capability is a capacity to carry out activities using resources to achieve a goal and to build and expand its resource base (Song & Morgan, 2019). An organisation's capabilities on the hand refer to the various sophisticated collections of knowledge and skills that allow the organisation to apply a combination of its available resources in order to outperform its competitors (Feng et al., 2017; Tho, 2018). Pucci et al. (2017) refer to these capabilities as distinct, different from ordinary resources, and whose function is to increase the potential and productivity of the resources that are available in the firm, therefore increasing profitability.

Putting the focus on the tourism sector, according to Fu et al. (2020), many hospitality and tourism ventures are family businesses. This already categorises these ventures as small businesses, putting them in a more vulnerable position of facing a lack of resources, capabilities, and experience, to scale their businesses, thereby growing the tourism industry (Fu et al., 2020). These firms are normally managed by the founder or owner who plays multiple roles in the firm i.e., administration, human resources, marketing, operations, innovation, R&D roles e.t.c., without necessarily being skilled in these roles.

Firm capabilities have been categorised according to their various functional areas i.e., operating capabilities, marketing capabilities and IT capabilities (Song and Morgan, 2019). Marketing, R&D, operations and innovativeness capabilities have been found to be the core firm capabilities that contribute to the firm's ability to create value for its customers, therefore, gaining a competitive edge (Feng et al., 2017; Pucci et al., 2017). A study by Pucci et al. (2017) further found that these firm capabilities have a positive influence on firm performance.

a) Marketing capabilities

Marketing capabilities are described as processes in which an organisation utilise its available resources to define, communicate and deliver value to its segment of customers better than its competitors (Feng et al., 2017). Song and Morgan (2019) define marketing

capabilities as an organisation's capacity to create its sales force, cement its marketing channel, and carry out promotional operations. Marketing capabilities are characterised by two essential components: a) acquiring superior customer understanding, and b) capitalising on that understanding to produce superior customer results (Mishra et al., 2022). These capabilities are seen as tools to help organisations succeed financially and to dominate the market (Medase & Barasa, 2019). Marketing capabilities rely on the strategic direction of the firm and the available resources to execute its research and development and market penetration (Davicik et al., 2021). They further posit that the performance of the entire firm as well as its capacity to create novel and competitive products is adversely affected by the lack of a well-defined market strategy (Davicik et al., 2021). A study by Medase and Barasa (2019) found that marketing capabilities have a positive relationship with innovation performance. Additionally, a study by Joensuu-Salo et al. (2018) found that marketing capability has a positive impact on firm performance.

b) R&D capabilities

The functions and impacts of R&D are a well-developed subject in management research. R&D is regarded as a fundamental business activity and a significant driver of innovation thus for businesses to obtain sustainable competitiveness, they need to innovate through ongoing R&D initiatives (Kim & Choi, 2020). R&D capability can be described as the organisation's ability to develop meaningful technological knowledge for innovating products and processes better than its competitors using resources at its disposal (Feng et al., 2017). Krasnikov and Jayachandran (2008) refer to R&D capabilities as the organisation's capacity to turn R&D spending into new technical skills that can be coupled with already-known skills to generate novel products and operations. The main purpose of an organisation's R&D capabilities is to integrate current knowledge in unique ways to produce new, more sophisticated expertise or inventions (Paruchuri & Eisenman, 2012). Kwon et al. (2022) in their quantitative study found that R&D capability is significantly and positively associated with a firm's performance. Mishra et al. (2022) argue that considering how crucial innovations are in gaining competitiveness, firms with high R&D capabilities would have the ability and be better positioned to manage the demand and supply implications of economic policy uncertainty.

c) *Operations capabilities*

Operations capability can be described as the organisation's ability to utilise its available resources to offer products and services efficiently at a standard better than that of its competitors (Feng et al., 2017). Mishra et al. (2022) further illustrate operations capability as the ability of a firm to shift as the market needs dictate and to improve production methods to increase resource effectiveness. Operations capabilities drive efficiency which allows organisations to achieve excellence in their everyday business operations (Kwon et al., 2022). According to Song and Morgan (2019), an organisation having operations capabilities is one that has the capacity to outperform competitors in terms of cost, quality, delivery and flexibility.

Mishra et al. (2022) submit that strong operations capabilities would enable businesses to respond quickly and effectively to changes in demand and supply brought on by uncertain economic policies and create value by improving their ability to satisfy the needs of customers by managing high costs. A study by Hirunyawipada and Xiong (2018) found that superior *marketing* and *operational* capabilities positively impact both short and long-term firm performance. Similarly, the findings of the study by Song and Liao (2018) are that *operations* capabilities have a positive impact on firm performance. From a dynamic capabilities perspective, *operations* and *R&D* capabilities are those which are essential components in an organisation achieving a sustainable competitive advantage (Kwon et al., 2022).

d) *Innovativeness capabilities*

Innovation is one of the essential elements of business competitiveness. Saunila (2020) illustrates the increase in the number of published studies between the years 2013 and 2018, particularly reviews of innovation capability in an SME context. Innovativeness capability is described as the firm's ability to create and implement new ideas, products and processes that set it apart from its competitors, therefore, gaining a competitive advantage (Tho, 2018). It has been concluded that innovation capability is essential for businesses as it enables them to respond to market demands and changes in an agile way (Maldonado-Guzmán et al., 2018). In a systematic review of the literature, for an organisation to survive, depends on its ability to innovate and its innovation capabilities are to enhance innovation performance (Yao et al. (2020). A quantitative study by

Maldonado-Guzmán et al. (2018) found that innovation in products, processes, marketing and management positively and significantly impacts the financial performance of SMEs.

2.4.1 SME Scaling and Core Firm Capabilities

Kayser and Budinich (2015) have cited a lack of firm capabilities as one of the obstacles to scaling up a business. Previous studies have found that core firm capabilities impact firm performance positively as follows:

Marketing capabilities: Joensuu-Salo et al. (2018) found that marketing capability has a positive impact on firm performance.

Innovativeness capabilities: A study by Tho (2018) found that both marketing and innovativeness capabilities are positively related to firm performance.

R&D capabilities: Kwon et al. (2022) in their quantitative study found that R&D capability is significantly and positively associated with a firm's performance.

Feng et al. (2017) found that both marketing and R&D capabilities have a positive effect on both revenue and profit growth.

Operations capabilities: Song and Liao (2018) found that *operations* capabilities have a positive impact on firm performance.

Falahat et al. (2018) specify the four types of firm performances as a) "perceived financial performance, b) perceived non-financial performance, c) perceived business growth and d) perceived performance relative to its competitors" (p. 1). It is thus anticipated that the positive impact of core firm capabilities on the performance of SMEs will drive business growth thereby enabling these SMEs to scale out and scale up their businesses. Furthermore, based on the findings of studies by (Feng et al., 2017; Pucci et al., 2017; Tho, 2018), it can be deduced that a firm having marketing, R&D, operations and innovativeness capabilities; will have increased performance, a competitive advantage, will be profitable, and therefore have high growth prospects. It is, therefore, expected that based on the increased firm performance and growth due to having these capabilities,

SMEs can scale up and scale out their operations and expand their businesses to reach a larger number of customers.

2.5 Entrepreneurial Fear of Failure

2.5.1 Conceptualising Fear of Failure

Fear of failure is still a developing theory within entrepreneurship and scholars have mostly conceptualised it as having a negative effect on the entrepreneurial context. Ng and Jenkins (2018) explain that in an achievement setting, fear of failure presents itself as an avoidance mechanism that is based on expecting or anticipating negative results. As a nascent entrepreneur or one that is running a new business, fear of failure comes as a cognitive and emotional response to a frightening impediment (Engel et al., 2021). To an entrepreneur with a strong fear of failure, failing is a signal of a widespread inability and conveys the notion that one is undeserving of acknowledgement (Stroe et al., 2020). Kollmann et al. (2017) further state that fear of failure is responsible for individuals' avoidance reactions when facing obstacles in business. Irrespective of how ambitious a person is, they are discouraged from entrepreneurship by fear of failure; fewer people choose to be entrepreneurs when they fear failing (Morgan & Sisak, 2016). Fear of failure has been identified as one of the factors negatively affecting the entrepreneurial intentions of non-entrepreneurs, or emerging entrepreneurs rather than established entrepreneurs or those who have been in business and exploiting opportunities already (Cacciotti et al., 2020).

In contrast, Hunter et al. (2021) have found that with the involvement of the entrepreneur's coping mechanism, fear of failure can be motivating, on condition that the entrepreneur is confident in their capability to handle it. Additionally, it has been found that fear of failure may drive highly ambitious entrepreneurs to make more concessions for their business, therefore a high fear of failure will result in increased investment in the business (Morgan & Sisak, 2016). A study by Dutta and Sobel (2021) found that increased economic opportunity and freedom significantly reduce the adverse effects of entrepreneurial fear of failure; thus when economic opportunity and freedom are high the effect of fear of failure is insignificant.

2.5.2 The moderating effects of Entrepreneurial Fear of Failure

This study submits that entrepreneurs can leverage bricolage to lower resource constraints as a result have sufficient resources to enable the replication and expansion of their businesses. A study by Pucci et al. (2017) found that core firm capabilities (i.e., marketing, R&D, operations and innovative capabilities) have a positive influence on firm performance. It is also argued that these capabilities increase the potential and productivity of the resources that are available in the firm, therefore increasing profitability. From the above, firms making use of the bricolage concept can result in growth opportunities; and firms having the above core firm capabilities can have increased performance, competitive advantage, increased resource productivity, and increased profitability. All of these make it possible for firms to replicate and expand their businesses geographically to increase their customer base or reach. However, even if entrepreneurs have all these in place, the fear of the expansion or other scaling logistics not succeeding can discourage the idea.

Entrepreneurs can acquire economic freedom from the financial performance brought by their firms' performance. The firm performance would be positively impacted by having core firm capabilities and growth performance due to entrepreneurial bricolage behaviour. Fear of failure has, therefore, a higher negative impact in environments where there is a lack of economic freedom and opportunity (Dutta & Sobel, 2021).

2.6 Theoretical Framework

2.6.1 Resource Orchestrating Theory

Palomares-Aguirre et al. (2018) identify a lack of scalability as a fundamental problem for long-term business concepts. They also mention the organisational capabilities that stimulate scaling, as identified by Bloom and Chatterji (2009): staffing, communications, alliance building, lobbying, earnings generation, replication, and stimulating market force, commonly known as the SCALERS model (Palomares-Aguirre et al., 2018). The study draws upon the resource orchestration theory which highlights the managers' function in allocating resources across the organisation (Yu & Wang, 2021). When compared to large established organisations, SMEs are said to suffer from a scarcity of resources (Wadhwa et al., 2017). Recent studies by (Tsilika et al., 2020; Yu et al., 2020; Yu & Wang, 2021)

mention that entrepreneurial bricolage is a mechanism that can be used as a tactic to mitigate the negative effects of resource constraints on new venture growth. Entrepreneurial bricolage relies on the available resources rather than sourcing new resources, which enables the organisation to overcome the challenge of resource constraints (Yu & Wang, 2021). A firm's performance cannot be fully understood by solely looking at its resource base, the orchestration of these resources is essential in enabling processes to build and leverage capabilities (Baert et al., 2016). The essential factor is how managers structure an organisation's portfolio of resources and combine them to create capabilities that will give their organisation a competitive advantage (Burin et al., 2020). According to the resource orchestration theory, organizations can only fully utilise the potential of their resources and capabilities when they are used in tandem (Asiaei et al., 2021). Resource orchestration involves making the most of current activities while pursuing new opportunities, whereas it is challenging to allocate limited to no resources among activities (Baert et al., 2016). Addressing resource scarcity can be done by adopting an entrepreneurial bricolage behaviour, therefore, resource orchestration can aid entrepreneurs in linking the available resource base their action in arranging these resources and capabilities thus leading to superior enterprise performance and competitive advantage. SME owners or founders can leverage this resource orchestration method to combine their resources and reallocate them to create the firm capabilities that will enable the scaling of their businesses.

2.7 Conclusion

This chapter reviewed the literature on the recent studies done around entrepreneurial bricolage, enterprise scaling and entrepreneurial fear of failure. The study was underpinned by the resource orchestration and entrepreneurial bricolage theories and are used to develop the conceptual model. Past studies around the four main constructs were reviewed, which led to the development of the hypotheses.

Literature has demonstrated that SMEs can leverage entrepreneurial bricolage as a tactic to mitigate their resource constraints, therefore, scaling up and scaling out their businesses. It is also evident that core firm capabilities are essential and catalysts in the performance of a firm thus leading to a firm having a competitive advantage.

CHAPTER 3

RESEARCH HYPOTHESES

3.1 Introduction

The objective of this research study is to provide insights into the impact of entrepreneurial bricolage and core firm capabilities on the scaling of SMEs. Based on the research problem and the identified gaps in literature posed in Chapter 1 and the literature review conducted in Chapter 2, the hypotheses as depicted in Figure 1 were developed.

3.2 Conceptual Framework Development

A conceptual framework that was used for the study on the identified constructs serving as a basis for understanding the impact of entrepreneurial bricolage and core firm capabilities on the scaling of SMEs, is presented in Figure 1 below. The framework also displays the moderating role that entrepreneurial fear of failure plays in the relationship between SME scaling and entrepreneurial bricolage as well as core firm capabilities. Resource orchestration and entrepreneurial bricolage theories underpin the study and were used to develop the conceptual model.

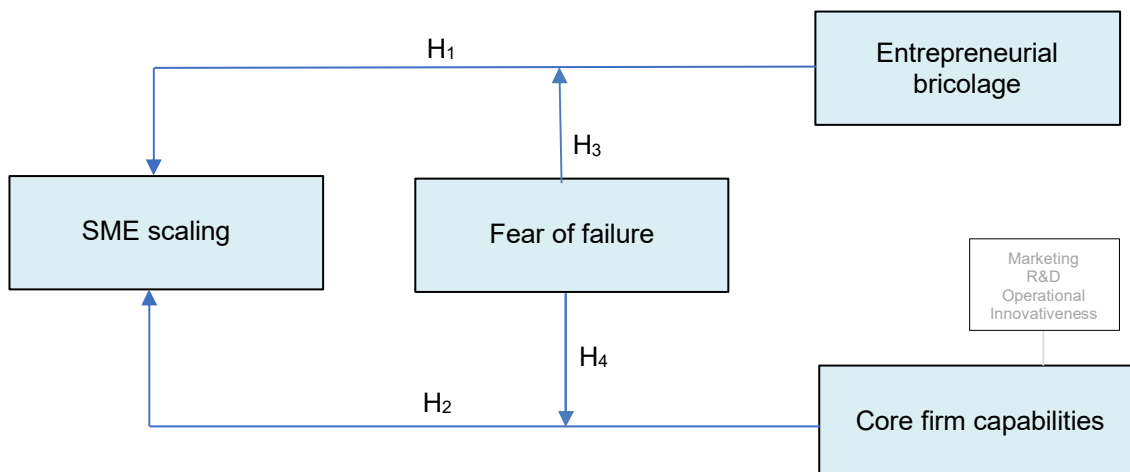


Figure 1: Conceptual framework for the study

3.3 Hypotheses

3.3.1 Hypothesis 1: There is a positive relationship between SME scaling and entrepreneurial bricolage

Academic literature including studies by Fu et al. (2020); Yu et al. (2020); and Yu and Wang (2021) has established the positive association of entrepreneurial bricolage with growth performance, improved growth capability and new venture growth. However, there is still a gap in exploring its impact on the scaling up of established businesses. Based on the literature review in Chapter 2, it is argued that SMEs can leverage entrepreneurial bricolage as a strategy to lower their resource constraints thus enabling the scaling up and scaling out of their business offerings. This hypothesis, therefore, seeks to test the relationship between entrepreneurial bricolage and SME scaling. It is therefore hypothesised as follows:

H₀ (1): There is no statistically significant positive correlation between SME scaling and entrepreneurial bricolage

H₁ (1): There is a statistically significant positive correlation between SME scaling and entrepreneurial bricolage

3.3.2 Hypothesis 2: There is a positive relationship between SME scaling and core firm capabilities

Studies by Feng et al. (2017); Pucci et al. (2017); and Tho (2018) found that firm capabilities have a positive influence on firm performance, revenue and profit growth. It is, therefore, argued that based on the increased firm performance, revenue and profit growth due to having these capabilities, SMEs can scale up and scale out their operations to expand their businesses and reach a larger number of customers. This hypothesis, therefore, aims to test the impact core firm capabilities have on the scaling of SMEs. It is thus hypothesised as follows:

H₀ (2): There is no statistically significant positive correlation between SME scaling and core firm capabilities

H₁ (2): There is a statistically significant positive correlation between SME scaling and core firm capabilities

3.3.3 Hypothesis 3: Entrepreneurial fear of failure negatively moderates the relationship between SME scaling and entrepreneurial bricolage

Studies by An et al. (2020); Fu et al. (2020); Ma & Yang (2022); Yu et al. (2020); Yu & Wang (2021) infer that SMEs can leverage entrepreneurial bricolage as a mechanism to mitigate their resource constraints so that they can scale up and scale out their businesses. This study seeks to conceptualise fear of failure as a moderator in the sense that founders or owners of SMEs who possess entrepreneurial bricolage behaviours but fear failing are likely to not franchise or expand their business to other geographic locations (scale up and scale out). It is argued that regardless of possessing entrepreneurial bricolage behaviour, the fear of an unsuccessful expansion or failure of any other scaling logistics can discourage the idea of pursuing to scale up or scale out an enterprise. Therefore, the impact of entrepreneurial bricolage on enterprise scaling will be moderated by fear of failure. It is thus hypothesised as follows:

H₀ (3): Entrepreneurial fear of failure does not moderate the relationship between SME scaling and entrepreneurial bricolage

H₁ (3): Entrepreneurial fear of failure moderates the relationship between SME scaling and entrepreneurial bricolage

3.3.4 Hypothesis 4: Entrepreneurial fear of failure negatively moderates the relationship between SME scaling and core firm capabilities

Core firm capabilities have been found to positively influence firm performance (Pucci et al., 2017; Tho, 2018). In addition, these capabilities have been found to have positive effects on revenue and profit growth (Feng et al., 2017). Based on the literature reviewed in Chapter 2, it is concluded that firms having core firm capabilities can have increased performance, competitive advantage, increased resource productivity, and increased profitability. All of these make it possible for firms to replicate and expand their businesses geographically to increase their customer base or reach. However, the enterprise owner or founder's fear of failing can act as a deterrent in leveraging these capabilities to scale

up their businesses. This hypothesis, therefore, aims to test the negative moderating impact of fear of failure towards the relationship between SME scaling and core firm capabilities. It is thus hypothesised as follows:

H₀ (4): Entrepreneurial fear of failure does not moderate the relationship between SME scaling and core firm capabilities

H₁ (4): Entrepreneurial fear of failure moderates the relationship between SME scaling and core firm capabilities

3.4 Conclusion

This chapter illustrated how the conceptual model for the study was developed as well as the research hypotheses. The following chapter outlines the methodological choice, the research methodology and the design that was used for the study.

CHAPTER 4

RESEARCH METHODOLOGY AND DESIGN

4.1 Introduction

This chapter outlines the research methodology that was employed in the study. It describes the rationale for the choice of the research design that was used to enable the answering of the research questions as well as to meet the research objectives that are outlined in the previous chapters (Saunders et al., 2016).

In addition to the research design, the methodological choice which entails the type of data that was collected and the collection methods that were used to collect that data (Edmondson & McManus, 2007); is also discussed. Further in this chapter, the research methodology addresses the selected samples' population, the unit of analysis and its size; the data gathering process including the tools that were used to collect the data and the data analysis techniques that were employed to analyse the data. Lastly, the chapter presents the quality controls that the researcher utilised to ensure the accuracy (validity) and consistency (reliability) of the study's measurement instrument, and the study's methodological limitations.

4.2 Methodology Choice

Bono and McNamara (2011) mention in their study that the primary principles of a good research design include matching the design to the research questions and constructs' definition matching operationalisation. It is important that the research design fit the research questions that it is trying to answer and also fits into the context of what the researcher wants to study (Köhler et al., 2017).

The purpose of the research design that was adopted for the study is descripto-explanatory. Descripto-explanatory studies seek to accurately describe individuals, events or situations and use that descriptive data to explain the relationship between the identified constructs (Saunders et al., 2016). The purpose of the study was to establish how SME owners or founders can overcome their resource constraints, and their decision-making behaviours in terms of expanding their businesses. Furthermore, the study aimed to

explore the impact of entrepreneurial bricolage and core firm capabilities on SME scaling; and how entrepreneurial fear of failure moderates the relationship between entrepreneurial bricolage and core firm capabilities on SME scaling. Given these elements, a descripto-explanatory design was seen as an appropriate design for the study as it describes the behaviour of individuals and the relationship between the constructs.

Saunders and Lewis (2018) refer to research philosophy as a ground for the nature and development of knowledge. Saunders et al. (2016) note the assumptions that always influence how the research is set: 1) ontological - realities encountered in the research, 2) epistemological – what constitutes knowledge, 3) axiological assumptions – the importance of values within the research (Saunders et al., 2016). Looking at the ontological and epistemological assumptions, the research study is quantitative in nature and used resource orchestration and entrepreneurial bricolage theories to develop the hypotheses. Quantitative methods are scientific, and their foundations can be determined by a positivist worldview (Rahi, 2017). In addition, the data collected was viewed as objective, and the identified constructs were not created from perceptions. This means that the research findings are likely to be considered objective and generalisable (Saunders & Lewis, 2018). Scientific research, according to positivism, should “be generalizable, focus on stable independent variables, have certain ontological assumptions, and use statistical or quantitative methods rather than qualitative methods” (Siponen & Tsohou, 2018, p. 600). From an axiology point of view, the researcher remained impartial and objective with the research and data (Saunders & Lewis, 2018). The study, therefore, aligned with a positivism research philosophy, as the constructs i.e., entrepreneurial bricolage, core firm capabilities, SME scaling, and entrepreneurial fear of failure were not created from perceptions and the data collected was viewed as objective.

