Gordon Institute of Business Science
University of Pretoria

The impact of entrepreneurial experiential learning on entrepreneurial competencies and business performance

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Abstract

Economic growth and job creation are driven by entrepreneurship and small business development. The purpose of this study is to highlight the importance of entrepreneurship education and competency development in developing entrepreneurial talent. Additionally, the study is designed to test whether experiential learning is more effective than traditional classroom instruction in teaching entrepreneurship. Researchers have identified entrepreneurial competencies as essential to business success. Experiential learning has been linked to business performance, but the entrepreneurial competencies that mediate that relationship have not been tested. Four hypotheses based on previous literature are presented. Hierarchical regression is used to test these hypotheses using data collected from 123 participants in an entrepreneurship development program. Based on the findings, experiential learning does lead to the development of entrepreneurial competencies that benefit business performance. There was a significant mediation effect between experiential learning and business performance through entrepreneurial competencies such as opportunity, network, return on investment and insights into the market.

Keywords

Entrepreneurial competencies; Experiential learning; Business performance

Declaration

I declare that the 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.

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CHAPTER 1: INTRODUCTION TO RESEARCH PROBLEM

1.1. Introduction

The research problem, theoretical and practical aspects are discussed in Chapter 1, along with their significance to the field of research. Additionally, the purpose and objectives of the study will be outlined and the scope will be defined. The report structure is outlined to indicate the chapters that follow.

1.2. Background to the Research Project

Coronavirus disease 2019 (COVID-19) has had a major impact on economic growth and business operations globally, (Anakpo & Mishi, 2021). In South Africa, the consequences have been particularly alarming. Its 34,4%, official unemployment rate ranked as one of the highest in the world, and amongst other emerging economies (Bowmaker-Falconer & Herrington, 2020; Maluleke, 2021). But the true picture is better understood by the expanded unemployment rate, which includes people who were available for work but discontinued job-seeking efforts. This rose to an alarming 44,4%, (*South Africa Unemployment Rate*, 2021). Two factors contributed to the outcome. Firstly, South Africa introduced some of the tightest lockdown regulations in the world in its efforts to curb the third wave of the pandemic; and secondly, in July of 2021, political factionalism triggered a series of looting and rioting incidents that shut down or destroyed businesses, disrupted supply chains, created massive economic certainty about South Africa's future growth prospects and ultimate cost the economy more than R50 billion, (Naidoo, 2021).

Entrepreneurship development has been identified as a key driver of employment and economic growth in a developing economy context, (UNCTAD, 2017). A recent World Bank analysis of South Africa, for example, suggests that the country could potentially halve its unemployment rate if it matched the self-employment rates found in other similarly situated middle-income countries, (Baduel, Cuevas & Fengler, 2021). But, as the report also indicated, in South Africa, self-employment makes up only 10% of jobs, versus 30% in most emerging economies. Additionally, the South African's Total early-stage Entrepreneurial Activity (TEA) rate is low at 10.8% which is below the African region average of 12.1%, (Bosma, Ionescu-Somers, Kelley,

Levie & Tarnawa, 2020). This low rate shows that more people are not venturing into entrepreneurship to create much-needed jobs. This paper explores why self-employment plays such a vital role in stimulating employment and economic growth; what might be some of the factors behind South Africa's low self-employment statistics; and whether we can improve on entrepreneurship success through various programme enhancements.

A successful entrepreneur is able to identify, evaluate, and exploit future goods and services (Shane & Venkataraman, 2000). There is a widespread belief that entrepreneurs play a prominent role in job creation and trade and industry, especially due to their innovative nature (Malchow-Møller, Schjerning & Sorensen, 2011; Ribeiro-Soriano, 2017). Innovating helps entrepreneurs meet market needs in a creative manner, thus boosting business growth, which ultimately leads to job creation (Lucian & Sergui, 2019; Spremo & Mićić, 2016). In 1934, Schumpeter posited that entrepreneurs are responsible for combining available resources in new ways and identifying new economic opportunities, and implementing them (Ferreira, Fayolle, Fernandes & Raposo, 2017). Economic opportunities mean growth in employment opportunities provided by Small Medium and Micro Enterprises (SMMEs). Thus, entrepreneurship can be viewed as a way to reduce unemployment and improve a country's competitiveness.