Deduction, induction, or abduction are the three approaches to developing theory in scholarly research. (Saunders & Lewis, 2018). From the positivist point of view, the research study aimed to test the hypotheses on existing theories and create new knowledge by exploring the impact of entrepreneurial bricolage and core firm capabilities on SME scaling. This hypothesis-testing approach is deductive, as it tests relationships between previously developed constructs or variables (Edmondson & McManus, 2007). The study, therefore, adopted a deductive approach as an approach to theory development. The operationalisation of concepts, reductionism, and generalisation are the other elements of a deductive approach (Saunders et al., 2016). The research study

adapted validated questionnaires to operationalise the concepts thus enabling quantitative measuring of facts, reductionism through the size and age of the enterprise (as control variables), and generalisability through the number of SMEs surveyed. As already mentioned, the study adopted a positivist philosophy, it took a deductive approach and is quantitative in nature. The data for the study was collected through a single technique, through a questionnaire, thus a mono method quantitative as a methodological choice (Saunders et al., 2016). This method was deemed appropriate as the data collected through the questionnaire was sufficient to meet the study's objectives.

A research strategy is a process of data collection and interpretation with the aim to answer the research questions, test the hypotheses, and meet the research objectives (Rahi, 2017). Saunders and Lewis (2018) state that the positivist philosophy uses quantifiable data that are analysed statistically, and highly structured methodologies such as questionnaires in order to aid in data duplication. A survey is a strategy that is related to a deductive approach as it allows the collection of quantitative data that can be analysed using descriptive and inferential statistics. Edmondson and McManus (2007) add that a quantitative survey is appropriate for collecting data for well-understood constructs, and the constructs that were identified for this study were well-understood. Therefore, the study used a survey research strategy through a questionnaire, to collect data. The questionnaire was structured and self-administered by respondents through an online link.

Now that the type of data collected and the collection methods have been described, it is important to highlight the time frame in which the data was collected. The type of research questions is one way of determining the time horizon in which the collection of data takes place. Saunders et al. (2016) describe cross-sectional studies as those that which the data is obtained at a single point in time, while with longitudinal studies the data is obtained over a period, allowing researchers to note changes as they occur. Edmondson and McManus (2007) add that a cross-sectional design is appropriate for collecting quantitative survey data for well-understood constructs. The issue with cross-sectional data is that it cannot establish change or causal associations between variables (Bono & McNamara, 2011). Longitudinal studies, however, track changes over a longer period ensuring that an effect is not just a once-off or temporary occurrence (Köhler et al., 2017). To study the impact of the relationship between the identified constructs, a longitudinal study would have been more fitting as the changes in decision-making behaviours of SME owners/founders would be noted over time, however, due to time constraints, a cross-

sectional study was employed.

4.3 Population

Saunders and Lewis (2018) define a population as a complete set of people, organisations, or places who are eligible to participate in a research study. This refers to any participants containing elements of what is to be studied. In an SME setting, strategic decisions such as the expansion or scaling of the business, and how the firm capabilities and resources are utilised, are normally taken by the highest decision-making individuals i.e., owners or founders of the enterprise. Since the research study aimed to investigate business decision-making behaviours; owners and founders of registered South African SMEs were identified as the relevant and target population. The owners and founders of SMEs were deemed relevant to the study as it is their decision-making behaviours that the study seeks to understand.

4.4 Unit of Analysis

The study sought to examine the strategic decision-making practices of the owner or founder of a business, and the impact of these on the enterprises' scaling logistics. The unit of analysis for the study was, therefore, the individuals being the founder or owner of a business in SA, running an established SME in the tourism sector. For the purpose of the study, the SMEs in the tourism sector refer to small and medium businesses that offer any kind of guest accommodation i.e., hotels, guest houses, guest lodges, motels, bed and breakfast establishments, and resorts across SA.

4.5 Sampling Method, Criteria and Size

According to Saunders and Lewis (2018), a sample is a sub-group of a whole population. It is typically used in cases where the researcher does not have access to the entire population owing to either time or financial constraints of the study (Saunders & Lewis, 2018). There are two main sampling methods in scholarly research; probability and non-probability sampling techniques. Probability sampling techniques are used when the researcher can obtain the whole list of the identified population's members; and conversely, non-probability sampling techniques are used when a complete list of the population cannot be obtained (Saunders & Lewis, 2018). The population that was identified for the study is the founder or owner of an SME in the tourism sector across SA.

This meant that the whole list of the population would be all the owners or founders of SMEs in the tourism industry across SA. Due to the large scale of the whole population, and the restricted time frame of the study, the researcher was not able to obtain the complete list of the population, and as a result, non-probability sampling was utilised (Saunders & Lewis, 2018).

Quota, purposive, volunteer, and convenience sampling are identified as the types of non-probability sampling techniques (Saunders & Lewis, 2018). Non-probability purposive sampling technique was adopted for the study, as the technique allows the researcher to intentionally select the appropriate and relevant individuals that are best fitted to assist in answering the research questions and meet the research objectives (Saunders & Lewis, 2018). Since the study targeted South African SME owners or founders in the tourism industry, any other samples that fell out of this specific category were deemed irrelevant to the study. The researcher collected the data based on relevance, from the population that is specific to the purpose of the study; individuals who make business decisions that impact the strategic direction of these enterprises, thus purposive sampling.

Due to the Protection of Personal Information Act (POPIA) 4 of 2013, it was challenging to obtain the contact details of the potential respondents directly from the databases of Tourism Associations, Tourism Authorities and organisations such as the Tourism Grading Council of South Africa (TGCSA) and Federated Hospitality Association of South Africa (FEDHASA). However, several Tourism Associations from several provinces eventually shared their databases. The samples were obtained through the databases of provincial Tourism Associations of four provinces in SA (North West, Gauteng, Limpopo and Western Cape), which consisted of over 800 potential respondents. In addition, contact details of establishments were acquired from internet searches, websites and social media platforms of different enterprises, and through professional and personal networks available to the researcher. Furthermore, the population was physically accessed at the Tourism Leadership Conference that was held from the 14th to 16th of September in Sun City, whereby over 100 owners were reached.

Köhler et al. (2017) stress the importance of appropriate sample size in a research study. They point out the negative effects it has on the level of significance of the statistical analyses. Previous quantitative studies on entrepreneurial bricolage had 305 (An et al., 2020), 369 (Digan et al., 2019), 345 (Fu et al., 2020), 113 (Kickul et al., 2018), 274 (Ma &

Yang, 2022), 354 (Yu et al., 2020), and 207 (Yu & Wang, 2021) as the numbers of their samples. Similar quantitative studies that were done on firm capabilities used 612 (Feng et al., 2017), 411 (Pucci et al., 2017) and 311 (Tho, 2018) samples. Due to the limited time of the study, the researcher aimed for a sample size of between 120 and 150.

The survey questionnaire received a total of 131 responses which was within the targeted 120 to 150. Of the 131 respondents, one respondent chose the option of not agreeing to participate in the survey and 12 respondents were discarded due to missing data; missing data is expanded in section 4.8.2. Therefore, only 118 valid responses were used for the data analysis.

4.6 Measurement Instrument

As already mentioned in section 4.2, the study adopted a survey research strategy, thus the survey data was used to test the hypotheses. A structured, self-administered online questionnaire was used as a type of survey instrument (see Appendix C). Questionnaires are deemed suitable for collecting data from a large number of respondents, uniformly and systematically (Saunders & Lewis, 2018). The survey questionnaire was developed using the scales and measures adapted from previous studies that have studied the same constructs. Google Forms was used to generate the questionnaire, and an online link was circulated to the respondents through email and social media platforms (i.e., Facebook, LinkedIn, Telegram and WhatsApp).

Likert scales were used to measure the responses. The study aimed at assessing the decision behaviours of entrepreneurs and the Likert scale is most appropriate for measuring human attitude or an individual's inclination towards an object, person, event or phenomenon (Joshi et al., 2015; Taherdoost, 2019). Similar studies done on the identified constructs have for their measuring instruments, utilised either a five-point Likert scale (An et al., 2020; Fu et al., 2020; Ma & Yang, 2022; Ng & Jenkins, 2018; Pucci et al., 2017) or a seven-point Likert scale (Cacciotti et al., 2020; Kickul et al., 2018; Tho, 2018; Yu et al., 2019; Yu et al., 2020; Yu & Wang, 2021). The Likert scale is easy to create and is likely to yield a highly dependable scale (Taherdoost, 2019). The study adopted a five-point Likert scale; however, Cacciotti et al. (2020) recommend the use of a seven-point or nine-point scale to avoid range restrictions in measuring entrepreneurial fear of failure. Therefore, for the entrepreneurial fear of failure construct specifically, a seven-point Likert

scale was adopted, and the rest of the other constructs were measured using a five-point scale. For the five-point scale, the respondents were asked to express the extent to which they agree or disagree with the statements (Taherdoost, 2019). Simms et al. (2019) provide the Likert response labels as follows:

Table 1: Five-point Likert scale

Strongly disagree	Disagree	Uncertain	Agree	Strongly disagree
1	2	3	4	5

Source: Adapted from Simms et al. (2019)

Cacciotti et al. (2020) further recommend, for measuring entrepreneurial fear of failure, “not at all afraid” to “very much afraid” type of anchor in order to avoid problems that come with question formats that are agreement-based (Cacciotti, et al., 2020). Therefore, the respondents were asked to express the extent to which they have been feeling afraid in terms of failing, as follows:

Table 2: Seven-point Likert scale

Very much afraid	Mostly afraid	Somewhat afraid	Neutral	Somewhat not afraid	Mostly not afraid	Not at all afraid
1	2	3	4	5	6	7

Source: Adapted from Cacciotti, et al. (2020)

4.6.1 Questionnaire Design

The literature review completed in Chapter 2 served as the basis for the design of the questionnaire. The questions were created with the intention of validating the constructs described in the developed hypotheses.

The questionnaire comprises five sections. It starts by outlining the objectives of the study, and the consent statement. The first section of the questionnaire, Section A, entails demographic information about the owner or founder of the enterprise and the enterprise itself. Then follows the four sections (Sections B, C, D and E) that measure the four main constructs of the study; entrepreneurial bricolage, SME scaling, core firm capabilities and entrepreneurial fear of failure. In order to increase the significance of the subsequent data analyses, the options for answers to each question were limited to one from a set of possible answers and all the questions required an answer in order for the respondent to

move to the next section and complete the questionnaire. The questionnaire was designed based on the study's main constructs, as follows:

Section A: General Information

This section entails the demographic information of the owner or founder of the enterprise and the business information. The business information: the size of the enterprise in terms of the number of employees, the length of operation and the annual income of an enterprise were used as control variables, as done in previous studies by Cacciotti et al. (2020); Kickul et al. (2018); Kollmann et al. (2017); Yu, et al. (2020); and Yu and Wang, (2021).

Section B: Construct 1 – Entrepreneurial Bricolage

The eight-item scale developed by Senyard et al. (2014) was adapted to measure the independent variable, entrepreneurial bricolage. The questions in this section were designed to assess how the enterprise utilises its available resources to respond or come up with solutions to new challenges. The respondents indicated how much they agreed or disagreed with the statements on the five-point Likert scale ranging from 1 = “strongly disagree” to 5 = “strongly agree”, as illustrated in Table 1.

Section C: Construct 2 – Core Firm Capabilities

The core firm capabilities construct consists of four sub-constructs i.e., marketing, R&D, operations and innovativeness capabilities. To measure *marketing capabilities*, *R&D capabilities*, and *operations capabilities*, six-item scales adapted from Krasnikov and Jayachandran (2008) were used, while *innovativeness capabilities* were measured by a three-item scale adapted from Covin and Slevin (1989). The questions on these scales are intended to measure the speed at which SMEs respond to customer needs and improve the quality of customer service; how they leverage R&D and technology to innovate and develop new products and services; how they improve their processes and operational efficiencies. The respondents indicated how much they agreed or disagreed with the statements on the five-point Likert scale ranging from 1 = “strongly disagree” to 5 = “strongly agree”, as illustrated in Table 1.

Section D: Construct 3 – Enterprise Scaling

The enterprise scaling variable was measured using the seven-item SCALERS model questionnaire adapted from Bloom and Brett (2010). The questions posed in this scale

are aimed at measuring the capability of the enterprise's staff to expand the organisation, whether the enterprise owners or founders can successfully communicate with their stakeholders, the capability to build partnerships, the ability to lobby the public and government agencies for support, to generate revenue, the capability to replicating their service offerings and to stimulate market forces; as compared to their competitors. The respondents indicated how much they agreed or disagreed with the statements on the five-point Likert scale ranging from 1 = "strongly disagree" to 5 = "strongly agree", as illustrated in Table 1.

Section E: Construct 4 – Entrepreneurial Fear of Failure

Entrepreneurial fear of failure (as the moderating variable) was measured using the 21-item scale developed by Cacciotti, et al. (2020). The questions are aimed at measuring the level of how enterprise owners or founders fear the unsustainability and failure of their businesses. The respondents were asked to express the extent to which they have been feeling afraid in terms of their enterprise failing on the seven-point Likert scale ranging from 1 = "very much afraid" to 7= "not at all afraid", as illustrated in Table 2.

4.6.2 Questionnaire Pilot Survey

To increase the clarity and validity of the measuring instrument, a pilot survey was conducted before circulating the survey questionnaire of the study (Quinlan et al., 2018). This was done by surveying ten purposively selected accommodation establishment owners who were personally known to the researcher. The respondents were requested to identify questions that were unclear, complex and/or deemed unrelated. The main objectives of the pilot survey were to gauge, with a small number of enterprise owners or founders, the clarity of the questions of the questionnaire, and how applicable and relevant these items are in terms of the context of the study (Quinlan et al., 2018).

Based on the feedback that was received from the ten respondents who partook in the pilot study, the descriptions of the acronyms used that were not described were provided, and a small number of wordings on some of the questions were rephrased to ensure that the questions were easy to understand. A total of eight questions from the innovativeness, R&D and operations capabilities were removed as they were out of context of the industry in which the unit of analysis operates. The questionnaire was therefore revised accordingly. What was also noted by the pilot study respondents was that it took around

15 minutes to complete the survey in contrast to the 20 minutes that was indicated on the consent statement. The respondents of the pilot study were excluded from participating in the main survey, and the collected data from the pilot study was not part of the main data analysis as it was only for testing the survey instrument.

4.7 Data Collection Process

The data for the study was collected using a single technique, being an online survey through a structured questionnaire. No other method of collecting data was employed. The questionnaire was generated using Google Forms and the survey link was distributed to the respondents through emails and social media platforms namely WhatsApp, Telegram, and LinkedIn. As done with similar studies (An et al., 2020; Digan et al., 2019; Fu et al., 2020; Yu et al., 2020; Yu & Wang, 2021); prior to collecting data, a pilot study was undertaken to increase the validity and reliability of the questionnaire, as elaborated in Section 4.6.2. The process of collecting data, including the measuring instrument pre-testing, commenced after the approval of ethical clearance for the study was approved by the GIBS Masters Research Ethics Committee (MREC).

Due to the Protection of Personal Information Act (POPIA) 4 of 2013, it was challenging to obtain the contact details of the potential respondents directly from the databases of Tourism Associations, Tourism Authorities and organisations such as the TGCSA) and FEDHASA. The Gauteng, North West, Limpopo and Western Cape Tourism Associations ended up assisting by sharing their databases. The online survey link was shared with the remainder of the Tourism Associations across SA in order for them to assist in distributing the survey to the identified population within their databases. A formal request accompanied by a consent letter and approved ethical clearance document was sent through email to the mentioned organisations to assist in distributing the survey link. Phone calls and emails were then sent to those establishments to request the participation of their owners or founders in the study.

In addition, when it was observed that the response rate was low, the researcher capitalised and opted to physically attend the Tourism Leadership Conference that was held at Sun City in September; to further maximise access to the population. This was decided as an effort to approach the owners of accommodation establishments directly and ask for their participation in the study. The survey link was shared with them either by

email or WhatsApp. Furthermore, other contact details of establishments were acquired from the websites and social media platforms of different enterprises, and through professional and personal networks available to the researcher.

A total number of 131 responses were received which was within the targeted 120 to 150. Unfortunately, one respondent chose the option of not agreeing to participate in the survey and 12 respondents were discarded from the data, as described in the Missing Data section (section 4.8.2). Therefore, only 118 were deemed valid and were used for the data analysis. At the end of the eight weeks, the data was then processed for statistical analysis; and the results of the analyses are presented in Chapter 5.

Although the targeted sample size of between 120 and 150 was achieved, it was noted that some of the respondents were not interested in participating in the study as they felt that there was nothing in it for them, and expressed how these studies never bear any fruits to their businesses. Others cited time as the reason not to complete the questionnaire and mentioned that as small business owners they have a lot to do daily. Others were interested in the findings of the study and enquired whether the report will be shared with them.

The data was collected throughout eight weeks (from the second week of July to the second week of September 2022); thus, a minimum of six weeks, as recommended by Saunders et al. (2016). Follow-ups were done during the period, as a reminder to those who have not yet completed the survey to kindly do so. The data collected from the survey will be stored electronically on the University's storage system i.e., the GIBS Data Storage system, and will be saved for the next ten years.

4.8 Data Analysis

Zyphur and Pierides (2017) describe data analysis as an activity where samples are used in statistical computations to estimate parameters such as co-variances or causal effects that define populations. The collected data were analysed using statistical analysis software, IBM Statistical Package for Social Science (SPSS) version 28 and SPSS AMOS version 28 where applicable.

For statistical tests, the level of significance was taken at 5% ($p < 0.05$) and tests such as correlation analyses were used to quantify and measure the strength of relationships between the identified constructs (Wegner, 2020). Descriptive statistics in terms of frequencies and standard deviations were conducted for the demographic variables, and measures for the validity and reliability of the questionnaire were conducted to ensure the quality of the data collected. As recommended by Meyer et al. (2017), the results of the statistical analysis were presented in order to allow other researchers the benefit of using the findings of the study in their own work.

4.8.1 Data Cleaning and Coding

In order for the proper analysis of the data that produce reliable results, it was essential to make sure that the data is in the proper format. Upon completion of the process of collecting data, the results from the Google Forms platform were downloaded into a Microsoft Excel spreadsheet that produced the results that depicted the responses for each respondent and each question in a table format. The data was further cleaned and coded in order to make it readable and easier to enter into the statistics software. Prior to running the data into the software, the demographics data were coded and converted into a numeric format as illustrated in Table 3 below:

Table 3: Numeric Codes of Demographic Variables

Gender		Age (years)		Number of employees		Annual Revenue (Rands)	
Male	0	21-35	0	2-6	0	<R5m	0
Female	1	36-45	1	7-12	1	R5m-R10m	1
Other	2	46-55	2	13-20	2	R11m-R15m	2
		56-64	3	Other	3	R16m-R30m	3
		>65	4			R31m-R60m	4

The data from the constructs were also coded and converted into a numeric format as per Tables 1 and 2. This exercise was done in order to enable the data to be readable in the SPSS software.

4.8.2 Missing Data

It is a common problem that researchers encounter some missing data where some of the responses to one or more questions are not available for analysis (Hair Jr et al., 2018). The total number of respondents that were recorded at the end of the survey was 131. From the 131 responses, missing data cases were noted. Cismondi et al. (2013) mention

two generally used approaches in dealing with missing data: a) remove all the variables of which one or more cases are missing and b) imputation of missing data values. This is however dependent on the level of randomness of the missing data. Prior to determining the randomness of the missing data, one case i.e., participant number 127 was deleted from the data due to the excessive amount of missing data i.e., 98.5% as they opted not to participate in the survey (non-response) (Hair Jr et al., 2018). Of the remaining 130 respondents, twelve cases (i.e., responses) contained missing data of 23.1% each. Using the listwise deletion method, these cases were omitted from the final data without further imputation strategies as the missing data of these cases were more than 10% and considered “generally large” (Hair Jr et al., 2018). Cismondi et al. (2013) further state that it is commonly acknowledged that when missing data exceeds 10%, all the cases with missing values can be discarded without significantly reducing the reliability of the statistical test results. Therefore, the total number of valid responses that were used for the data analysis was 118.

4.8.3 Test for Normality

Most statistical tests require an assessment of the normality of the collected data as normally distributed data is an underlying premise in parametric testing (Mishra et al., 2019). One of the limitations associated with normality testing is that the data should be continuous (Mishra et al., 2019). The constructs’ data collected in this study is considered ordinal, as the measuring instrument utilised five and seven-point Likert scales to address the respondents’ attitude (i.e., level of agreement and level of fear) towards the identified phenomenon (Quinlan et al., 2018). Based on this limitation, the test for normality was therefore not conducted.

4.8.4 Demographics

In quantitative studies using surveys for data collection, the data is described using descriptive statistics (Quinlan et al., 2018). These statistics provide an understanding of the behaviour and characteristics of the variables in the study. These were measured through the responses provided by the respondents on the demographic data that was captured. The results of this statistical analysis included the frequencies and percentages for the categorical data (gender, age, number of employees and annual revenue). The results for the numeric data (i.e., age of firm) included mean scores, standard deviations,

and minimum and maximum scores (Wegner, 2020). The results are presented in Chapter 5.

4.8.5 Quality Controls

Köhler et al. (2017) mention that information about the quality of the measurement instrument should be included in every research study. They further state that notwithstanding that the scale has been adapted from earlier studies, it should produce sufficient reliability and validity for the current study (Köhler et al., 2017). The quality of the survey data collected depends on how stringent the pilot study is, the structure of the measuring instrument, and how well the respondents understand the questions (Saunders et al., 2016). Drawing from the study by Anderson and Gerbing (1988), there are standard procedures to test the data quality of variables, being the validity and reliability measures, and these are outlined in subsections 4.8.5.1. and 4.8.5.2 below.

4.8.5.1 Validity Measure

The validity of the measurement scale refers to its ability to assess and quantify what it was intended to assess (Vaske et al., 2017). A valid questionnaire refers to one in which the data is accurately measured for what it is intended, and the research results are about what they appear to be about (Saunders & Lewis, 2018). Validity of the construct is a way of demonstrating that the questions under the construct are consistent with each other and are relevant to the concept being investigated in the study (Quinlan et al., 2018). The scales for the questionnaire that were used for this study were all adapted from previous studies; however, these scales were developed under different conditions and thus need to be validated for the context of this study (Köhler et al., 2017). To measure the validity of the scales used in the study, construct validity tests were done through confirmatory factor analysis (CFA). The objective of the construct validity measure is to test the accuracy of the items; to test whether the measured items (variables/questions) accurately measure what the constructs were designed to measure (Hair Jr et al., 2018).

Due to the sample size of 118, partial least squares structural equation modeling (PLS-SEM) was chosen as opposed to the covariance-based structural equation modeling (CB-SEM) to assess the measurement model i.e., how well the measured variables represent the constructs, thus the constructs' validity (Hair Jr et al., 2018). PLS-SEM is more robust, normality test assumptions are less restrictive, and even though a sample size greater

than 100 is recommended, smaller size samples of less than 100 are acceptable (Hair Jr et al., 2018; Hair et al., 2019). The PLS-SEM was used to assess four conditions of each construct: indicator loadings, reliability, convergent and discriminant validities as follows (Hair Jr et al., 2018):

- a) Indicator loadings: standardised loadings should be above 0.5, and ideally, above 0.7 to establish convergent validity.
- b) Convergent validity: Once the loadings that were below the 0.7 benchmark were removed, then the average variance extracted (AVE) was measured. AVE is computed as the sum of the squared standardised factor loadings divided by the number of items of that construct. The acceptable AVE is 0.5 or higher which will indicate that on average the construct explains more than half of its indicator's variance.
- c) Discriminant validity: measured the degree to which a construct is distinct from other constructs. For PLS-SEM, the discriminant validity is measured using the Fornell-Larcker criterion test, the Heterotrait-Monotrait (HTMT) ratio of correlations, and the factor cross-loadings. To establish discriminant validity, the Fornell-Larcker criterion specifies that the square root of the AVE construct should be higher than its correlation with other constructs. The recommended value of the HTMT is 0.9 or lower, a value above 0.9 indicates a lack of discriminant validity. To assess discriminant validity using cross-loadings, the factor loadings for each item of each construct should load significantly higher into their constructs than into other constructs.

The detailed results for the validity measure are presented in Chapter 5.

4.8.5.2 Instrument Reliability Measure

Vaske et al. (2017) state that a good measurement instrument (questionnaire) is reliable, valid and accurately measured. They further mention that reliability of the questionnaire indicates that the same construct is measured by the various items that are mutually connected. In essence, the test measures whether the measuring instrument is consistent i.e. if it produces the same results with the same questions when testing different scenarios. A reliability analysis is widely used to measure the internal consistency of the questionnaire items (Vaske et al., 2017). There are differing schools of thought regarding which reliability estimate method amongst various options is the best. Cronbach's alpha is one of the most commonly used internal consistency reliability measures (Vaske et al.,

2017), while composite reliability is often used together with the SEM method (Hair Jr et al., 2020). Hair Jr et al. (2018) confirm that different reliability coefficients produce similar reliability estimates, thus the researcher used Cronbach's alpha to test whether the questionnaire items' reliability was acceptable. The reliability measures were conducted per construct and per sub-construct where applicable. According to Al-Metwali et al. (2021), a Cronbach's alpha of at least 0.6 indicates that the variables in a construct have acceptable internal consistency and that the construct can be regarded as reliable whilst Hair Jr et al. (2020) recommend values exceeding 0.7. The results are presented in Chapter 5.

4.8.6 Model Fit

Following reliability and validity measurements for the model were completed, the model was evaluated on whether it fits the collected data. The objective of a model fit was to test whether the identified variables measure what they were intended to measure; and whether the collected data fits the proposed conceptual model. Furthermore, the model intended to assess the theory of the conceptualised model and to test the relationship between the constructs as illustrated in Chapter 3. The relationships were considered significant at the 5% level of significance level ($p < 0.05$). The model fit was assessed using the PLS-SEM. This analysis tests how well a measurement theory comprising preidentified variables and constructs fits the collected data's depiction of reality (Hair Jr et al., 2018). Several fit indices were used to assess whether the collected data fit the model or not, and the researcher considered the four that are listed below. The statistical output from the analysis yielded the following fit indices as outlined by Naqvi et al. (2018):

- a) Model Chi-Square (X^2)
- b) Comparative Fit Index (CFI)
- c) Root Mean Square Error Approximation (RMSEA)
- d) (Standardized) Root Mean Square Residual (SRMR)

Naqvi et al. (2018) give guidelines on what are considered benchmarks for a good model on the indices specified above. For the relationship between the variables and constructs, and the overall model to be considered a good fit; the CFI should be greater than 0.9, and the RMSEA and SRMR should be less than 0.07 (Naqvi et al. (2018). Additionally, to confirm validity, the p values of each item are required to significantly load onto their

respective constructs at a 5% level of significance ($p < 0.05$), meaning; that there is no need to remove any items from the constructs.

4.8.6.1 Assumptions of the Confirmatory Factor Analysis

The following limitations and assumptions were considered when carrying out the CFA :

- a) Missing data: if there is missing data, it should be dealt with using appropriate and relevant methods. Missing data has been dealt with in section 4.8.2.
- b) Sample size: models with five or fewer constructs having three or more items require a minimum sample of 100 (Hair Jr et al., 2018). The total sample that was used for this study is 118 with four constructs containing more than three variables each.
- c) Data sampling: CFA requires random sampling; a non-probability purposive sampling was utilised for this study.
- d) Multivariate normality: The PLS-SEM is less restrictive to normality assumptions.

4.8.7 Dimension Reduction

Following the measuring for validity and reliability, a variable reduction technique is required to determine the structure, and interrelatedness of these items, and whether the measuring instrument has sufficient psychometric properties (Steenkamp & Maydeu-Olivares, 2022). They further emphasise the importance of having multiple items or questions in measuring constructs. The measuring instrument used in this study comprised a large number of items/questions (i.e., over 70 items). When determining validity, reliability and testing the hypotheses, the interest lies at a construct level rather than at an item/question or variable level. These items (observed variables) need to be restructured, reduced and consolidated into groups of related sub-constructs with a smaller number of items to better understand the construct (latent variable).

This dimension reduction technique was done in SPSS using the varimax rotated techniques, and the output from the analysis is as follows:

- a) Component Matrix: measures the correlations between questions in each variable. Hair Jr et al. (2018) suggest that for the variables to be factorable, a considerable number of the intercorrelations between variables should be greater than 0.3.

- b) Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO): this measures the adequacy of the sample; the sample is considered adequate for factor analysis to be conducted when the KMO is greater than 0.7 (Ma et al., 2011).
- c) Bartlett's Test of Sphericity: measures the relationship between the variables and the validity of the collected data through the correlation matrix. The p-value of Bartlett's test of sphericity is significant at a 5% level of significance ($p < 0.05$), implying that the items are factorable (Montshiwa & Moroke, 2014).

4.8.7.1 Exploratory Factor Analysis

Following the tests for factorability by the above three measures, an Exploratory Factor Analysis (EFA) was then conducted to establish the structure of the relationships of the variables. This statistical analysis was used to explore correlative relations among a large number of variables and to structure these relations with one or more latent variables (Goretzko et al., 2021). EFA was used to establish the common factors that explain the structure of the set of observed variables that have highly mutual relationships (Watkins et al., 2018). The analysis provided the optimum number of variables needed for each construct to test the study's hypotheses as stated in Chapter 3. The Principal Components Analysis (PCA) analysis was used to extract the factors. Each variable should belong to one factor and is also required to yield a coefficient that is greater than 0.7 implying that the scale for that construct is valid and cannot be divided into other variables and thus belong to one factor (Ma et al., 2011). Should the variables not belong to one factor, they can be grouped to form new constructs to test the study's hypotheses. The results are presented in Chapter 5.

4.8.7.2 Assumptions of the Exploratory Factor Analysis

The following are the limitations and assumptions that were considered while performing the exploratory factor analysis (Watkins et al., 2018):

- Sample size: the sample size should be 100 or larger (Hair Jr et al., 2018)
- Normality: all variables should be scored in the same direction, to decrease skewness affecting the EFA results
- Variability: requires random sampling; a non-probability purposive sampling was utilised for this study
- Missing data: if there is missing data, it should be dealt with using appropriate and relevant methods. Missing data has been dealt with in section 4.8.2

- Linearity: the relationship between the observed variables should be linear
- Measurement error: variables not meeting the minimum acceptable reliability value of 0.7 should be avoided for the EFA

4.8.8 Descriptive Statistics: Constructs and Questions

In addition to describing the sample used in the survey, descriptive statistics were used to statistically describe the characteristics of the responses for each question posed in each construct. Constructs also included those that were re-grouped into components after factor analysis. This was done to have an understanding of how many respondents responded to each question. Frequency tables were created in addition to the standard descriptive statistics such as means and standard deviations.

4.8.9 Hypotheses Testing

As illustrated in Chapter 3, the hypotheses were aimed at testing the relationship between the following constructs:

- The correlation between Enterprise Scaling and Entrepreneurial Bricolage
- The correlation between Enterprise Scaling and Core Firm Capabilities
- The moderating effect of Entrepreneurial Fear of Failure in the relationship between Enterprise Scaling and Entrepreneurial Bricolage
- The moderating effect of Entrepreneurial Fear of Failure in the relationship between Enterprise Scaling and Core Firm Capabilities

Spearman's ranked correlation coefficient test was used to test the bivariate correlations of the constructs with linear relationships specified in the hypotheses (i.e., H_1 and H_2) in Chapter 3. Spearman's ranked correlation coefficient was selected based on the assumption that the measurement instrument used for the study utilised Likert scales which are measured on an ordinal scale. If it were assumed that the Likert scales are measured on a numeric or continuous scale, Pearson's correlation would have been the appropriate measure. When Spearman's correlation coefficient is positive, it implies that there is a positive relationship between the two constructs although a negative correlation coefficient indicates a negative relationship, and a zero correlation coefficient implies that there is no relationship between the two variables measured (Sedgwick, 2014). The p-values of the pairs of correlations should be less than the 5% level of significance ($p < 0.05$) for the correlations to be considered significant. Furthermore, the magnitude of the

relationships was determined by the coefficient value from the guidelines provided by Cohen (1988). The guidelines are illustrated in Table 4 below.

Table 4: Cohen’s D strength of association table

Coefficient value	Strength of association
$0.10 < r < 0.30$	Small/weak correlation
$0.31 < r < 0.50$	Medium/moderate correlation
$ r > 0.51$	Large/strong correlation

4.8.9.1 Assumptions of the Spearman’s Ranked Correlation Coefficient Test

The following are the limitations and assumptions that were considered while performing the Spearman’s ranked correlation coefficient test (Temizhan et al., 2022):

- The variables are measured on an ordinal scale – Likert scales data were collected and treated as ordinal data
- One variable is monotonically related to the other – as the x variable increases, the y variable should either never increase or decrease.
- The p-values of the pairs of correlations should be less than the 5% level of significance ($p < 0.05$) for the correlations to be considered significant.

To test the moderating effects of a multiple linear regression analysis on the relationship between the independent and dependent variables, as depicted in Figure 7 below. In the context of the study and the hypotheses, (X) represents entrepreneurial bricolage and core firm capabilities, (Y) represents enterprise scaling and (M) represents entrepreneurial fear of failure.

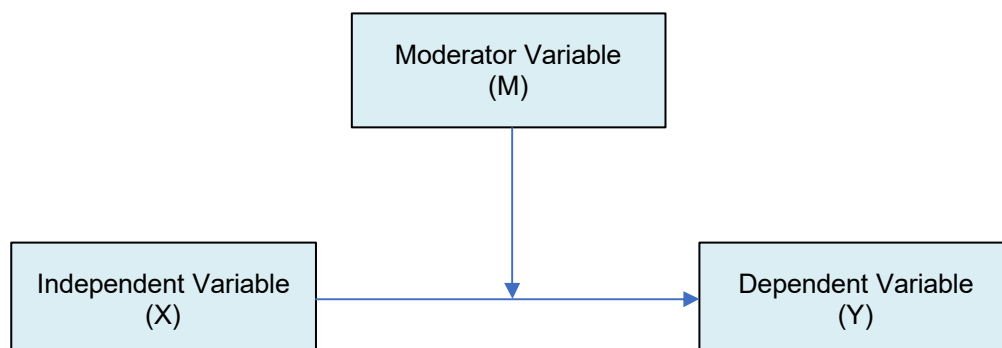


Figure 2: Moderation Model

Source: Adapted from (Memon et al., 2019)

An *interaction term variable*, which is the Z scores of the independent variable multiplied by the Z scores of the moderator variable was added and used to test the interaction (moderation) of entrepreneurial fear of failure between entrepreneurial bricolage and enterprise scaling. The analysis gives the output as follows:

4.9 Research Methodology Limitations

Based on the research design and methodology of the study, the following limitations were considered:

- The sample was drawn from a single industry (tourism sector) from one country (SA); this is seen as a limitation and thus essential to examine whether the findings of the study can be generalised to other industries or other similar countries.
- The study was conducted using a cross-sectional time dimension to collect the data, with which the data is collected at a particular point in time as opposed to a longitudinal time dimension. This is seen as a limitation as there can be changing patterns in entrepreneurial bricolage behaviours of SME founders or owners that would not be tracked over time. If the study was carried out at a different period, the outcomes might be different, however, due to time constraints, this limitation could not be avoided.
- The research design of the study being descripto-explanatory and quantitative in nature used a structured self-administered questionnaire with closed-ended questions. Data gathered through a survey, in contrast to data gathered through other research strategies, is likely to be undetailed (Saunders & Lewis, 2018). This is seen as a limitation as the data collected from structured observations are based on standardisation; thus, the respondents are not afforded the opportunity to express their whole perspective and additional perspectives on the subject matter. Additionally, structured self-completed questionnaires prevent respondents from seeking clarification on any questions they may not fully understand.
- SMEs are found to often operate under resource constraints when compared to large established corporations (Wadhwa et al., 2017). Different enterprises have varying firm capabilities and experience different levels of resource constraints. To

generalise the results of enterprises of different types, sizes, ages and revenue brackets, may produce misleading results.

- The respondents of the survey were either founders or owners of enterprises and thus regarded as senior in occupation. As a result of them occupying a senior position in the firm, they may have expressed views that falsely elevate them to a position they are not in; i.e. even though the survey was filled anonymously, as an individual occupying the highest position in the firm, they might have painted the picture of their capabilities being higher than they are just so it does not reflect negatively on them. Furthermore, varying skill sets, educational backgrounds and levels of expertise exist among enterprise owners or founders in the tourism sector, as a result, the level of understanding and interpretation of questions varied from one person to the other. To manage this limitation, based on the questionnaire pilot study, complex questions adapted from previous studies were revised to provide a better understanding.

4.10 Conclusion

This chapter detailed the methodological choice and the research design. Furthermore, the chapter outlined how the data were analysed including the different types of statistical tests that were conducted and their assumptions. Lastly, the limitations of the research methodology were discussed. The next chapter presents the results of the descriptive statistics, the statistical analysis and the hypotheses tests.

CHAPTER 5

RESULTS

5.1 Introduction

Chapter 5 presents the findings and the results of the tests conducted on the data that was collected for the study. The results are aimed at addressing the objectives of the study and proving or disproving the hypotheses tested. The chapter first starts by describing the sample that was obtained during the data collection. This is followed by the presentation of the demographics results with the aim of demonstrating the sample that partook in the study, as outlined in Chapter 4. Subsequently, the statistical test results of each construct are presented; these include descriptive statistics, factor analysis, and tests for reliability and validity. Lastly, the hypotheses test results to measure the correlations between the identified constructs, therefore, enabling the understanding of the main objective of the study which is the impact of entrepreneurial bricolage on SME scaling.

5.2 Description of the Sample Obtained

A total number of 131 responses were recorded from the research study survey during the 8 weeks between the 23rd of July and the 18th of September 2022. This was within the targeted number of between 120 to 150. Upon cleaning and coding the data as described in section 4.8.1, missing data were noted amongst thirteen respondents. From the total number of 131, one respondent (i.e., respondent number 127) was deleted from the data set due to the excessive amount of missing data i.e., 98.5% as they opted not to participate in the survey. Of the remaining 130 respondents, twelve cases (i.e., responses) contained missing data of 23.1% each. These cases were omitted from the final data without further imputation strategies as the missing data of these cases were more than 10% and considered “generally large” (Hair Jr et al., 2018; Cismondi et al., 2013). Therefore, the total number of valid responses that were used for the data analysis was 118.

5.3 Sample Demographics

The total number of valid responses captured from the survey was 118. The survey began with the five demographic questions which were used to describe the sample. These questions addressed the gender and the age of the respondent; the age, size and annual revenue of the firm. This specific information on the owner of the business and the firm itself was essential in order to assure that the data is collected on the appropriate sample as described in Chapter 4.

5.3.1 Gender

The gender question was categorised into three groups i.e., male, female and other. As presented in Figure 3 below, out of the final sample size that comprised 118 valid responses, half of the respondents were female while 49.2% were male and 0.8% were other.

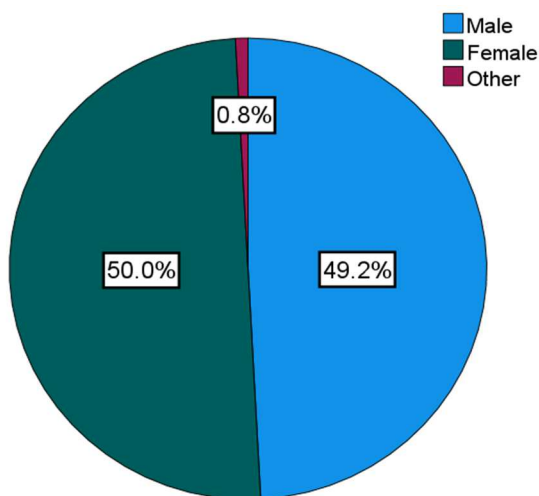


Figure 3: Gender

5.3.2 Age Group

The ages of respondents were categorised into five groups ranging from 21 years to respondents that are over 65 years. The results in Figure 4 show that the majority of the respondents were between 46 and 55 years old, followed by the 36 to 45 years old group at 40.7% and 37.3% respectively. The respondents that are over 65 years old were the least at only 4.2%.

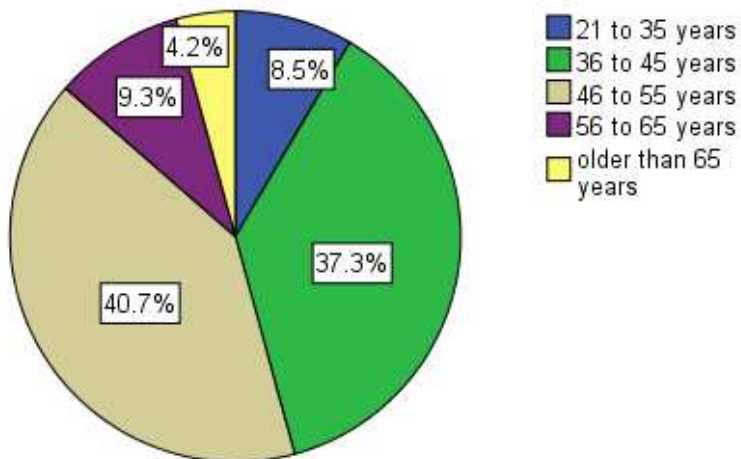


Figure 4: Age Groups

5.3.3 Firm Size

The size of the firms was determined by the number of permanent employees the firm employs and was categorised into four categories. Out of the final valid sample size of 118 the majority of the firms employed between two and six employees constituting a total of 48.3% of the entire sample as represented in Figure 5 below.

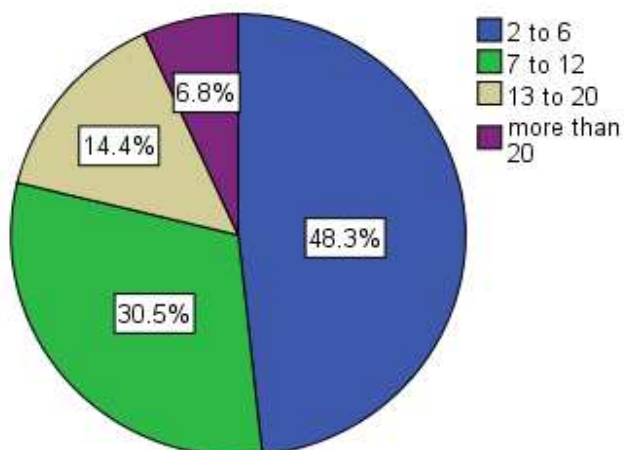


Figure 5: Number of Employees

5.3.4 Annual Revenue

In addition to categorising the size of the firm by the number of employees under its employ, it was key to understand the type of firms that participated in the study by differentiating them by their annual revenue. The firm's annual revenue was categorised into four groups as illustrated in Figure 6 below, and out of the final sample of 118 valid responses, over 60% of the firms earned less than R5 million per annum with just under a percentage of the firms earning annual revenue of between R16 million and R30 million.

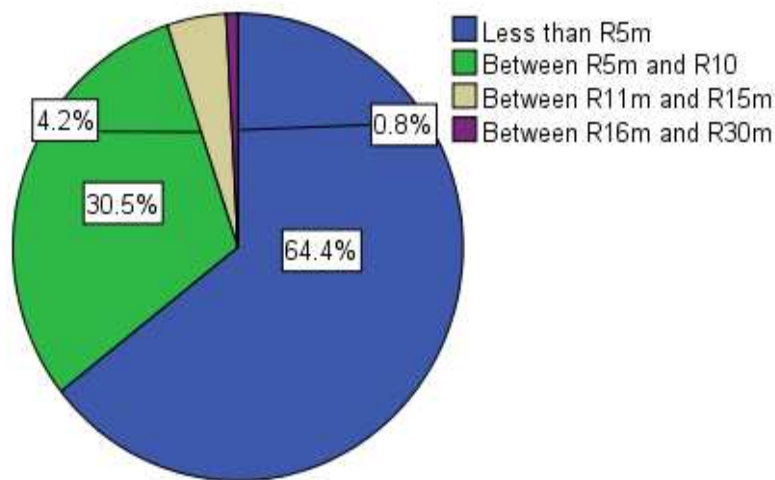


Figure 6: Annual Revenue

5.3.5 Age of Firm

The researcher included the age of the firm in the study as it was essential to have an indication of the experience of the owner of the firm in running the business. Out of the total of 118 valid responses, the average age of the firms range between 1 to 36 years with an average age of nine and a half years. This implies that the ages of the firms that were part of the survey are scattered closer to the mean age of 9.46 years.

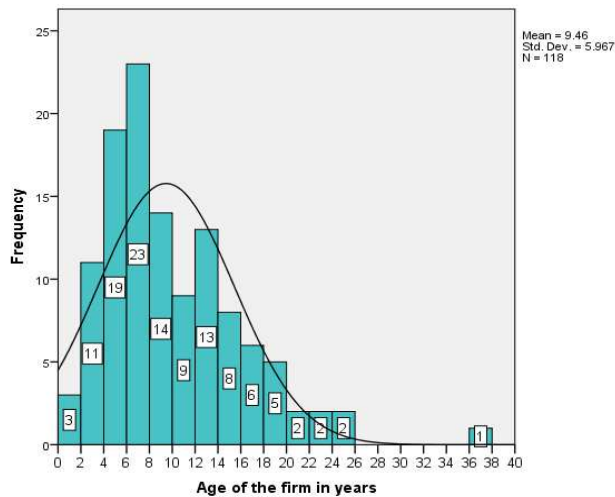


Figure 7: Age of Firm

5.4 Constructs Validity Test Results

The construct validity was measured using the CFA method and the results for the convergent and discriminant validities are provided below.

5.4.1 Convergent Validity

Table 5 below shows the standardised factor loadings for testing convergent validity. There were six items/questions (ES4, ES5, ES6, ES11, ES18 and ES20) from the enterprise scaling construct with the standardised loadings below between 0.5 and 0.7. These questions were removed in order to improve the AVE for the enterprise scaling construct that was below 0.5. The rest of the questions were retained in the computations as the AVEs for their respective constructs were above the acceptable 0.5, indicating that convergent validity has been achieved.

Table 5: Standardised Factor Loadings and AVE per Item

Item		Dimension / Construct	Standardised Factor Loadings	AVE
EB1	<---	Entrepreneurial Bricolage	0,801	0,69
EB2	<---	Entrepreneurial Bricolage	0,824	
EB3	<---	Entrepreneurial Bricolage	0,862	
EB4	<---	Entrepreneurial Bricolage	0,846	
EB5	<---	Entrepreneurial Bricolage	0,847	
EB6	<---	Entrepreneurial Bricolage	0,816	

EB7	<---	Entrepreneurial Bricolage	0,884	
EB8	<---	Entrepreneurial Bricolage	0,758	
CFC1	<---	Core Firm Capabilities	0,723	0,60
CFC2	<---	Core Firm Capabilities	0,782	
CFC3	<---	Core Firm Capabilities	0,732	
CFC4	<---	Core Firm Capabilities	0,813	
CFC5	<---	Core Firm Capabilities	0,822	
CFC6	<---	Core Firm Capabilities	0,865	
CFC7	<---	Core Firm Capabilities	0,825	
CFC8	<---	Core Firm Capabilities	0,838	
CFC9	<---	Core Firm Capabilities	0,832	
CFC10	<---	Core Firm Capabilities	0,871	
CFC11	<---	Core Firm Capabilities	0,812	
CFC12	<---	Core Firm Capabilities	0,664	
CFC13	<---	Core Firm Capabilities	0,796	
CFC14	<---	Core Firm Capabilities	0,602	
CFC15	<---	Core Firm Capabilities	0,503	
ES1	<---	Enterprise Scaling	0,738	0,51
ES2	<---	Enterprise Scaling	0,605	
ES3	<---	Enterprise Scaling	0,769	
ES7	<---	Enterprise Scaling	0,705	
ES8	<---	Enterprise Scaling	0,788	
ES9	<---	Enterprise Scaling	0,785	
ES10	<---	Enterprise Scaling	0,561	
ES12	<---	Enterprise Scaling	0,741	
ES13	<---	Enterprise Scaling	0,784	
ES14	<---	Enterprise Scaling	0,736	
ES15	<---	Enterprise Scaling	0,746	
ES16	<---	Enterprise Scaling	0,671	
ES17	<---	Enterprise Scaling	0,725	
ES19	<---	Enterprise Scaling	0,609	
ES21	<---	Enterprise Scaling	0,712	
EFF1	<---	Entrepreneurial Fear of Failure	0,542	0,59
EFF2	<---	Entrepreneurial Fear of Failure	0,581	
EFF3	<---	Entrepreneurial Fear of Failure	0,579	
EFF4	<---	Entrepreneurial Fear of Failure	0,766	
EFF5	<---	Entrepreneurial Fear of Failure	0,786	
EFF6	<---	Entrepreneurial Fear of Failure	0,746	
EFF7	<---	Entrepreneurial Fear of Failure	0,850	
EFF8	<---	Entrepreneurial Fear of Failure	0,813	
EFF9	<---	Entrepreneurial Fear of Failure	0,842	
EFF10	<---	Entrepreneurial Fear of Failure	0,845	
EFF11	<---	Entrepreneurial Fear of Failure	0,834	

EFF12	<---	Entrepreneurial Fear of Failure	0,784
EFF13	<---	Entrepreneurial Fear of Failure	0,849
EFF14	<---	Entrepreneurial Fear of Failure	0,884
EFF15	<---	Entrepreneurial Fear of Failure	0,876
EFF16	<---	Entrepreneurial Fear of Failure	0,726
EFF17	<---	Entrepreneurial Fear of Failure	0,742
EFF18	<---	Entrepreneurial Fear of Failure	0,797
EFF19	<---	Entrepreneurial Fear of Failure	0,757
EFF20	<---	Entrepreneurial Fear of Failure	0,703
EFF21	<---	Entrepreneurial Fear of Failure	0,775

5.4.2 Discriminant Validity

As part of the accuracy in measurement, testing for validity continued by assessing discriminant validity. Table 6 presents the Fornell-Lacker criterion results.

Table 6: Discriminant Validity: Fornell-Larcker criterion

	CFC	EB	ES	EFF
CFC	0.772	0.718	0.771	0.653
EB	0.718	0.830	0.588	0.510
ES	0.771	0.588	0.715	0.583
EFF	0.653	0.510	0.583	0,771

Table 7 presents the HTMT ratio of correlation results. All the HTMT values are within the recommended threshold of below 0.9. Therefore, discriminant validity has been established.

Table 7: Discriminant Validity: HTMT

Heterotrait-monotrait ratio (HTMT)	
EB -> CFC	0.756
EFF -> CFC	0.653
EFF -> EB	0.510
ES -> CFC	0.806
ES -> EB	0.611
ES -> EFF	0.583

As a final step in assessing construct validity, Table 8 presents the cross-loadings for each item of the constructs. All the individual items are loading well (higher) onto their respective

parent constructs as opposed to other constructs; therefore, discriminant validity is established.

Table 8: Discriminant Validity: Cross Loadings

Cross Loadings				
	CFC	EB	EFF	ES
CFC1	0.723	0.522	0.464	0.490
CFC10	0.870	0.666	0.525	0.676
CFC11	0.814	0.608	0.454	0.696
CFC12	0.664	0.379	0.395	0.631
CFC13	0.798	0.478	0.419	0.641
CFC14	0.598	0.399	0.443	0.507
CFC15	0.499	0.307	0.260	0.446
CFC2	0.781	0.636	0.478	0.556
CFC3	0.733	0.571	0.531	0.567
CFC4	0.815	0.604	0.594	0.570
CFC5	0.824	0.614	0.611	0.594
CFC6	0.867	0.656	0.624	0.614
CFC7	0.823	0.537	0.481	0.572
CFC8	0.838	0.630	0.562	0.674
CFC9	0.829	0.616	0.431	0.597
EB1	0.587	0.804	0.380	0.500
EB2	0.620	0.827	0.443	0.546
EB3	0.572	0.861	0.388	0.418
EB4	0.562	0.845	0.444	0.427
EB5	0.639	0.847	0.432	0.533
EB6	0.603	0.815	0.405	0.481
EB7	0.657	0.884	0.412	0.509
EB8	0.499	0.753	0.354	0.454
EFF1	0.283	0.253	0.541	0.312
EFF10	0.497	0.407	0.845	0.420
EFF11	0.525	0.435	0.834	0.426
EFF12	0.478	0.398	0.784	0.380
EFF13	0.630	0.526	0.849	0.552
EFF14	0.631	0.455	0.884	0.537
EFF15	0.598	0.397	0.876	0.549
EFF16	0.365	0.254	0.726	0.384
EFF17	0.399	0.301	0.742	0.407
EFF18	0.411	0.322	0.797	0.447
EFF19	0.473	0.406	0.757	0.383
EFF2	0.355	0.200	0.581	0.331
EFF20	0.431	0.344	0.703	0.325
EFF21	0.568	0.471	0.775	0.448

EFF3	0.280	0.215	0.579	0.320
EFF4	0.448	0.364	0.766	0.506
EFF5	0.503	0.424	0.786	0.429
EFF6	0.557	0.399	0.746	0.423
EFF7	0.593	0.464	0.850	0.533
EFF8	0.532	0.397	0.813	0.480
EFF9	0.478	0.391	0.842	0.399
ES1	0.630	0.523	0.385	0.737
ES10	0.384	0.228	0.241	0.561
ES12	0.498	0.367	0.313	0.740
ES13	0.675	0.494	0.476	0.784
ES14	0.453	0.315	0.365	0.736
ES15	0.674	0.520	0.494	0.746
ES16	0.522	0.394	0.369	0.672
ES17	0.585	0.415	0.495	0.726
ES19	0.520	0.332	0.482	0.612
ES2	0.389	0.292	0.332	0.605
ES21	0.558	0.338	0.427	0.713
ES3	0.619	0.568	0.406	0.768
ES7	0.530	0.461	0.423	0.705
ES8	0.543	0.445	0.373	0.787
ES9	0.539	0.452	0.395	0.784

Based on the results displayed in the three Tables above (Table 6, Table 7 and Table 8), the discriminant validity of all four constructs has been established.

5.5 Instrument Reliability Test Results

The measuring instrument was subjected to internal reliability testing. The results are presented in terms of Cronbach's alpha coefficients per construct and per sub-constructs for the core firm capabilities and enterprise scaling constructs. As stipulated in Chapter 4, the constructs having a value of at least 0.6 indicate that their variables have acceptable internal consistency, and the construct can be regarded as reliable. The results are illustrated in the tables according to the corresponding sub-sections.

5.5.1 Entrepreneurial Bricolage

The results in Table 9 below show a Cronbach alpha of 0.935. This according to Al-Metwali et al. (2021), indicates good reliability thus no need to remove any question from the scale to improve its reliability. Therefore, it indicates that the eight variables used to measure entrepreneurial bricolage have an acceptable internal consistency and the scale used to measure this construct is regarded as reliable.

Table 9: Instrument Reliability Results: Entrepreneurial Bricolage

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.935	0.935	8

5.5.2 Core Firm Capabilities

The core firm capabilities construct comprises four sub-constructs: marketing, operations, R&D and innovativeness capabilities. The results are presented per sub-construct in Table 10 below. The results show that all the variables under each sub-construct of core firm capabilities are above the 0.6 benchmark as set out by Al-Metwali et al. (2021). As Cronbach's Alpha values are all above 0.6, they do not need to be improved, thus no need to remove any questions from the scales. This is an indication of an acceptable internal consistency, therefore the scales used to measure these sub-constructs are regarded as reliable.

Table 10: Instrument Reliability Results: Core Firm Capabilities

Sub-Construct	Reliability Statistics		
	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Marketing capabilities	0.947	0.947	6
Operations capabilities	0.940	0.942	4
R&D capabilities	0.877	0.886	3
Innovativeness capabilities	0.878	0.880	2

5.5.3 Enterprise Scaling

The enterprise scaling construct comprises seven sub-constructs as illustrated in Table 11 below. The results are presented per sub-construct and indicate that all the variables under each sub-construct have a Cronbach's Alpha value of above 0.6. This indicates, according to Al-Metwali et al. (2021) that the scales used to measure each subconstruct under enterprise scaling have an acceptable internal consistency therefore the scales are regarded as reliable.

Table 11: Instrument Reliability Results: Enterprise Scaling

Sub-Construct	Reliability Statistics		
	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Staffing	0.821	0.825	3
Communicating	0.844	0.848	3
Alliance-Building	0.896	0.897	3
Lobbying	0.868	0.868	3
Earnings Generation	0.854	0.855	3
Replicating	0.854	0.857	3
Stimulating Market Forces	0.844	0.845	3

5.5.4 Entrepreneurial Fear of Failure

The 21 variables used to measure entrepreneurial fear of failure were first tested for reliability before conducting confirmatory factor analysis. The 0.965 value of Cronbach's alpha shows that the variables have an acceptable internal consistency indicating that the scale used to measure entrepreneurial fear of failure is regarded as reliable.

Table 12: Instrument Reliability Results: Entrepreneurial Fear of Failure

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.965	0.965	21

5.6 Model Fit

The structural model results that assessed the model fit are presented in Table 13 below.

Table 13: Model Fit Indices

Model Fit Indices				
	Chi-square	CFI	RMSEA	SRMR
EB	0.000	0.937	0.138	0.036
CFC	0.000	0.687	0.230	0.144
ES	0.000	0.587	0.180	0.158
EFF	0.000	0.639	0.216	0.262

The fit indices presented in Table 13 above did not meet the acceptance criteria as stipulated in Section 4.8.6. This was despite having removed questions with loadings of less than 0.7. This can be attributed to the small sample size of 118 (below 200).

5.7 Dimension Reduction Test Results

Dimension reduction and factor analysis were conducted to define the structure amongst variables and group them according to their interrelationships. Prior to conducting factor analysis, the correlation matrix tables of each applicable construct were evaluated to scan whether there is a considerable number of intercorrelations between the variables that are greater than 0.3 (Hair Jr et al., 2018). The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's Test of Sphericity were then tested to measure the sample adequacy and variables factorability. The analysis was done per construct and the assumptions, limitations and requirements are stipulated in section 4.8.7.2.

5.7.1 Entrepreneurial Bricolage

a) Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's Test of Sphericity

The KMO of 0.913 reported below is greater than the minimum acceptable value of 0.7, therefore, the sample is adequate for EFA to be conducted. Also, the p-value of Bartlett's test is significant at a 5% level of significance ($p < 0.05$), thus implying that the items are factorable.

Table 14: KMO and Bartlett's Test: Entrepreneurial Bricolage

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.913
Bartlett's Test of Sphericity	Approx. Chi-Square	713.875
	df	28
	P-value	0.000

b) Exploratory Factor Analysis Statistical Output

Following the KMO and Bartlett's Test of Sphericity, the EFA was conducted. The Principal Components Analysis (PCA) results in Table 15 below show that the items for the entrepreneurial bricolage construct belong to one factor. This implies that the entrepreneurial bricolage construct scale cannot be divided into constructs, and it is valid as it is. Therefore, all eight questions under entrepreneurial bricolage were used in testing the hypotheses.

Table 15: Component Matrix: Entrepreneurial Bricolage

Component Matrix ^a	
Variable / Question	Component
	1
EB1	0.796
EB2	0.815
EB3	0.873
EB4	0.855
EB5	0.847
EB6	0.814
EB7	0.885
EB8	0.752

^a 1 component extracted

5.7.2 Core Firm Capabilities

The core firm capabilities construct has already been explored and is grouped into four sub-constructs containing six, four, three and two variables. Therefore, the researcher did not see the need to perform dimension reduction. The validity of the construct has been validated in Section 5.4.

Table 16: Core Firm Capabilities Construct and its Variables

Core Firm Capabilities	
Sub-construct	Variables
Marketing capabilities	CFC1
	CFC2
	CFC3
	CFC4
	CFC5
	CFC6
Operations capabilities	CFC7
	CFC8
	CFC9
	CFC10
R&D capabilities	CFC11
	CFC12
	CFC13
Innovativeness capabilities	CFC14
	CFC15

5.7.3 Enterprise Scaling

The enterprise scaling construct has already been explored and is grouped into seven sub-constructs containing three variables in each sub-construct. Therefore, the researcher did not see the need to perform dimension reduction. The validity of the construct has been validated in Section 5.4.

Table 17: Enterprise Scaling Construct and its Variables

Enterprise Scaling	
Sub-construct	Variables
Staffing	ES1
	ES2
	ES3
Communicating	ES4
	ES5
	ES6
Alliance Building	ES7
	ES8
	ES9
Lobbying	ES10
	ES11
	ES12
Earnings Generation	ES13
	ES14
	ES15
Replacing	ES16
	ES17
	ES18
Simulating market forces	ES19
	ES20
	ES21

5.7.4 Entrepreneurial Fear of Failure

a) Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's Test of Sphericity

From Table 11 below, the KMO shows that the sample is adequate for EFA to be conducted as the value of 0.924 is greater than the minimum acceptable value of 0.7 (Ma et al., 2011). Also, the p-value of Bartlett's test is significant at a 5% level of significance ($p < 0.05$) thus implying that the items are factorable.

Table 18: KMO and Bartlett's Test: Entrepreneurial Fear of Failure

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.924	
Bartlett's Test of Sphericity	Approx. Chi-Square	2861.885
	df	210
	P-value	0.000

b) Exploratory Factor Analysis Statistical Output

Following the KMO and Bartlett's Test of Sphericity, the EFA was conducted. The Eigenvalue 1 rule was applied to establish how many components/factors to extract. The Principal Components Analysis (PCA) analysis was used to extract the factors, and it yielded four components (named entrepreneurial fear of failure 1, 2, 3 and 4) representing entrepreneurial fear of failure and the items that belong to these components. The four extracted components represent 80.363% of the variance (see Appendix J). The components were then grouped according to where the variables/questions load the highest i.e., the question belongs to the component where it loads the highest. The results shown in Table 19 below illustrate the factor loadings at each component.

Table 19: Rotated Component Matrix: Entrepreneurial Fear of Failure

Component Matrix	
Entrepreneurial Fear of Failure 1	
Variable / Question	Component 1
EFF8	0.674
EFF9	0.691
EFF10	0.785
EFF11	0.793
EFF12	0.775
Variable / Question	Component 2
Entrepreneurial Fear of Failure 2	
EFF4	0.676
EFF5	0.731
EFF6	0.805
EFF7	0.586
EFF13	0.633
EFF14	0.597
EFF15	0.515
Variable / Question	Component 3
Entrepreneurial Fear of Failure 3	
EFF16	0.732
EFF17	0.763
EFF18	0.751
EFF19	0.677
EFF20	0.645
EFF21	0.537

Variable / Question	Component 4
Entrepreneurial Fear of Failure 4	
EFF1	0.843
EFF2	0.897
EFF3	0.890

5.8 Descriptive Statistics: Constructs and Questions

Descriptive statistics were used to statistically describe the characteristics of the data for each question and construct. These included the minimum and maximum scores, mean scores, and standard deviations for each question. The frequency tables of each question per construct depict the number of responses (N) and how many times or the percentage of specific responses per question as captured on the Likert scale. The results for average responses for each question are presented in Appendix E and additionally, the results for normality i.e., skewness and kurtosis are presented in Appendix D. Table 20, Table 21, Table 22 and Table 23 represent the descriptive statistics for each construct.

5.8.1 *Entrepreneurial Bricolage*

Eight questions were used to assess the entrepreneurial bricolage construct. Based on the five and seven-point Likert scales that were specified in Section 4.6, respondents indicated their level of agreement and expressed the extent to which they were afraid on the fear of failure scale. The frequency tables (see Appendix E) for the construct indicate that the majority (over 60%) of the respondents “agree” with the sentiments that were measuring entrepreneurial bricolage, followed by 26% that “strongly agree”. Table 20 shows the descriptive statistics for the eight questions under EB. The mean per question ranges between 3,82 and 4,12 with the overall mean for the construct being 4,08. This indicates that in the questions provided to respondents on their bricolage behaviours the respondents mainly agreed. The degree of dispersion from the mean was not high with standard deviations ranging between 0,827 and 0,932, and for the overall construct, 0.753.

Table 20: Descriptive Statistics: Entrepreneurial Bricolage

	N	Minimum	Maximum	Mean	Std. Deviation
EB1: We are confident of our ability to find workable solutions to new challenges by using our existing resources	118	1	5	4,01	0,901
EB2: We gladly take on a broader range of challenges than others with our resources would be able to	118	1	5	3,89	0,932
EB3: We use any existing resource that seems useful responding to a new problem or opportunity	118	1	5	4,04	0,861
EB4: We deal with new challenges by applying a combination of our existing resources and other resources inexpensively available to us	118	1	5	4,08	0,863
EB5: When dealing with new problems or opportunities, we take action by assuming that we will find a workable solution	118	1	5	4,12	0,849
EB6: By combining our existing resources, we take on a surprising variety of new challenges	118	1	5	3,98	0,827
EB7: When we face new challenges, we put together workable solutions from our existing resources	118	1	5	4,05	0,914
EB8: We combine resources to accomplish new challenges that the resources weren't originally intended to accomplish	118	1	5	3,82	0,873
Entrepreneurial Bricolage	118	1	5	4,08	0,753

5.8.2 Core Firm Capabilities

Of the fifteen questions that were posed under the core firm capabilities construct, based on the highest mean of 4.15, most (almost 50%) of the respondents seem to “strongly agree” that their firms have the ability to improve the quality of customer service. The question with the lowest mean score is “Our changes in service lines have usually been dramatic” with a standard deviation of 1,223. The standard deviation for the overall construct is relatively low at 0.919.

Table 21: Descriptive Statistics: Core Firm Capabilities

	N	Minimum	Maximum	Mean	Std. Deviation
CFC1: My firm has the ability to sense market change and build strong and steady bonds with customers	118	1	5	3,71	0,971
CFC2: My firm has the ability to obtain precise knowledge of customer profiles to differentiate its products and services	118	1	5	3,70	1,015
CFC3: My firm has the ability to obtain customer feedback and forecast customer needs	118	1	5	4,00	0,952
CFC4: My firm has the ability to quickly respond to customer needs	118	1	5	4,08	1,063
CFC5: My firm has the ability to minimize customer complaints	118	1	5	4,10	1,008
CFC6: My firm has the ability to improve the quality of customer service	118	1	5	4,15	1,075
CFC 7: My firm has the ability to improve process flexibility	118	1	5	3,69	0,940
CFC8: My firm has the ability to improve process quality	118	1	5	3,93	1,068
CFC9: My firm has the ability to improve delivery dependability	118	1	5	3,67	1,022
CFC10: My firm has the ability to improve operational efficiency	118	1	5	3,81	0,972
CFC11: My firm has the ability to improve service quality	118	1	5	4,00	1,102
CFC12: My firm has the ability to lower the price of services	118	1	5	3,50	1,273
CFC13: My firm has the ability to improve functionalities of services	118	1	5	3,91	1,021
CFC14: We introduced many new lines of services in the last three years	118	1	5	3,09	1,320
CFC15: Our changes in service lines have usually been dramatic	118	1	5	2,87	1,223
Core Firm Capabilities	118	1	5	3,96	0,919

5.8.3 Enterprise Scaling

Table 22 shows the descriptive statistics for the 21 questions under the ES construct. The mean per question ranges between 2,46 and 3,85 with the overall mean for the construct being 3,40. This indicates that most of the respondents both agreed and were uncertain about questions regarding the scalability of their businesses. The degree of dispersion from the mean was relatively high with standard deviations ranging between 0,932 and 1,412, and for the overall construct, 0.828.

Table 22: Descriptive Statistics: Enterprise Scaling

	N	Minimum	Maximum	Mean	Std. Deviation
ES1: We have been effective at meeting our labour needs with people who have the necessary skills	118	1	5	3,72	1,077
ES2: We have an ample pool of capable volunteers available to help us meet our labour needs	118	1	5	3,12	1,214
ES3: We have individuals in management positions who have the skill to expand our organization, program or principles	118	1	5	3,85	1,122
ES4: We have been effective at communicating what we do to key constituencies and stakeholders	118	1	5	3,56	0,974
ES5: We have been successful at informing the individuals we seek to serve about the value of our program for them	118	1	5	3,79	0,932
ES6: We have been successful at informing donors and funders about the value of what we do	118	1	5	3,36	1,107
ES7: We have built partnerships with other organizations that have been win-win situations for us and them	118	1	5	3,76	1,182
ES8: We rarely try to 'go it alone' when pursuing new initiatives	118	1	5	3,62	1,198
ES9: We have accomplished more through joint action with other organizations than we could have by flying solo	118	1	5	3,75	1,139

ES10: We have been successful at getting government agencies and officials to provide financial support for our efforts	118	1	5	2,76	1,412
ES11: We have been successful at getting government agencies and officials to create laws, rules, and regulations that support our efforts	118	1	5	2,46	1,350
ES12: We have been able to raise our cause to a higher place on the public agenda	118	1	5	3,36	1,230
ES13: We have generated a strong stream of revenues from the services that we sell for a price	118	1	5	3,71	1,163
ES14: We have cultivated donors and funders who have been major sources of revenue for us.	118	1	5	3,03	1,194
ES15: We have found ways to finance our activities that keep us sustainable	118	1	5	3,79	1,093
ES16: We have a 'package' or 'system' that can work effectively in multiple locations or situations	118	1	5	3,37	1,190
ES17: We find it easy to replicate our programs	118	1	5	3,38	1,183
ES18: We have been successful at controlling and coordinating our programs in multiple locations	118	1	5	2,77	1,284
ES19: We have been able to demonstrate that businesses can make money through supporting our initiatives	118	1	5	3,37	1,084
ES20: We have been able to demonstrate that consumers can save money through patronizing our services	118	1	5	3,51	0,976
ES21: We have been able to trust market forces to help resolve social problems	118	1	5	3,53	1,068
Enterprise Scaling	118	1	5	3,40	0,828

5.8.4 Entrepreneurial Fear of Failure

When conducting factor analysis, the EFF construct loaded onto four components (E Entrepreneurial Fear of Failure 1, 2, 3 and 4). The mean scores of over 4 demonstrate that most of the respondents answered with “neutral to somewhat not afraid” on the seven-point Likert scale described in Chapter 4. The degree of dispersion from the mean was relatively low with standard deviations ranging between 1,294 and 1,615, and for the overall construct, 1,242.

Table 23: Descriptive Statistics: Entrepreneurial Fear of Failure Components

	N	Minimum	Maximum	Mean	Std. Deviation
Entrepreneurial Fear of Failure 1	118	1	7	4,54	1.615
Entrepreneurial Fear of Failure 2	118	1	7	4,86	1.498
Entrepreneurial Fear of Failure 3	118	1	7	4,57	1.453
Entrepreneurial Fear of Failure 4	118	1	7	3,19	1,294
Entrepreneurial Fear of Failure	118	1	7	4,41	1,242

5.9 Hypotheses Testing

A Spearman’s ranked correlation coefficient was used to test the bivariate correlations of the constructs with linear relationships as stipulated in the study’s hypotheses (i.e., H1 and H2) in Chapter 3.

5.9.1 Spearman’s Correlation Test: Hypothesis 1

Correlation between SME Scaling and Entrepreneurial Bricolage

H₀ (1): There is no statistically significant positive correlation between SME scaling and entrepreneurial bricolage

H₁ (1): There is a statistically significant positive correlation between SME scaling and entrepreneurial bricolage

Table 24: Spearman’s correlation Test: Hypothesis 1

Spearman’s rho	Correlation Test			
			ES	EB
	ES	Correlation Coefficient	1.000	0.446
EB	Sig. (2-tailed)		<,001	
	N	118	118	

The positive correlation coefficient presented in Table 24 indicates that there is a positive association between enterprise scaling and entrepreneurial bricolage. Additionally, the p-value (Sig. 2-tailed) of less than 0.05 denotes a significant association. Lastly, the association is considered moderate based on the correlation coefficient of 0.446 being less than 0.5.

5.9.2 Spearman’s Correlation Test: Hypothesis 2

Correlation between SME Scaling and Core Firm Capabilities

H₀ (2): There is no statistically significant positive correlation between SME scaling and core firm capabilities

H₁ (2): There is a statistically significant positive correlation between SME scaling and core firm capabilities

Table 25: Spearman’s correlation Test: Hypothesis 2

Spearman’s rho	Correlation Test			
			ES	CFC
	ES	Correlation Coefficient	1.000	0.713
CFC	Sig. (2-tailed)		<,001	
	N	118	118	

The positive correlation coefficient presented in Table 25 indicates that there is a positive association between enterprise scaling and core firm capabilities. Additionally, the p-value (Sig. 2-tailed) of less than 0.05 denotes a significant association. Lastly, the association is considered strong based on the correlation coefficient of 0.713 being greater than 0.5.

Moderation Analysis

To test the moderating effect of entrepreneurial fear of failure between enterprise scaling and entrepreneurial bricolage was conducted using the multiple linear regression method. The results are illustrated in Table 26 and Table 27 below.

5.9.3 Multiple Linear Regression Results: Hypothesis 3

Moderating effect of Entrepreneurial Fear of Failure between SME Scaling and Entrepreneurial Bricolage

H_0 (3): Entrepreneurial fear of failure does not moderate the relationship between SME scaling and entrepreneurial bricolage

H_1 (3): Entrepreneurial fear of failure moderates the relationship between SME scaling and entrepreneurial bricolage

The results for EB from Table 26 below show a positive B coefficient value of 0.295 and is significant at the p-value of below 0.05. This means that as entrepreneurial bricolage increases, enterprise scaling increases. For EFF, a positive B value of 0.240 and a p-value below 0.05 indicate the significant effect, and also that when entrepreneurial fear of failure increases, enterprise scaling increases. The interaction term shows a negative B value of 0.058 and a p-value greater than 0.05 implying that the effect is not significant. Therefore, entrepreneurial fear of failure does not influence the relationship between entrepreneurial bricolage and enterprise scaling.

Table 26: Model Results for EFF moderating EB - ES

Model		Unstandardized Coefficients		Standardized Coefficients	t	p-value
		B	Std. Error	Beta		
1	Constant	1.162	0.383		3.036	0.003
	EB	0.295	0.097	0.268	3.034	0.003
	EFF	0.240	0.059	0.360	4.084	<0,001
	Interaction Term	-0.058	0.060	-0.078	-0.966	0.336

5.9.4 Moderation Results: Hypothesis 4

Moderating effect of Entrepreneurial Fear of Failure between SME Scaling and Core Firm Capabilities

H₀ (4): Entrepreneurial fear of failure does not moderate the relationship between SME scaling and core firm capabilities

H₁ (4): Entrepreneurial fear of failure moderates the relationship between SME scaling and core firm capabilities

The results for CFC from Table 27 below show a positive B coefficient value of 0.511 and is significant at the p-value of below 0.05. This means that as core firm capabilities increase, enterprise scaling increases. For EFF, a positive B value of 0.154, and a p-value below 0.05 indicate a significant effect, and also that when entrepreneurial fear of failure increases, enterprise scaling increases. The interaction term shows a positive B value of 0.030 and a p-value greater than 0.05, implying that the effect is not significant. Therefore, entrepreneurial fear of failure does not influence the relationship between core firm capabilities and enterprise scaling.

Table 27: Model Results for EFF moderating CFC - ES

Model		Unstandardized Coefficients		Standardized Coefficients	t	p-value
		B	Std. Error	Beta		
1	Constant	0.681	0.301		2.264	0.025
	CFC	0.511	0.077	0.567	6.642	<0,001
	EFF	0.154	0.052	0.231	2.962	0.004
	Interaction_Term1	0.030	0.049	0.046	0.607	0.545

5.10 Conclusion

Chapter 5 described the sample that was obtained during data collection. Additionally, the demographics of the sample were presented. The results for descriptive statistics, factor analysis, model fit, and hypotheses tests were presented. The discussion of these results will be discussed in Chapter 6.

CHAPTER 6

DISCUSSION OF RESULTS

6.1 Introduction

The main objective of the study was to establish the impact of entrepreneurial bricolage on the scaling of SMEs. This chapter aims to analyse the data of the statistical tests that were presented in chapter 5. The analysis will be based on the findings of the hypotheses outlined in Chapter 3 to determine whether or not the objective of the study is met. The analysis will further link findings to the research problem and compare the findings to the literature that was reviewed in Chapter 2.

6.2 Summary of Results

A synopsis of the findings as outlined in Chapter 5 is provided in Table 28 below.

Table 28: Summary of Results

Section Number	Section	Sub-Section	Results Summary
5.2	Description of the Sample Obtained		The collected data comprised a total of 131 respondents. Following data cleaning and addressing missing data, a valid sample size was 118.
5.3	Demographics		The population was described through demographics such as gender, age of owner/founder, age of firm, and the number of employees and annual revenue.
5.4	Construct Validity		Both Convergent and discriminant validity of constructs were established, through CFA.
5.5	Instrument Reliability		The reliability of the instrument was measured through Cronbach's alpha and all the scales for the four constructs were reliable.
5.6	Model Fit		The structural model was assessed through CFA, and the fit indices did not meet the acceptable criteria, therefore, based on that the model was not a good fit.
5.7	Dimension Reduction		Variables for EB and EFF were tested for factorability through dimension reduction. The KMO and Bartlett's tests confirmed their factorability. Through the EFA: all the items under EB loaded on one component and EFF loaded on four components. EFA was not conducted for ES and CFC.

5.8	Descriptive Statistics	Constructs and Questions	Insights into how the population responded to questions were assessed through descriptive statistics such as means, standard deviations and frequencies.
5.9.1, 5.9.2	Hypotheses Testing	H1, H2	Spearman's correlation test confirmed that there significant associations between EB and ES; and CFC and ES
5.9.3, 5.9.4		H3, H4	EFF does not have a moderating effect on the EB-ES and CFC-ES relationships

6.3 Sample Obtained

The total number of valid responses that were used for data analysis was 118. The sample size was considered for statistical analyses based on the recommendation by Hair Jr et al. (2018) and Hair et al. (2019) that a sample size greater than 100 is still acceptable for statistical analysis. Furthermore, the sample size was considered useable based on Hair Jr et al. (2018) guidance that models with five or fewer constructs having three or more items require a minimum sample of 100. In contrast, Steenkamp and Maydeu-Olivares (2022) demonstrate that for the CFA model, a sample size smaller than 200 does not achieve a good fit. Additionally, Rahi (2017) also states that a sample size larger than 200 is considered good for structural equation modelling. A comparison is also made with previous quantitative studies on the same constructs: previous quantitative studies on entrepreneurial bricolage had 305 (An et al., 2020), 369 (Digan et al., 2019), 345 (Fu et al., 2020), 274 (Ma & Yang, 2022), 354 (Yu et al., 2020), and 207 (Yu & Wang, 2021) as the numbers of their samples. Similar quantitative studies that were done on firm capabilities used 612 (Feng et al., 2017), 411 (Pucci et al., 2017) and 311 (Tho, 2018) samples. The sample sizes are all larger than 200, and the study's 118. This then poses a challenge that the findings of the study may not be generalised.

6.4 Demographics

The unit of analysis that was targeted for the study was an owner or founder of an SME that provides guest accommodation within all the provinces in SA. The study used five variables to collect the demographic information of the respondents. The variables included the gender and age of the respondent; the age, size and the total annual revenue

of the firm. The final sample that was used for data analysis was 118. The demographic variables were not used as control variables, but rather to gain insights into the type of population used for the study. There was no significant difference between the genders as males and females were almost equally spread with 50% (n = 59) female respondents and 49.2% (n = 58) male. The “other” gender constituted only 1 respondent. The majority (40.7%) of the respondents were between the ages of 46 to 55 years with 48 respondents, and the least were respondents that are over the age of 65 with just over 4%. It can be deduced that the population of the study was predominantly female between the age of 46 to 55.

The enterprise-level results indicate that the size of the firm that took part in the study is small with 48.3% of the firms employing between two and six employees followed by firms employing between seven and twelve employees. Furthermore, the average age of the firm that took part in the study was 9 and a half with over 60% of these firms earning a total annual revenue of less than R5 million. The population of the study was aimed at SMEs which are differentiated by the number of full-time employees the enterprise employ, and the enterprise’s total annual turnover and total gross asset value (Department of Small Business Development, 2019). The focus of this study is on South African SMEs in the tourism sector. According to the amended schedule of the small enterprise definition, as outlined in the National Small Business Amendment Act No. 26 of 2003, SMEs in the tourism industry in South Africa (SA) constitutes as follows (Department of Small Business Development, 2019): Small enterprises are those that employ 11 to 50 full-time employees with the total annual turnover of not more than R15 million, while medium enterprises employ 51 to 250 full-time employees with the total annual turnover of not more than R40 million. The firm size could be attributed to a study by Fu et al. (2020) that found that many of the ventures in the tourism sector are small, family-owned businesses. It is evident that the sample.

6.5 Overview of the Constructs

The study investigated four constructs that were subjected to different statistical testing and the results were presented in Chapter 5. The constructs are discussed below.

6.5.1 *Entrepreneurial Bricolage*

SMEs often operate under resource constraints, when compared to large established corporations (Wadhwa et al., 2017). These constraints include access to finance, infrastructure, regulatory environment, and market-related constraints (Rehman et al., 2019). These constraints can act as barriers to growth and make it difficult for SMEs to scale up their businesses. Literature on entrepreneurship has identified that entrepreneurial bricolage is a mechanism that can be used as an approach to overcome the negative effects of resource constraints on new venture growth. Recent studies (Fu et al., 2020; Yu et al., 2020; Yu & Wang, 2021) found that entrepreneurial bricolage is positively related to growth performance, new venture growth and improved growth capability. The entrepreneurial bricolage construct was used in the study to establish its impact on the scaling up and scaling out of well-established SMEs. An eight-item scale developed by Senyard et al. (2014) was adapted to further study the construct. The questions in the scale were designed to assess how the enterprise utilises its available resources to respond or come up with solutions to new challenges.

The validity of the constructs was measured by the convergent and discriminant validity tests. None of the factor loadings was below 0,5, therefore no questions were removed when testing for convergent validity. Convergent validity was established based on the AVE of 0,69. Equally, discriminant validity was also established. This was based on the Fornell-Larcker criterion that showed that the square root of the AVE was higher than the intercorrelations with other constructs. Additionally, as part of measuring discriminant validity, the HTMT intercorrelation values of EB with other constructs were within the recommended threshold of below 0.9. Lastly, all the EB individual items loaded well (higher) onto the construct as opposed to other constructs. Based on these three criteria, the questions that were used to measure the EB construct are indeed measuring what they are meant to measure, therefore EB is considered a valid construct.

The reliability of the scale used to measure the EB construct was measured using Cronbach's alpha, and a value of 0.935 was achieved. This shows that the variables have an acceptable internal consistency indicating that the scale used to measure entrepreneurial bricolage was regarded as reliable. After establishing validity and reliability, the structural model of the study was tested for fitness. Of the four fit indices that were used to measure the model fit i.e. Chi-square, CFI, RMSEA and SRMR, only the CFI and SRMR met the thresholds as stipulated by Naqvi et al. (2018). Therefore, the model did not achieve a good fit. Steenkamp and Maydeu-Olivares (2022) mention that for the CFA model, a sample size smaller than 200 does not achieve a good fit. Additionally, Rahi (2017) states that a sample size larger than 200 is considered good for structural equation modelling. The model not achieving a good fit can be attributed to the sample size of 118 which is smaller than 200.

Factorability was nonetheless conducted and dimension reduction formed part of the analysis. The KMO showed that the sample was adequate for factor analysis to be conducted as the value of 0.913 is greater than the minimum acceptable value of 0.7 (Ma et al., 2011). Also, the p-value of Bartlett's test is significant at a 5% level of significance ($p < 0.05$) thus implying that the items were factorable. The Eigenvalue 1 rule was applied to establish how many components/factors to extract. The Principal Components Analysis (PCA) results in Table 15 show that the items for the construct belong to one factor. This implied that the entrepreneurial bricolage construct scale could not be divided into constructs, and it is valid as it is. All eight questions on the scale were used in testing the hypotheses.

Descriptive statistics for the construct were analysed and based on the five-point Likert scale that was specified in Section 4.6, respondents indicated their level of agreement. The frequency tables (see Appendix E) for the construct indicate that the majority (over 60%) of the respondents "agree" with the sentiments that were measuring entrepreneurial bricolage, followed by 26% that "strongly agree". Table 20 shows the descriptive statistics for the eight questions under EB. The mean per question ranges between 3,82 and 4,12 with the overall mean for the construct being 4,08. This indicates that in the questions provided to respondents on their bricolage behaviours the respondents mainly agreed. The degree of dispersion from the mean was below 1 with standard deviations ranging between 0,827 and 0,932, and for the overall construct, 0.753.

6.5.2 Core Firm Capabilities

Feng et al. (2017) and Tho (2018) have referred to firm capabilities as various sophisticated collections of knowledge and skills that allow the organisation to apply a combination of its available resources in order to outperform its competitors. Pucci et al. (2017) refer to these capabilities as distinct, different from ordinary resources, and whose function is to increase the potential and productivity of the resources that are available in the firm, therefore increasing profitability. Putting the focus on the tourism sector, according to Fu et al. (2020), many hospitality and tourism ventures are family businesses. This already categorises these ventures as small businesses, putting them in a more vulnerable position of facing a lack of resources, capabilities, and experience, to scale their businesses, thereby growing the tourism industry (Fu et al., 2020). A fifteen-question scale comprising four sub-constructs (marketing, operation and R&D and innovativeness) was used to further study the construct. The questions in the scale were designed to assess whether these capabilities have a relationship with the scaling up and scaling out of SMEs.

From the CFA, none of the factor loadings was below 0,5, therefore no questions were removed when testing for convergent validity. Convergent validity was established based on the AVE of 0,60. Equally, discriminant validity was also established. This was based on the Fornell-Larcker criterion that showed that the square root of the AVE was higher than the intercorrelations with other constructs. Additionally, as part of measuring discriminant validity, the HTMT intercorrelation values of CFC with other constructs were within the recommended threshold of below 0.9. Lastly, all the CFC individual items loaded well (higher) onto the construct as opposed to other constructs. Based on these three criteria, the questions that were used to measure the CFC construct are indeed measuring what they are meant to measure, therefore CFC is considered a valid construct.

The scale used to measure CFC and its sub-constructs was considered reliable based on Cronbach's alpha values that are above the 0.6 benchmark as set out by Al-Metwali et al. (2021). After establishing validity and reliability, the structural model of the study was tested for fitness and the model did not achieve a good fit as all the four fit indices that were used for measurement did not meet the acceptable thresholds as stipulated by Naqvi et al. (2018). The core firm capabilities construct has already been explored and is grouped into four sub-constructs containing six, four, three and two variables. Dimension

reduction was therefore not conducted and the validity of the construct has been validated in Section 5.4.

In analysing the descriptive statistics of the questions of this construct, of the fifteen questions that respondents answered, most (almost 50%) of the respondents seem to “strongly agree” that their firms have the ability to improve the quality of customer service. This is based on the highest mean score of 4.1. The question with the lowest mean score (2,87) is CFC15: “Our changes in service lines have usually been dramatic” with a standard deviation of 1,223 implying that of the two questions that were responded to within the sub-construct “innovativeness capabilities”, about 45% of the respondents agree with that specific question. The standard deviation for the overall construct is below 1 at 0.919.

6.5.3 Enterprise Scaling

O’Reilly and Binns (2019) describe business scaling as where available assets and capabilities are reallocated to assist in the growth of a new firm. In the entrepreneurship literature, scaling can relate to organisational or financial growth; it can also refer to franchising or replication and expansion to increase reach to customers, in the marketing literature (Khare & Joshi, 2018). A 21-question scale comprising seven sub-constructs with three questions each was used to further study the construct.

As with the other constructs, the validity of the ES construct was measured through the convergent and discriminant validity tests. Six questions (ES4, ES5, ES6, ES11, ES18 and ES20) were removed from the analysis as their standardised loadings were below between 0.5 and 0.7. Following the removal of these questions, the AVE improved to 0,51 which was above the acceptable 0.5 indicating that convergent validity has been achieved. Equally, discriminant validity was also established. This was based on the Fornell-Larcker criterion that showed that the square root of the AVE was higher than the intercorrelations with other constructs. Additionally, as part of measuring discriminant validity, the HTMT intercorrelation values of ES with other constructs were within the recommended threshold of below 0.9. Lastly, all the ES individual items loaded well (higher) onto the construct as opposed to other constructs. Based on these three criteria, the questions that were used to measure the ES construct are indeed measuring what they are meant to measure, therefore ES is considered a valid construct.

The scale that was used to study the ES construct was subjected to reliability testing using Cronbach's alpha. This was done per sub-construct as illustrated in Table 11. Reliability was achieved for all the sub-constructs as the values were over the required 0,6 recommended by Al-Metwali et al. (2021). This shows that the variables have an acceptable internal consistency indicating that the scale used to measure ES was regarded as reliable. After establishing validity and reliability, the structural model of the study was tested for fitness. All four fit indices that were used to measure the model fit did not meet the acceptable thresholds as stipulated by Naqvi et al. (2018). The model did not achieve a good fit regardless of multiple efforts of removing variables with lower standardised loadings. The ES construct has already been explored and is grouped into seven sub-constructs containing three variables per sub-construct. Dimension reduction was therefore not conducted and the validity of the construct has been validated in Section 5.4.

The descriptive statistics for the 21 questions under the ES construct are shown in Table 22. The mean per question ranges between 2,46 and 3,85 with the overall mean for the construct being 3,40. This indicates that most of the respondents both agreed and were uncertain about questions regarding the scalability of their businesses. The degree of dispersion from the mean was relatively high with standard deviations ranging between 0,932 and 1,412, and for the overall construct, 0.828.

6.5.4 Entrepreneurial Fear of Failure

Fear of failure is still a developing theory within entrepreneurship and scholars have mostly conceptualised it as having a negative effect on the entrepreneurial context. Fear of failure has been identified as one of the factors negatively affecting the entrepreneurial intentions of non-entrepreneurs, or emerging entrepreneurs rather than established entrepreneurs or those who have been in business and exploiting opportunities already (Cacciotti et al., 2020). Kollmann et al. (2017) further state that fear of failure is responsible for individuals' avoidance reactions when facing obstacles in business. Hunter et al. (2021) have however found that with the involvement of the entrepreneur's coping mechanism, fear of failure can be motivating, on condition that the entrepreneur is confident in their capability to handle it. Additionally, it has been found that fear of failure may drive highly ambitious entrepreneurs to make more concessions for their business, therefore a high fear of failure will result in increased investment in the business (Morgan & Sisak, 2016). This construct

was used in the study to determine its moderating effects on the positive relationships between enterprise scaling and entrepreneurial bricolage as well as core firm capabilities. A 21-item scale developed by Cacciotti, et al. (2020) was adapted and used to further study the construct. The questions from the scale were aimed at measuring the level of how enterprise owners or founders fear the unsustainability and failure of their businesses.

The validity of the constructs was measured by the convergent and discriminant validity tests. None of the factor loadings was below 0,5, therefore no questions were removed when testing for convergent validity. Convergent validity was established based on the AVE of 0,59. Equally, discriminant validity was also established. This was based on the Fornell-Larcker criterion that showed that the square root of the AVE was higher than the intercorrelations with other constructs. Additionally, as part of measuring discriminant validity, the HTMT intercorrelation values of EFF with other constructs were within the recommended threshold of below 0.9. Lastly, all the EFF individual items loaded well (higher) onto the construct as opposed to other constructs. Based on these three criteria, the questions that were used to measure the EFF construct are indeed measuring what they are meant to measure, therefore EFF is considered a valid construct.

The reliability of the scale used to measure the EFF construct was measured using Cronbach's alpha, and a value of 0.965 was achieved. This shows that the variables have an acceptable internal consistency indicating that the scale used to measure entrepreneurial fear of failure was regarded as reliable. After establishing validity and reliability, the structural model of the study was tested for fitness. The four fit indices that were used to measure the model fit i.e. Chi-square, CFI, RMSEA and SRMR did not meet the acceptable thresholds as stipulated by Naqvi et al. (2018). Steenkamp and Maydeu-Olivares (2022) mention that for the CFA model, a sample size smaller than 200 does not achieve a good fit. Additionally, Rahi (2017) states that a sample size larger than 200 is considered good for structural equation modelling. The model not achieving a good fit can be attributed to the sample size of 118 which is smaller than 200.

Factorability was nonetheless conducted and dimension reduction formed part of the analysis. The KMO showed that the sample was adequate for factor analysis to be conducted as the value of 0.924 is greater than the minimum acceptable value of 0.7 (Ma et al., 2011). Also, the p-value of Bartlett's test is significant at a 5% level of significance ($p < 0.05$) thus implying that the items were factorable. The Eigenvalue 1 rule was applied

to establish how many components/factors to extract. The Principal Components Analysis (PCA) analysis was used to extract the factors, and it yielded four components (named entrepreneurial fear of failure 1, 2, 3 and 4) representing entrepreneurial fear of failure and the items that belong to these components. The four extracted components represented 80.363% of the variance (see Appendix J).

Descriptive statistics for the construct were analysed and mean scores of over 4 demonstrate that most of the respondents answered with “neutral to somewhat not afraid” on the seven-point Likert scale described in Chapter 4. The average degree of dispersion from the mean for the four components was over 1 point with standard deviations ranging between 1,294 and 1,615, and for the overall construct, 1,242.

6.6 Hypotheses Testing

6.6.1 Hypothesis 1: The relationship between SME scaling and entrepreneurial bricolage

This hypothesis aimed to establish the relationship between SME scaling and entrepreneurial bricolage. Lyon and Fernandez (2012) identify various strategies for scaling up enterprise operations; these include diversification and franchising. They further mention that for each of these strategies to be successful, various types of organisational resources, competencies and capabilities are required. Entrepreneurial bricolage has emerged as one of the key theories in entrepreneurship literature that is used to understand the behaviours of entrepreneurs when faced with resource constraints (Kickul et al., 2018). It is a resource-application strategy that enables emerging businesses to survive and thrive (Fu et al., 2020). Academic literature including studies by Fu et al. (2020); Yu et al. (2020); and Yu and Wang (2021) has established the positive association of entrepreneurial bricolage with growth performance, improved growth capability and new venture growth. However, there is still a gap in exploring its impact on the scaling up of established businesses. It was argued that SMEs can leverage entrepreneurial bricolage as a strategy to lower their resource constraints thus enabling the scaling up and scaling out of their business offerings. Therefore, it was hypothesised as follows:

H₀ (1): There is no statistically significant positive correlation between SME scaling and entrepreneurial bricolage

H₁ (1): There is a statistically significant positive correlation between SME scaling and entrepreneurial bricolage

A Spearman's ranked correlation test was used to establish the association between enterprise scaling and entrepreneurial bricolage. The correlation results for hypothesis one indicated that there is a significant positive correlation between SME scaling and entrepreneurial bricolage. The results presented in Table 24 show a positive correlation coefficient indicating a positive association between enterprise scaling and entrepreneurial bricolage. Additionally, the p-value (Sig. 2-tailed) of less than 0.05 denotes a significant association. Lastly, the association is considered moderate based on the correlation coefficient of 0.446 being less than 0.5. Therefore, the null hypothesis H₀ (1) stated above is rejected, and the alternate hypothesis H₁ (1) is accepted.

These findings demonstrate the importance of the behaviour of an owner of an SME towards entrepreneurial bricolage as a resource-application strategy to enable a firm to thrive. The findings suggest that through entrepreneurial bricolage, owners of SMEs in the tourism sector in SA can overcome resource constraints thus enabling scaling up and scaling of their businesses. The findings also agree with the findings of studies by Fu et al. (2020); Yu et al. (2020); and Yu and Wang (2021) which established the positive association of entrepreneurial bricolage with growth performance, and improved growth capability.

6.6.2 Hypothesis 2: The relationship between SME scaling and core firm capabilities

Hypothesis 2 sought to establish the relationship between SME scaling and core firm capabilities. Marketing, R&D, operations and innovativeness capabilities have been found to be the core firm capabilities that contribute to the firm's ability to create value for its customers, therefore, gaining a competitive edge (Feng et al., 2017; Pucci et al., 2017). Studies by Feng et al. (2017); Pucci et al. (2017); and Tho (2018) found that firm capabilities have a positive influence on firm performance, revenue and profit growth. It was, therefore, argued that based on the increased firm performance, revenue and profit growth due to having these capabilities, SMEs can scale up and scale out their operations to expand their businesses and reach a larger number of customers. This hypothesis, therefore, aims to test the impact core firm capabilities have on the scaling of SMEs. It was thus hypothesised as follows:

H₀ (2): There is no statistically significant positive correlation between SME scaling and core firm capabilities

H₁ (2): There is a statistically significant positive correlation between SME scaling and core firm capabilities

The correlation results for hypothesis two indicated that there is a significant positive correlation between SME scaling and core firm capabilities. The results presented in Table 25 show a positive correlation coefficient indicating a positive association between enterprise scaling and enterprise scaling. Additionally, the p-value (Sig. 2-tailed) of less than 0.05 denotes a significant association. Lastly, the association is considered strong based on the correlation coefficient of 0.713 being greater than 0.5. Therefore, the null hypothesis H₀ (2) stated above is rejected, and the alternate hypothesis H₁ (2) is accepted.

Based on the findings of studies by (Feng et al., 2017; Pucci et al., 2017; Tho, 2018), it can be concluded that a firm having marketing, R&D, operations and innovativeness capabilities; will be profitable, will have increased performance, a competitive advantage, and therefore have high growth prospects. Based on the increased firm performance and growth due to having these capabilities, SMEs can scale up and scale out their operations and expand their businesses to reach a larger number of customers.

6.6.3 Hypothesis 3: The moderating effects of entrepreneurial fear of failure in the relationship between SME scaling and entrepreneurial bricolage

The aim of the analysis of this hypothesis is to demonstrate the moderating effects of entrepreneurial fear of failure in the relationship between SME scaling and entrepreneurial bricolage. Ng and Jenkins (2018) explain that in an achievement setting, fear of failure presents itself as an avoidance mechanism that is based on expecting or anticipating negative results. As a nascent entrepreneur or one that is running a new business, fear of failure comes as a cognitive and emotional response to a frightening impediment (Engel et al., 2021). Kollmann et al. (2017) also state that fear of failure is responsible for individuals' avoidance reactions when facing obstacles in business. In this study, it was argued that entrepreneurs can leverage bricolage to lower resource constraints and thus have sufficient resources to enable the replication and expansion of their businesses. In possessing entrepreneurial bricolage behaviour, the fear of an unsuccessful expansion or failure of any other scaling logistics can discourage the idea of pursuing to scale up or

scale out an enterprise. Therefore, the impact of entrepreneurial bricolage on enterprise scaling will be moderated by fear of failure. It was thus hypothesised as follows:

H₀ (3): Entrepreneurial fear of failure does not moderate the relationship between SME scaling and entrepreneurial bricolage

H₁ (3): Entrepreneurial fear of failure moderates the relationship between SME scaling and entrepreneurial bricolage

The results presented in Table 26 show that there is no significant moderating effect of entrepreneurial fear of failure between entrepreneurial bricolage and enterprise scaling. EFF does not negatively impact the relationship between EB and ES. This is in agreement with Hunter et al. (2021) findings that fear of failure is rather motivating to an entrepreneur that is confident in their capability to handle it. Morgan and Sisak (2016) also found that high fear of failure results in increased investment in the business by the entrepreneur as it may drive highly ambitious entrepreneurs to make more concessions for their business.

6.6.4 Hypothesis 4: The moderating effects of entrepreneurial fear of failure in the relationship between SME scaling and core firm capabilities

In this study, it was posited that entrepreneurs can leverage bricolage to lower resource constraints and have sufficient resources to enable the replication and expansion of their businesses. A study by Pucci et al. (2017) found that core firm capabilities (i.e., marketing, R&D, operations and innovative capabilities) have a positive influence on firm performance. It is also argued that these capabilities increase the potential and productivity of the resources that are available in the firm, therefore increasing profitability. Therefore, firms having core firm capabilities can have increased performance, competitive advantage, increased resource productivity, and increased profitability thus enabling them to scale up and scale out their businesses. It was however put forward that the owner of the enterprise having fear of failing can discourage the idea of replication or expanding their business idea geographically to reach out to a larger number of customers. As a result, the following hypothesis was postulated to test the moderating effects accordingly:

H₀ (4): Entrepreneurial fear of failure does not moderate the relationship between SME scaling and core firm capabilities

H₁ (4): Entrepreneurial fear of failure moderates the relationship between SME scaling and core firm capabilities

Fear of failure has been identified as one of the factors negatively affecting the entrepreneurial intentions of non-entrepreneurs, or emerging entrepreneurs rather than established entrepreneurs or those who have been in business and exploiting opportunities already (Cacciotti et al., 2020). The enterprise-level demographic results show that the average age of the firm that participated in this study is about nine and a half years (9.46) in operation. These firms have been in operation and have passed the nascent stage. The results in Table 27 show that entrepreneurial fear of failure does not have a moderating effect on the relationship between core firm responsibilities and enterprise scaling. This leads to rejecting hypothesis H₁ (4) and accepting the null hypothesis H₀ (4). It is thus concluded that fear of failure does not moderate the relationship between core firm capabilities and enterprise scaling of well-established tourism sector SMEs in SA. The findings suggest that EFF does not negatively impact the relationship between CFC and ES which are in agreement with Hunter et al. (2021) findings that fear of failure is rather motivating to an entrepreneur that is confident in their capability to handle it.

6.7 Summary of Results from Hypotheses Testing

Figure 8 below illustrates the hypothesised results as discussed above. To summarise, the study has found that there is a positive significant correlation between entrepreneurial bricolage and SME scaling; denoted by the green line between the two constructs. Similarly, there is a positive significant correlation between core firm capabilities and SME scaling; denoted by the green line between the two constructs. It is also found that entrepreneurial fear of failure does not have a moderating effect on both relationships as depicted by the red line in the framework below.

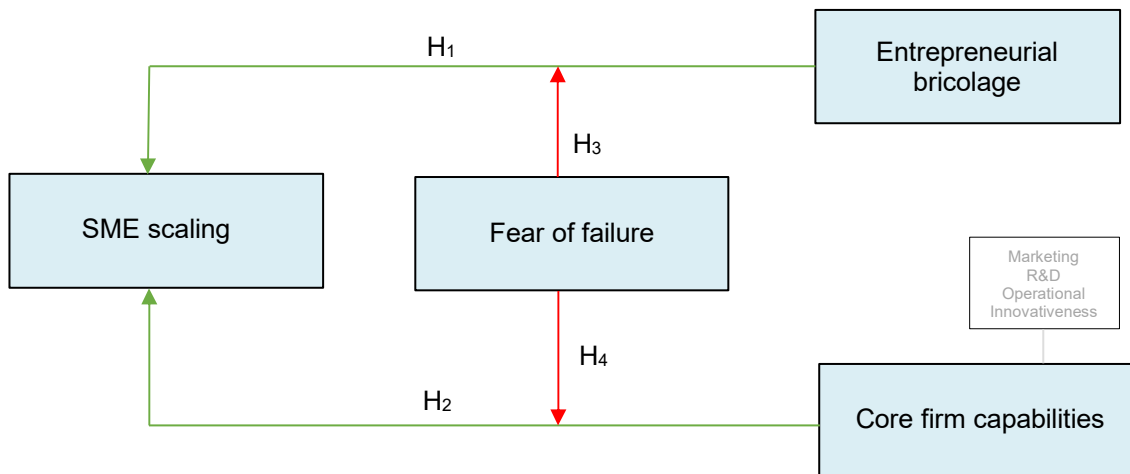


Figure 8: Conceptual framework for the study

6.8 Conclusion

This chapter discussed the results of the analyses and tests conducted to analyse the study population, the constructs and the hypotheses presented in Chapter 3. It has been demonstrated that the average age of firms that took part in the study is nine and a half meaning they are not new ventures. The results also indicate that these firms are considered small as the majority of them (over 48%) employ between two and six employees, and over 60% of them earn less than R5 million in annual revenue. It was established that there is a positive correlation between SME scaling and entrepreneurial bricolage as well as between SME scaling and core capabilities. Additionally, entrepreneurial fear of failure does not moderate the positive correlation between SME scaling and core capabilities and between SME scaling and entrepreneurial bricolage. The next chapter provides the conclusions and recommendations in terms of future research, as well as the limitations of the study.

CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

The objective of the study was to establish what impact entrepreneurial bricolage and core firm capabilities have in the scaling up and scaling out of established SMEs that operate in the tourism sector, in SA. Furthermore, the study sought to explore the role that entrepreneurial fear of failure has on the relationship between enterprise scaling and entrepreneurial bricolage, as well as core firm capabilities. The study was motivated by the need to offer value by enriching small and medium business owners or managers with the knowledge of how they can leverage the entrepreneurial bricolage concept as a strategy to aid in scaling their businesses. The study also aimed at assisting business owners, founders or managers, by identifying which organisational capabilities are key to scaling a business, and how to best manage their organisation's available resources in order to gain a competitive advantage in scaling their businesses as SMEs have been found to be the primary drivers of economic growth that create jobs and alleviate poverty, in emerging or low-income countries (Maziriri & Chivandi, 2020). This chapter provides the principal conclusions of the study's findings as well as recommendations for future research. In addition, the chapter discusses the business as well as the theoretical implications of the study, and the limitations.

7.2 Principal Conclusions

The conclusions on key findings of the study are presented below:

The existing measuring scales for the constructs: entrepreneurial bricolage, enterprise scaling, core firm capabilities and entrepreneurial fear of failure were validated. The entrepreneurial fear of failure constructs loaded into four components from factor analysis. The identified variables and constructs indeed measured what they were designed to measure. Although the measuring instrument was used in a different context in various studies, all the variables displayed good internal consistency rendering the instrument

reliable for the context of this study. The structural model of the study did not have a good fit, and this can be attributed to the insufficient sample size smaller than 200.

The hypotheses presented in Chapter 3 were tested. The results for hypothesis one indicate that there is a moderate, positive significant correlation between SME scaling and entrepreneurial bricolage. These findings are consistent with recent studies by Fu et al. (2020) who have found that entrepreneurial bricolage improves a firm's growth capability and strategic flexibility. Strategic flexibility involves adopting a bricolage concept and growth capability relates to the ability to scale up and scale out the business. In addition, the finding from hypothesis one concurs with the findings by Fu et al. (2020) and Yu et al. (2020) that entrepreneurial bricolage is positively related to venture growth and adaptiveness, growth performance and ambidexterity, as bricolage scaling involves expansion thus venture growth and growth performance. Based on these findings, it is concluded that owners of SMEs adopting a bricolage concept can aid in the scaling up and scaling out of their businesses.

The second hypothesis found that there is a strong, positive significant correlation between SME scaling and core firm capabilities. This finding is consistent with the findings from studies by Pucci et al. (2017); and Tho (2018) that found that core firm capabilities have a positive influence and are positively related to firm performance. Additionally, the findings from hypothesis two concur with a study by Feng et al. (2017) that found that firm capabilities have a positive effect on both revenue and profit growth. Based on these findings, it can be concluded that a firm having marketing, R&D, operations and innovativeness capabilities; will have increased performance, a competitive advantage, will be profitable, and therefore have high growth prospects. And, therefore, based on the increased firm performance and growth due to having these capabilities, SMEs can scale up and scale out their operations and expand their businesses to reach a larger number of customers.

The purpose of hypothesis 3 was to establish the moderating effect of entrepreneurial fear of failure on the relationship between entrepreneurial bricolage and enterprise scaling. The results show that there is no significant effect on the relationship between entrepreneurial bricolage and enterprising scaling. Similar to hypothesis 3, the purpose of hypothesis 4 was to establish the moderating effect of entrepreneurial fear of failure on the relationship between core firm capabilities and enterprise scaling. The results show

that there is no significant effect on the relationship, thus entrepreneurial fear of failure does not moderate the relationship.

From the literature reviewed in Chapter 2, it can be summed up by taking a stance that firms making use of the bricolage concept can result in growth opportunities; and firms having core firm capabilities can have increased performance, competitive advantage, increased resource productivity, and increased profitability. All of these make it possible for firms to replicate and expand their businesses geographically to increase their customer base or reach. It is thus concluded that well-established tourism sector SMEs in SA who adopt a bricolage concept and possess core firm capabilities will not be deterred by fear of failure to expand their businesses.

7.3 Theoretical Contribution

The study contributes to the academic body of knowledge by linking firm capabilities and enterprise scaling to the entrepreneurial bricolage theory (Yu & Wang, 2021). While studies on entrepreneurial bricolage have focused on start-ups and new ventures, the study looks at how established SMEs can make use of the entrepreneurial bricolage concept. Additionally, the study contributes to developing the entrepreneurial literature by conceptualising entrepreneurial fear of failure and examining the moderating role played by fear of failure in the relationship between entrepreneurial bricolage and core firm capabilities on enterprise scaling. Cacciotti et al. (2016) posit that fear of failure as a construct has been defined and measured in many different ways that are characterised by a “static approach” (p. 303), thus limiting its association with entrepreneurship. This study expands the understanding of the entrepreneurial fear of failure within the advanced entrepreneurial stages, as opposed to the nascent stage.

7.4 Implications for Management and other Stakeholders

SMEs have been found to be the primary drivers of economic growth that create jobs and alleviate poverty, in emerging or low-income countries (Maziriri & Chivandi, 2020). The South African tourism sector has been identified as a key contributor to the economic growth and development of SA which could aid in reducing the high unemployment rate that the country is facing (Department of Tourism, 2021). It is thus critical that the small and medium businesses in the tourism sector grow and expand across the country, in order to contribute to the economic and social prosperity of the nation. This study can

assist governments as stakeholders in small business development, by giving them direction as to what kind of aid SMEs in the tourism sector require for them to scale. For example, to scale up and out, SMEs may require instead of funding, land for expansion in a different geographical location, leadership or entrepreneurship training for the owner e.t.c.

This study also offers value in business as its findings can enrich small and medium business owners or managers with the knowledge of how they can leverage the entrepreneurial bricolage concept as a strategy to aid in scaling their businesses. The findings of the study will also assist business owners, founders or managers, by identifying which organisational capabilities are key to scaling a business, and how to best manage their organisation's available resources in order to gain a competitive advantage in scaling their businesses. In addition, through this study, business owners or founders can acquaint themselves with the understanding of the effects of fear of failure when they need to take strategic decisions such as expanding or scaling the business.

7.5 Limitations of the Research

Based on the design of the proposed study, several limitations need to be highlighted:

- The research design of the study was descripto-explanatory and quantitative in nature and used a structured self-administered questionnaire with closed-ended questions. Data gathered through a survey, in contrast to data gathered through other research strategies, is likely to be undetailed (Saunders & Lewis, 2018). This is seen as a limitation as the data collected from structured observations are based on standardisation; thus, the respondents are not afforded the opportunity to express their whole perspective and additional perspectives on the subject matter. Additionally, structured self-completed questionnaires prevent respondents from seeking clarification on any questions they may not fully understand.
- The study focuses on entrepreneurial bricolage behaviours and core firm capabilities in the scaling of SMEs within the South African context; that being the case, the findings may have a cultural bias. In addition to the one-country context, the sample was drawn from a single industry (tourism sector). This is seen as a limitation as it is essential to examine whether the findings of the study can be generalised to other industries or other contexts of similar countries.

- The study was conducted using a cross-sectional time dimension to collect the data, with which the data is collected at a particular point in time as opposed to a longitudinal time dimension. This is seen as a limitation as there can be changing patterns in entrepreneurial bricolage behaviours of SME founders or owners that would not be tracked over time. If the study was carried out at a different period, the outcomes might be different, however, due to time constraints, this limitation could not be avoided.
- SMEs are found to often operate under resource constraints when compared to large established corporations (Wadhwa et al., 2017). Different enterprises have varying firm capabilities and experience different levels of resource constraints. To generalise the results of enterprises of different types, sizes, ages and revenue brackets, may produce misleading results.
- The respondents of the survey were either founders or owners of enterprises, as a result of their seniority in occupation, they may express views that falsely elevate them to a position they are not in. Furthermore, varying skill sets, educational backgrounds and levels of expertise exist among enterprise owners or founders in the tourism sector, as a result, the level of understanding and interpretation of questions varied from one person to the other. Based on the questionnaire pilot study, complex questions adapted from previous studies were revised to provide a better understanding.
- A sample size of 118 was low in comparison with previous studies done on similar constructs. Previous quantitative studies on entrepreneurial bricolage have had 305 (An et al., 2020), 369 (Digan et al., 2019), 345 (Fu et al., 2020), 113 (Kickul et al., 2018), 274 (Ma & Yang, 2022), 354 (Yu et al., 2020), and 207 (Yu & Wang, 2021) samples. Similar quantitative studies that were done on firm capabilities used 612 (Feng et al., 2017), 411 (Pucci et al., 2017) and 311 (Tho, 2018) samples.
- The structural model of the study was not a good fit as it did not satisfy the fit indices. This can be attributed to the sample size that is smaller than 200.

- The fit indices that determine whether the data as conceptualised in the model is fit, were not satisfied. This can be attributed to the small size being below 200. Therefore, this limits the generalisation of the results.

7.6 Recommendations for Future Research

The objective of the study was to establish what impact entrepreneurial bricolage and core firm capabilities have in the scaling up and scaling out of established SMEs that operate in the tourism sector, in SA. Furthermore, the study sought to explore the role that entrepreneurial fear of failure has on the relationship between enterprise scaling and entrepreneurial bricolage, as well as core firm capabilities. The research study was contextualised around SA with respondents located across all nine provinces. Future researchers could look at a more focused geographical location. Leadership has been identified as one of the barriers to scaling up (Harnish, 2014). The unit of analysis for the study was the owner or founder of the SME, as the leader of the firm. It would aid literature if the type of leadership required for the successful scaling of a business is investigated further. The educational qualifications of the owners of firms that participated in the study were not considered, it would also be interesting to discover if there is a link between the educational qualifications and/or backgrounds of the owners with the decision-making behaviour. The findings from the descriptive statistics show that the average age of firms that participated in the study is nine and a half years, and although these businesses are not considered new, an interesting area of investigation would be to examine whether bricolage is preferred or more effective in new ventures than in established firms.

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APPENDICES

APPENDIX A: CONSENT STATEMENT

Dear Respondent

I am currently a student at the University of Pretoria's Gordon Institute of Business Science and completing my research in partial fulfilment of an MBA. As such, I am conducting research on the impact of entrepreneurial bricolage on the scaling of SMEs in the tourism sector. To that end, you are asked to complete an online survey. This will help us better understand how SMEs can leverage entrepreneurial bricolage.

The survey should take no more than 20 minutes of your time. Your participation is voluntary, and you can withdraw at any time without penalty. Your participation is anonymous and only aggregated data will be reported. By completing the survey, you indicate that you voluntarily participate in this research. If you have any concerns, please contact my supervisor or me.

Our details are provided below:

Researcher name: Lesedi Seeco

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APPENDIX B: ONLINE QUESTIONNAIRE

Section A: General Information

Gender	1) Male <input type="checkbox"/>	2) Female <input type="checkbox"/>	3) Other <input type="checkbox"/>		
Age (years)	a) 21-35 <input type="checkbox"/>	b) 36-45 <input type="checkbox"/>	c) 46-55 <input type="checkbox"/>	d) 56-64 <input type="checkbox"/>	e) >65 <input type="checkbox"/>
Age of firm (years in operation)					
Number of employees	a) Between 2 and 6 <input type="checkbox"/>	b) Between 7 and 12 <input type="checkbox"/>	c) Between 13 and 20 <input type="checkbox"/>	d) Other <input type="checkbox"/>	
Annual revenue (Rands)	a) Less than 5m <input type="checkbox"/>	b) Between 5m and 10m <input type="checkbox"/>	c) Between 11m and 15m <input type="checkbox"/>		
	e) Between 16m and 30m <input type="checkbox"/>	f) Between 31m and 60m <input type="checkbox"/>	h) Above 60m <input type="checkbox"/>		

Source: Department of Small Business Development (2019)

Section B: Entrepreneurial Bricolage

Item	1 Strongly disagree	2 Disagree	3 Uncertain	4 Agree	5 Strongly agree
We are confident of our ability to find workable solutions to new challenges by using our existing resources					
We gladly take on a broader range of challenges than others with our resources would be					

able to					
We use any existing resource that seems useful responding to a new problem or opportunity					
We deal with new challenges by applying a combination of our existing resources and other resources inexpensively available to us					
When dealing with new problems or opportunities, we take action by assuming that we will find a workable solution					
By combining our existing resources, we take on a surprising variety of new challenges					
When we face new challenges, we put together workable solutions from our existing resources					
We combine resources to accomplish new challenges that the resources weren't originally intended to accomplish					

Source: Adapted from Senyard et al. (2014)

Section C: Core Firm Capabilities

	1 Strongly disagree	2 Disagree	3 Uncertain	4 Agree	5 Strongly Agree
Marketing capabilities					
My firm has ability to...					
Sense market change and build strong and steady bonds with customers					

Obtain precise knowledge of customer profiles to differentiate its services					
Obtain customer feedbacks and forecast customer needs					
Quickly respond to customer needs					
Minimize customer complaints					
Improve the quality of customer service					
Operations capabilities					
My firm has ability to...					
Improve process flexibility					
Improve process quality					
Improve delivery dependability					
Improve operational efficiency					
Research & Development (R&D) capabilities					
My firm has ability to...					
Improve service quality					

Lower the price of the service					
Improve functionalities of the service					
Innovativeness capabilities					
We introduced many new lines of services in the last three years					
Our changes in service lines have usually been dramatic					

Source (Marketing, operations and R&D capabilities): Adapted from Krasnikov & Jayachandran (2008)

Source (Innovativeness capabilities): Adapted from Covin and Slevin (1989)

Section D: Enterprise Scaling

Item	1 Strongly disagree	2 Disagree	3 Uncertain	4 Agree	5 Strongly agree
Compared to other organizations working to resolve similar social problems as our organization . . .					
Staffing					
. . . we have been effective at meeting our labor needs with people who have the necessary skills					
. . . we have an ample pool of capable volunteers available to help us meet our labor needs					

. . . we have individuals in management positions who have the skill to expand our organization, program or principles					
Communicating					
. . . we have been effective at communicating what we do to key constituencies and stakeholders					
. . . we have been successful at informing the individuals we seek to serve about the value of our program for them					
. . . we have been successful at informing donors and funders about the value of what we do					
Alliance-Building					
. . . we have built partnerships with other organizations that have been win-win situations for us and them					
. . . we rarely try to 'go it alone' when pursuing new initiatives					
. . . we have accomplished more through joint action with other organizations than we could have by flying solo					
Lobbying					
. . . we have been successful at getting government agencies and officials to provide financial support for our efforts					
. . . we have been successful at getting government agencies and officials to create laws, rules, and regulations that support our efforts					
. . . we have been able to raise our cause to a higher place on the public agenda					
Earnings Generation					

. . . we have generated a strong stream of revenues from the services that we sell for a price					
. . . we have cultivated donors and funders who have been major sources of revenue for us					
. . . we have found ways to finance our activities that keep us sustainable					
Replicating					
. . . we have a 'package' or 'system' that can work effectively in multiple locations or situations					
. . . we find it easy to replicate our services					
. . . we have been successful at controlling and coordinating our service in multiple locations					
Stimulating Market Forces					
. . . we have been able to demonstrate that businesses can make money through supporting our initiatives					
. . . we have been able to demonstrate that consumers can save money through patronizing our services					
. . . we have been able to trust market forces to help resolve social problems					

Source: Adapted from Bloom and Brett (2010)

Section E: Entrepreneurial Fear of Failure

Over the past few months, I have been afraid...	1 Very much afraid	2 Mostly afraid	3 Somewhat afraid	4 Neutral	5 Somewhat not afraid	6 Mostly not afraid	7 Not at all afraid
...of not getting enough funding to move the company forward							
...of not being able to finance the business							
...of not being able to get the required funding for the business							
...that no one will be interested in the product/service							
...that this is not a valuable business idea							
...that there is no need for our product/service out there							
...of other people's expectations of me							
...of disappointing the people who are important to me							
...of losing the trust of people who are important to me							
...that running the business is taking my time away from other activities							
...of missing important events of my life because of my business							
...of not being able to spend enough time with my family and friends							

...of not being able to manage people effectively							
...of not being able to manage the business effectively							
...of not being able to fulfil all the roles that this job requires							
...of running out of money							
...of losing all my savings							
...of losing all I have invested in the business/business activities							
Over the past few months, I have been afraid of the organization's ability to...							
...meet client expectations							
...overcome technical challenges							
...deliver upon promises							

Source: Adapted from Cacciotti, et al. (2020)

APPENDIX C: CODE BOOK

Section A: Demographics

Gender:	Firm Age	Age:	
0 = Male	As they are, Nr	0 = 21-35	3 = 56-64
1 = Female		1 = 36-45	4 = >65
2 = Other		2 = 46-55	
Number of Employees:		Annual Revenue:	
0 = 2-6 R16m-R30m	2 = 13-20	0 = <R5m	3 =
1 = 7-12 R31m-R60m	3 = Other	1 = R5m-R10m	4 =
>R60m		2 = R11m-R15m	5 =

LIKERT SCALE RESPONSES CODED TO NUMERIC DATA

Section B: Entrepreneurial Bricolage

- 5 = Strongly agree
- 4 = Agree
- 3 = Uncertain
- 2 = Disagree
- 1 = Strongly disagree

Section C: Core Firm Capabilities

- 5 = Strongly agree
- 4 = Agree
- 3 = Uncertain

2 = Disagree

1 = Strongly disagree

Section D: Enterprise Scaling

5 = Strongly agree

4 = Agree

3 = Uncertain

2 = Disagree

1 = Strongly disagree

Section E: Entrepreneurial Fear of Failure

1 = Very much afraid

2 = Mostly afraid

3 = Somewhat afraid

4 = Neutral

5 = Somewhat not afraid

6 = Mostly not afraid

7 = Not at all afraid

SHORT FORM FOR CONSTRUCTS:

Entrepreneurial Bricolage – EB

Enterprise Scaling – ES

Core Firm Capabilities – CFC

Entrepreneurial Fear of Failure - EFF

**APPENDIX D: DESCRIPTIVE STATISTICS - SUMMARY OF CONSTRUCTS
AND QUESTIONS**

	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
EB1	118	4	1	5	4.01	.901	.812	-1.229	.223	2.032	.442
EB2	118	4	1	5	3.89	.932	.868	-1.132	.223	1.377	.442
EB3	118	4	1	5	4.04	.861	.742	-1.389	.223	2.928	.442
EB4	118	4	1	5	4.08	.863	.745	-1.220	.223	2.091	.442
EB5	118	4	1	5	4.12	.849	.721	-1.594	.223	3.780	.442
EB6	118	4	1	5	3.98	.827	.683	-1.261	.223	2.513	.442
EB7	118	4	1	5	4.05	.914	.835	-1.469	.223	2.841	.442
EB8	118	4	1	5	3.82	.873	.763	-1.131	.223	1.778	.442
CFC1	118	4	1	5	3.71	.971	.942	-1.217	.223	1.433	.442
CFC2	118	4	1	5	3.70	1.015	1.031	-1.018	.223	.824	.442
CFC3	118	4	1	5	4.00	.952	.906	-1.028	.223	.846	.442
CFC4	118	4	1	5	4.08	1.063	1.131	-1.325	.223	1.342	.442
CFC5	118	4	1	5	4.10	1.008	1.015	-1.227	.223	1.141	.442
CFC6	118	4	1	5	4.15	1.075	1.156	-1.443	.223	1.560	.442
CFC7	118	4	1	5	3.69	.940	.884	-1.215	.223	1.106	.442
CFC8	118	4	1	5	3.93	1.068	1.141	-1.276	.223	1.221	.442
CFC9	118	4	1	5	3.67	1.022	1.044	-1.008	.223	.672	.442
CFC10	118	4	1	5	3.81	.972	.945	-1.132	.223	1.121	.442
CFC11	118	4	1	5	4.00	1.102	1.214	-1.444	.223	1.673	.442
CFC12	118	4	1	5	3.50	1.273	1.620	-.557	.223	-.858	.442
CFC13	118	4	1	5	3.91	1.021	1.043	-1.428	.223	2.016	.442
CFC14	118	4	1	5	3.09	1.320	1.743	-.061	.223	-1.384	.442
CFC15	118	4	1	5	2.87	1.223	1.497	-.009	.223	-1.331	.442
ES1	118	4	1	5	3.72	1.077	1.160	-1.005	.223	.388	.442
ES2	118	4	1	5	3.12	1.214	1.473	-.173	.223	-1.253	.442
ES3	118	4	1	5	3.85	1.122	1.259	-1.134	.223	.630	.442
ES4	118	4	1	5	3.56	.974	.949	-.818	.223	-.058	.442
ES5	118	4	1	5	3.79	.932	.869	-1.172	.223	1.479	.442
ES6	118	4	1	5	3.36	1.107	1.225	-.573	.223	-.530	.442
ES7	118	4	1	5	3.76	1.182	1.396	-1.013	.223	.208	.442
ES8	118	4	1	5	3.62	1.198	1.435	-.771	.223	-.422	.442
ES9	118	4	1	5	3.75	1.139	1.298	-.878	.223	-.041	.442
ES10	118	4	1	5	2.76	1.412	1.994	.116	.223	-1.413	.442
ES11	118	4	1	5	2.46	1.350	1.823	.473	.223	-1.108	.442

ES12	118	4	1	5	3.36	1.230	1.513	-.712	.223	-.594	.442
ES13	118	4	1	5	3.71	1.163	1.352	-.909	.223	.026	.442
ES14	118	4	1	5	3.03	1.194	1.427	-.386	.223	-1.195	.442
ES15	118	4	1	5	3.79	1.093	1.194	-1.167	.223	.902	.442
ES16	118	4	1	5	3.37	1.190	1.415	-.544	.223	-.731	.442
ES17	118	4	1	5	3.38	1.183	1.400	-.561	.223	-.680	.442
ES18	118	4	1	5	2.77	1.284	1.648	.266	.223	-1.192	.442
ES19	118	4	1	5	3.37	1.084	1.176	-.423	.223	-.753	.442
ES20	118	4	1	5	3.51	.976	.953	-.725	.223	-.235	.442
ES21	118	4	1	5	3.53	1.068	1.140	-.861	.223	.209	.442
EFF1	118	6	1	7	2.92	1.258	1.583	1.289	.223	2.533	.442
EFF2	118	6	1	7	3.31	1.516	2.299	.500	.223	-.478	.442
EFF3	118	6	1	7	3.41	1.481	2.192	.635	.223	-.284	.442
EFF4	118	6	1	7	4.66	1.608	2.585	-.209	.223	-.856	.442
EFF5	118	6	1	7	4.90	1.661	2.759	-.519	.223	-.666	.442
EFF6	118	6	1	7	4.92	1.752	3.070	-.654	.223	-.578	.442
EFF7	118	6	1	7	4.80	1.762	3.104	-.381	.223	-.928	.442
EFF8	118	6	1	7	4.61	1.759	3.095	-.363	.223	-1.023	.442
EFF9	118	6	1	7	4.60	1.769	3.131	-.336	.223	-1.003	.442
EFF10	118	6	1	7	4.53	1.647	2.713	-.376	.223	-.957	.442
EFF11	118	6	1	7	4.50	1.723	2.970	-.301	.223	-1.061	.442
EFF12	118	6	1	7	4.47	1.733	3.003	-.278	.223	-1.096	.442
EFF13	118	6	1	7	4.89	1.642	2.697	-.751	.223	-.297	.442
EFF14	118	6	1	7	5.07	1.708	2.918	-.955	.223	.003	.442
EFF15	118	6	1	7	4.85	1.652	2.729	-.817	.223	-.098	.442
EFF16	118	6	1	7	3.81	1.729	2.991	.021	.223	-1.012	.442
EFF17	118	6	1	7	4.14	1.640	2.688	-.081	.223	-1.045	.442
EFF18	118	6	1	7	4.36	1.889	3.567	-.184	.223	-1.317	.442
EFF19	118	6	1	7	4.75	1.633	2.666	-.482	.223	-.839	.442
EFF20	118	6	1	7	4.43	1.651	2.726	-.220	.223	-.904	.442
EFF21	118	6	1	7	5.18	1.703	2.900	-.864	.223	-.006	.442
Valid N (listwise)	118										

APPENDIX E: FREQUENCY TABLES - CONSTRUCTS AND QUESTIONS

Frequency Tables – Entrepreneurial Bricolage Construct

EB1: We are confident of our ability to find workable solutions to new challenges by using our existing resources

		Frequency	Valid Percent
Valid	Strongly disagree	3	2.5
	Disagree	5	4.2
	Uncertain	14	11.9
	Agree	62	52.5
	Strongly agree	34	28.8
	Total	118	100.0

EB2: We gladly take on a broader range of challenges than others with our resources would be able to

		Frequency	Valid Percent
Valid	Strongly disagree	3	2.5
	Disagree	9	7.6
	Uncertain	13	11.0
	Agree	66	55.9
	Strongly agree	27	22.9
	Total	118	100.0

EB3: We use any existing resource that seems useful responding to a new problem or opportunity

		Frequency	Valid Percent
Valid	Strongly disagree	3	2.5
	Disagree	4	3.4
	Uncertain	11	9.3
	Agree	67	56.8
	Strongly agree	33	28.0
	Total	118	100.0

EB4: We deal with new challenges by applying a combination of our existing resources and other resources inexpensively available to us

		Frequency	Valid Percent
Valid	Strongly disagree	2	1.7
	Disagree	5	4.2
	Uncertain	12	10.2
	Agree	61	51.7
	Strongly agree	38	32.2
	Total	118	100.0

EB5: When dealing with new problems or opportunities, we take action by assuming that we will find a workable solution

		Frequency	Valid Percent
Valid	Strongly disagree	3	2.5
	Disagree	4	3.4
	Uncertain	6	5.1
	Agree	68	57.6
	Strongly agree	37	31.4
	Total	118	100.0

EB6: By combining our existing resources, we take on a surprising variety of new challenges

		Frequency	Valid Percent
Valid	Strongly disagree	2	1.7
	Disagree	6	5.1
	Uncertain	11	9.3
	Agree	72	61.0
	Strongly agree	27	22.9
	Total	118	100.0

**EB7: When we face new challenges, we put together
workable solutions from our existing resources**

		Frequency	Valid Percent
Valid	Strongly disagree	4	3.4
	Disagree	4	3.4
	Uncertain	10	8.5
	Agree	64	54.2
	Strongly agree	36	30.5
	Total	118	100.0

**EB8: We combine resources to accomplish new challenges
that the resources weren't originally intended to
accomplish**

		Frequency	Valid Percent
Valid	Strongly disagree	3	2.5
	Disagree	7	5.9
	Uncertain	18	15.3
	Agree	70	59.3
	Strongly agree	20	16.9
	Total	118	100.0

Frequency Tables – Core Firm Capabilities

**CFC1: My firm has the ability to sense market change and
build strong and steady bonds with customers**

		Frequency	Valid Percent
Valid	Strongly disagree	6	5.1
	Disagree	8	6.8
	Uncertain	17	14.4
	Agree	70	59.3
	Strongly agree	17	14.4
	Total	118	100.0

**CFC2: My firm has the ability to obtain precise knowledge
of customer profiles to differentiate its products and
services**

		Frequency	Valid Percent
Valid	Strongly disagree	6	5.1
	Disagree	9	7.6
	Uncertain	20	16.9
	Agree	62	52.5
	Strongly agree	21	17.8
	Total	118	100.0

**CFC3: My firm has the ability to obtain customer feedback
and forecast customer needs**

		Frequency	Valid Percent
Valid	Strongly disagree	2	1.7
	Disagree	9	7.6
	Uncertain	14	11.9
	Agree	55	46.6
	Strongly agree	38	32.2
	Total	118	100.0

**CFC4: My firm has the ability to quickly respond to customer
needs**

		Frequency	Valid Percent
Valid	Strongly disagree	5	4.2
	Disagree	7	5.9
	Uncertain	11	9.3
	Agree	46	39.0
	Strongly agree	49	41.5
	Total	118	100.0

CFC5: My firm has the ability to minimize customer complaints

		Frequency	Valid Percent
Valid	Strongly disagree	3	2.5
	Disagree	8	6.8
	Uncertain	12	10.2
	Agree	46	39.0
	Strongly agree	49	41.5
	Total	118	100.0

CFC6: My firm has the ability to improve the quality of customer service

		Frequency	Valid Percent
Valid	Strongly disagree	5	4.2
	Disagree	7	5.9
	Uncertain	9	7.6
	Agree	41	34.7
	Strongly agree	56	47.5
	Total	118	100.0

CFC7: My firm has the ability to improve process flexibility

		Frequency	Valid Percent
Valid	Strongly disagree	4	3.4
	Disagree	14	11.9
	Uncertain	10	8.5
	Agree	77	65.3
	Strongly agree	13	11.0
	Total	118	100.0

CFC8: My firm has the ability to improve process quality

		Frequency	Valid Percent
Valid	Strongly disagree	6	5.1
	Disagree	9	7.6
	Uncertain	8	6.8
	Agree	59	50.0
	Strongly agree	36	30.5
	Total	118	100.0

CFC9: My firm has the ability to improve delivery dependability

		Frequency	Valid Percent
Valid	Strongly disagree	6	5.1
	Disagree	11	9.3
	Uncertain	18	15.3
	Agree	64	54.2
	Strongly agree	19	16.1
	Total	118	100.0

CFC10: My firm has the ability to improve operational efficiency

		Frequency	Valid Percent
Valid	Strongly disagree	4	3.4
	Disagree	11	9.3
	Uncertain	12	10.2
	Agree	68	57.6
	Strongly agree	23	19.5
	Total	118	100.0

CFC11: My firm has the ability to improve service quality

		Frequency	Valid Percent
Valid	Strongly disagree	8	6.8
	Disagree	5	4.2
	Uncertain	8	6.8
	Agree	55	46.6
	Strongly agree	42	35.6
	Total	118	100.0

CFC12: My firm has the ability to lower the price of services

		Frequency	Valid Percent
Valid	Strongly disagree	10	8.5
	Disagree	22	18.6
	Uncertain	13	11.0
	Agree	45	38.1
	Strongly agree	28	23.7
	Total	118	100.0

CFC13: My firm has the ability to improve functionalities of services

		Frequency	Valid Percent
Valid	Strongly disagree	7	5.9
	Disagree	5	4.2
	Uncertain	10	8.5
	Agree	66	55.9
	Strongly agree	30	25.4
	Total	118	100.0

CFC14: We introduced many new lines of services in the last three years

		Frequency	Valid Percent
Valid	Strongly disagree	13	11.0
	Disagree	40	33.9
	Uncertain	6	5.1
	Agree	41	34.7
	Strongly agree	18	15.3
	Total	118	100.0

CFC15: Our changes in service lines have usually been dramatic

		Frequency	Valid Percent
Valid	Strongly disagree	16	13.6
	Disagree	41	34.7
	Uncertain	10	8.5
	Agree	44	37.3
	Strongly agree	7	5.9
	Total	118	100.0

Frequency Tables – Enterprise Scaling Construct

ES1: We have been effective at meeting our labour needs with people who have the necessary skills

		Frequency	Valid Percent
Valid	Strongly disagree	6	5.1
	Disagree	14	11.9
	Uncertain	11	9.3
	Agree	63	53.4
	Strongly agree	24	20.3
	Total	118	100.0

ES2: We have an ample pool of capable volunteers available to help us meet our labour needs

		Frequency	Valid Percent
Valid	Strongly disagree	10	8.5
	Disagree	38	32.2
	Uncertain	10	8.5
	Agree	48	40.7
	Strongly agree	12	10.2
	Total	118	100.0

ES3:We have individuals in management positions who have the skill to expand our organization, program or principles

		Frequency	Valid Percent
Valid	Strongly disagree	7	5.9
	Disagree	11	9.3
	Uncertain	9	7.6
	Agree	57	48.3
	Strongly agree	34	28.8
	Total	118	100.0

ES4:We have been effective at communicating what we do to key constituencies and stakeholders

		Frequency	Valid Percent
Valid	Strongly disagree	3	2.5
	Disagree	20	16.9
	Uncertain	15	12.7
	Agree	68	57.6
	Strongly agree	12	10.2
	Total	118	100.0

ES5:We have been successful at informing the individuals we seek to serve about the value of our program for them

		Frequency	Valid Percent
Valid	Strongly disagree	4	3.4
	Disagree	9	7.6
	Uncertain	15	12.7
	Agree	70	59.3
	Strongly agree	20	16.9
	Total	118	100.0

ES6:We have been successful at informing donors and funders about the value of what we do

		Frequency	Valid Percent
Valid	Strongly disagree	8	6.8
	Disagree	21	17.8
	Uncertain	22	18.6
	Agree	54	45.8
	Strongly agree	13	11.0
	Total	118	100.0

ES7:We have built partnerships with other organizations that have been win-win situations for us and them

		Frequency	Valid Percent
Valid	Strongly disagree	9	7.6
	Disagree	11	9.3
	Uncertain	12	10.2
	Agree	53	44.9
	Strongly agree	33	28.0
	Total	118	100.0

ES8:We rarely try to 'go it alone' when pursuing new initiatives

		Frequency	Valid Percent
Valid	Strongly disagree	8	6.8
	Disagree	19	16.1
	Uncertain	10	8.5
	Agree	54	45.8
	Strongly agree	27	22.9
	Total	118	100.0

ES9:We have accomplished more through joint action with other organizations than we could have by flying solo

		Frequency	Valid Percent
Valid	Strongly disagree	6	5.1
	Disagree	15	12.7
	Uncertain	13	11.0
	Agree	52	44.1
	Strongly agree	32	27.1
	Total	118	100.0

ES10:We have been successful at getting government agencies and officials to provide financial support for our efforts

		Frequency	Valid Percent
Valid	Strongly disagree	31	26.3
	Disagree	27	22.9
	Uncertain	13	11.0
	Agree	33	28.0
	Strongly agree	14	11.9
	Total	118	100.0

ES11:We have been successful at getting government agencies and officials to create laws, rules, and regulations that support our efforts

		Frequency	Valid Percent
Valid	Strongly disagree	38	32.2
	Disagree	32	27.1
	Uncertain	14	11.9
	Agree	24	20.3
	Strongly agree	10	8.5
	Total	118	100.0

ES12:We have been able to raise our cause to a higher place on the public agenda

		Frequency	Valid Percent
Valid	Strongly disagree	15	12.7
	Disagree	15	12.7
	Uncertain	16	13.6
	Agree	57	48.3
	Strongly agree	15	12.7
	Total	118	100.0

ES13:We have generated a strong stream of revenues from the services that we sell for a price

		Frequency	Valid Percent
Valid	Strongly disagree	8	6.8
	Disagree	13	11.0
	Uncertain	14	11.9
	Agree	53	44.9
	Strongly agree	30	25.4
	Total	118	100.0

ES14:We have cultivated donors and funders who have been major sources of revenue for us.

		Frequency	Valid Percent
Valid	Strongly disagree	16	13.6
	Disagree	29	24.6
	Uncertain	14	11.9
	Agree	54	45.8
	Strongly agree	5	4.2
	Total	118	100.0

ES15:We have found ways to finance our activities that keep us sustainable

		Frequency	Valid Percent
Valid	Strongly disagree	8	6.8
	Disagree	8	6.8
	Uncertain	13	11.0
	Agree	61	51.7
	Strongly agree	28	23.7
	Total	118	100.0

ES16:We have a 'package' or 'system' that can work effectively in multiple locations or situations

		Frequency	Valid Percent
Valid	Strongly disagree	10	8.5
	Disagree	22	18.6
	Uncertain	17	14.4
	Agree	52	44.1
	Strongly agree	17	14.4
	Total	118	100.0

ES17:We find it easy to replicate our programs

		Frequency	Valid Percent
Valid	Strongly disagree	10	8.5
	Disagree	21	17.8
	Uncertain	18	15.3
	Agree	52	44.1
	Strongly agree	17	14.4
	Total	118	100.0

ES18:We have been successful at controlling and coordinating our programs in multiple locations

		Frequency	Valid Percent
Valid	Strongly disagree	19	16.1
	Disagree	44	37.3
	Uncertain	12	10.2
	Agree	31	26.3
	Strongly agree	12	10.2
	Total	118	100.0

ES19:We have been able to demonstrate that businesses can make money through supporting our initiatives

		Frequency	Valid Percent
Valid	Strongly disagree	5	4.2
	Disagree	26	22.0
	Uncertain	21	17.8
	Agree	52	44.1
	Strongly agree	14	11.9
	Total	118	100.0

ES20:We have been able to demonstrate that consumers can save money through patronizing our services

		Frequency	Valid Percent
Valid	Strongly disagree	3	2.5
	Disagree	21	17.8
	Uncertain	18	15.3
	Agree	65	55.1
	Strongly agree	11	9.3
	Total	118	100.0

ES21:We have been able to trust market forces to help resolve social problems

		Frequency	Valid Percent
Valid	Strongly disagree	8	6.8
	Disagree	12	10.2
	Uncertain	23	19.5
	Agree	59	50.0
	Strongly agree	16	13.6
	Total	118	100.0

Frequency Tables – Entrepreneurial Fear of Failure Components

Entrepreneurial Fear of Failure 1

		Frequency	Valid Percent
Valid	Very much afraid	3	2.5
	Mostly afraid	12	10.2
	Somewhat afraid	19	16.1
	Neutral	22	18.6
	Somewhat not afraid	19	16.1
	Mostly not afraid	32	27.1
	Not afraid at all	11	9.3
	Total	118	100.0

Entrepreneurial Fear of Failure 2

		Frequency	Valid Percent
Valid	Very much afraid	3	2.5
	Mostly afraid	6	5.1
	Somewhat afraid	12	10.2
	Neutral	26	22.0
	Somewhat not afraid	21	17.8
	Mostly not afraid	37	31.4
	Not afraid at all	13	11.0
	Total	118	100.0

Entrepreneurial Fear of Failure 3

		Frequency	Valid Percent
Valid	Very much afraid	2	1.7
	Mostly afraid	7	5.9
	Somewhat afraid	23	19.5
	Neutral	21	17.8
	Somewhat not afraid	28	23.7
	Mostly not afraid	29	24.6
	Not afraid at all	8	6.8
	Total	118	100.0

Entrepreneurial Fear of Failure 4

		Frequency	Valid Percent
Valid	Very much afraid	6	5.1
	Mostly afraid	35	29.7
	Somewhat afraid	33	28.0
	Neutral	28	23.7
	Somewhat not afraid	9	7.6
	Mostly not afraid	5	4.2
	Not afraid at all	2	1.7
	Total	118	100.0

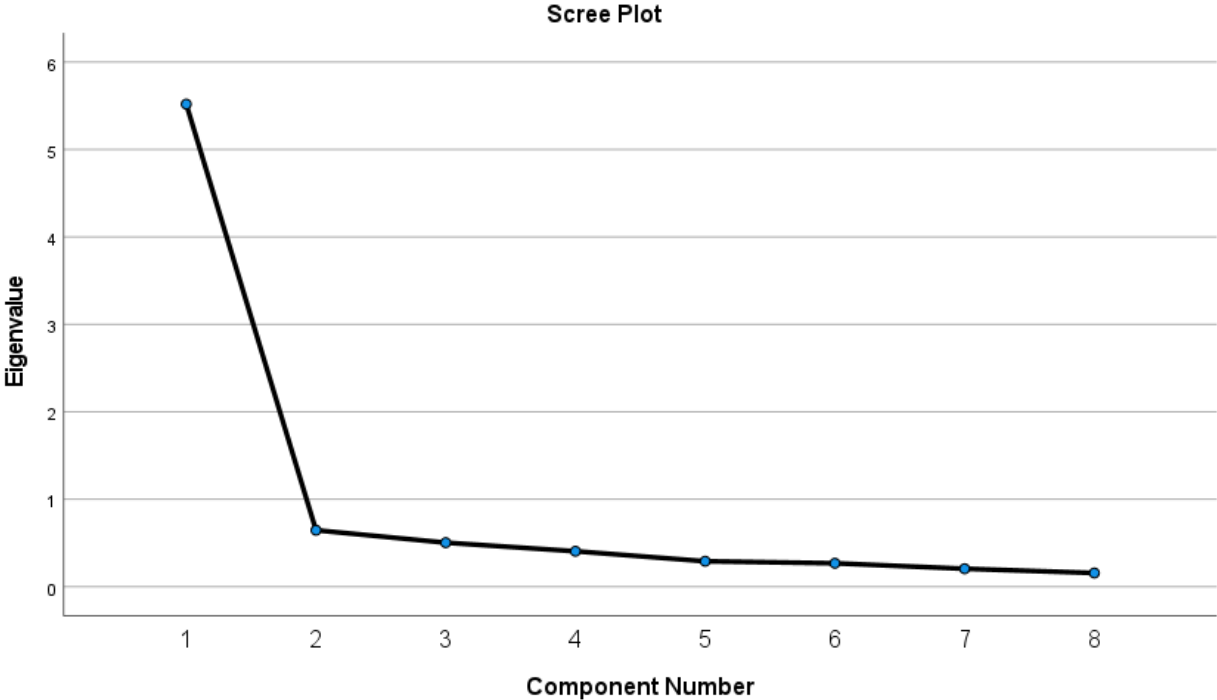
APPENDIX F: CORRELATION MATRIX TABLE – ENTREPRENEURIAL BRICOLAGE

		EB1	EB2	EB3	EB4	EB5	EB6	EB7	EB8
Correlation	EB1	1.000	.775	.605	.637	.580	.528	.664	.512
	EB2	.775	1.000	.592	.639	.622	.597	.669	.532
	EB3	.605	.592	1.000	.789	.753	.649	.779	.601
	EB4	.637	.639	.789	1.000	.698	.625	.677	.598
	EB5	.580	.622	.753	.698	1.000	.673	.730	.547
	EB6	.528	.597	.649	.625	.673	1.000	.714	.623
	EB7	.664	.669	.779	.677	.730	.714	1.000	.622
	EB8	.512	.532	.601	.598	.547	.623	.622	1.000

APPENDIX G: TOTAL VARIANCE EXPLAINED – ENTREPRENEURIAL BRICOLAGE

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.520	68.995	68.995	5.520	68.995	68.995
2	.646	8.081	77.076			
3	.504	6.303	83.379			
4	.406	5.076	88.455			
5	.292	3.646	92.101			
6	.269	3.356	95.457			
7	.206	2.576	98.033			
8	.157	1.967	100.000			

APPENDIX H: EINGENVALUE SCREE PLOT – ENTREPRENEURIAL BRICOLAGE



APPENDIX I: CORRELATION MATRIX TABLE – ENTREPRENEURIAL BRICOLAGE

EFF1	EFF2	EFF3	EFF4	EFF5	EFF6	EFF7	EFF8	EFF9	EFF10	EFF11	EFF12	EFF13	EFF14	EFF15	EFF16	EFF17	EFF18	EFF19	EFF20	EFF21
1.000	.731	.721	.425	.344	.218	.432	.429	.426	.402	.398	.375	.351	.341	.409	.499	.445	.362	.294	.355	.223
.731	1.000	.873	.449	.372	.312	.439	.439	.406	.379	.366	.381	.319	.394	.449	.569	.515	.432	.324	.404	.290
.721	.873	1.000	.479	.378	.300	.409	.426	.395	.366	.375	.389	.303	.367	.441	.547	.528	.472	.342	.410	.310
.425	.449	.479	1.000	.720	.672	.715	.575	.589	.585	.531	.499	.649	.643	.656	.411	.476	.534	.531	.532	.540
.344	.372	.378	.720	1.000	.846	.711	.577	.649	.626	.633	.548	.688	.686	.608	.437	.454	.557	.552	.456	.677
.218	.312	.300	.672	.846	1.000	.667	.527	.601	.570	.569	.525	.713	.699	.645	.350	.373	.495	.569	.456	.675
.432	.439	.409	.715	.711	.667	1.000	.843	.783	.706	.673	.597	.745	.737	.718	.498	.528	.577	.562	.556	.608
.429	.439	.426	.575	.577	.527	.843	1.000	.853	.733	.699	.612	.680	.680	.676	.493	.550	.594	.505	.465	.600
.426	.406	.395	.589	.649	.601	.783	.853	1.000	.775	.739	.691	.726	.724	.710	.543	.553	.614	.555	.530	.602
.402	.379	.366	.585	.626	.570	.706	.733	.775	1.000	.926	.855	.654	.707	.709	.569	.598	.668	.602	.524	.609
.398	.366	.375	.531	.633	.569	.673	.699	.739	.926	1.000	.906	.678	.717	.688	.548	.567	.645	.612	.485	.639
.375	.381	.389	.499	.548	.525	.597	.612	.691	.855	.906	1.000	.655	.688	.685	.548	.530	.595	.551	.467	.528
.351	.319	.303	.649	.688	.713	.745	.680	.726	.654	.678	.655	1.000	.889	.854	.516	.511	.583	.631	.550	.661
.341	.394	.367	.643	.686	.699	.737	.680	.724	.707	.717	.688	.889	1.000	.900	.589	.573	.644	.671	.608	.722
.409	.449	.441	.656	.608	.645	.718	.676	.710	.709	.688	.685	.854	.900	1.000	.630	.598	.645	.636	.595	.651
.499	.569	.547	.411	.437	.350	.498	.493	.543	.569	.548	.548	.516	.589	.630	1.000	.872	.811	.519	.519	.450
.445	.515	.528	.476	.454	.373	.528	.550	.553	.598	.567	.530	.511	.573	.598	.872	1.000	.880	.562	.529	.490
.362	.432	.472	.534	.557	.495	.577	.594	.614	.668	.645	.595	.583	.644	.645	.811	.880	1.000	.628	.560	.604
.294	.324	.342	.531	.552	.569	.562	.505	.555	.602	.612	.551	.631	.671	.636	.519	.562	.628	1.000	.775	.803
.355	.404	.410	.532	.456	.456	.556	.465	.530	.524	.485	.467	.550	.608	.595	.519	.529	.560	.775	1.000	.690
.223	.290	.310	.540	.677	.675	.608	.600	.602	.609	.639	.528	.661	.722	.651	.450	.490	.604	.803	.690	1.000

APPENDIX J: TOTAL VARIANCE EXPLAINED – ENTREPRENEURIAL FEAR OF FAILURE

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	12.500	59.524	59.524	12.500	59.524	59.524	5.275	25.120	25.120
2	2.056	9.790	69.314	2.056	9.790	69.314	5.002	23.821	48.941
3	1.220	5.809	75.123	1.220	5.809	75.123	3.439	16.375	65.316
4	1.100	5.240	80.363	1.100	5.240	80.363	3.160	15.046	80.363
5	.728	3.469	83.832						
6	.627	2.984	86.816						
7	.563	2.680	89.496						
8	.395	1.882	91.377						
9	.325	1.546	92.923						
10	.248	1.179	94.103						
11	.191	.912	95.014						
12	.175	.833	95.848						
13	.147	.699	96.547						
14	.139	.664	97.210						
15	.114	.542	97.753						
16	.111	.530	98.283						
17	.093	.444	98.727						
18	.082	.388	99.115						
19	.073	.348	99.463						
20	.069	.327	99.790						
21	.044	.210	100.000						

Extraction Method: Principal Component Analysis.

APPENDIX K: EINGENVALUE SCREE PLOT – ENTREPRENEURIAL FEAR PF FAILURE