To that end, entrepreneurship has become a common career choice in many developing and developed economies. To be able to capitalize meaningfully on such opportunities, entrepreneurs employ behaviours that involve identifying opportunities and seeking opportunities. According to Schneider, (2017) opportunities are a rare chance to recognize a situation that may not seem disadvantageous at the time and which provides an advantage. If entrepreneurship is regarded as the solution to economic issues, then it is important that a culture of entrepreneurship is ignited among civil society, academia, business, and government.

Additionally, for those that have started and are operating, the Global Entrepreneurship Monitor (GEM) South Africa report (2020) states that the business discontinuance rate (4.9%) was higher compared to the established business ownership rate (3.5%) in 2019, (Bowmaker-Falconer & Herrington, 2020). This is worrying as it shows that more entrepreneurs are exiting the entrepreneurial process

than remaining. Therefore, to improve business continuation, and performance, it is important to consider human capital development and the competencies required for the development and sustainability of SMMEs.

The concept of human capital refers to the knowledge and skills, whether generic or specific to a given task environment, that enables individuals to perform and potentially excel, (Dimov, 2017). Task-related or specific human capital is focused on skills and knowledge specific to entrepreneurship human capital whilst generic human capital skills are skills and knowledge that can be applied in any field, (Martin, McNally & Kay, 2013). High levels of human capital have been shown to provide a firm with its competitive advantage (Chen & Chang, 2013). Human capital, which is the capability to perform a function, is key to creating economic value, (Mamabolo, Myres & Kele, 2017). As Penrose argued more than 50 years ago, resources alone are not sufficient to explain entrepreneurial success, (Gümüsay & Bohné, 2018). Human capital skills are acquired through education, practical experience, or a combination of the three, and they can be used to build capabilities that can be generic or entrepreneurship-specific, (M. A. Mamabolo et al., 2017).

The World Economic Forum's Global Competitiveness report 2020, which measures a country's productivity, indicates that South Africa is still grappling with a skills mismatch and technological lag that hampers its economic growth, (Schwab & Zahidi, 2020). Given this grim outlook, findings from the GEM report further indicate that South Africa's entrepreneurial intentions are discouraging, with fewer people taking into consideration starting their business ventures as a means of gaining employment, (Bowmaker-Falconer & Herrington, 2020). What is known in all countries is that entrepreneurial skills and know-how are essential for economic growth and competitiveness (Bosma, Hill, Ionescu-Somers, Kelley, Levie & Tarnawa, 2020). Therefore it is important for entrepreneurship development support programmes to focus on building entrepreneurial skills which will enhance entrepreneurial intention and perceptions.

A growing area of research has been devoted to entrepreneurship education due to its practical significance and role in facilitating the economic well-being of the global economy, (Ratten & Usmanij, 2021). With the growth in policies enabling entrepreneurship, courses and programmes on entrepreneurship have also

increased in number, predominantly in higher education, (Achampong, Hill & Yannakaris, 2020). Several empirical studies have found that university-based entrepreneurship education programs and courses have a positive effect on the perceived feasibility and attractiveness of new venture initiations, (von Graevenitz, Harhoff & Weber, 2010). The lack of progress in South Africa's education system to develop human capital is inextricably linked to the country's economic stagnation. Human capital development is vital for both individuals as well as national development, (Bosma et al., 2020). However, insights from the GEM 2020 report that whilst entrepreneurial self-perceptions are high at 60,4% in 2019, the fear of failure is equally high at 49,8%. The results are discouraging since they demonstrate low self-perceptions of starting a business, but importantly, entrepreneurship education should start earlier in the education process to increase skills and knowledge, which in turn will boost self-confidence.

According to a study by (Secundo, Mele, Sansone & Paolucci, 2020), the European Commission cites personal initiative and entrepreneurship as essential competencies for economic advancement, social inclusion and employment. Successful entrepreneurs possess the entrepreneurial competencies required for opportunity exploitation and success, just as successful professionals possess skills and knowledge. Entrepreneurship education and training programs focused on how these competencies can be developed by exposing students to practical experiences that bridge theory and practice (Castaldi, Sepe, Turi & Iscaro, 2020; Miles, de Vries, Harrison, Bliemel, de Klerk & Kasouf, 2017). The implication here then is that investing in the development of entrepreneurial competencies through entrepreneurship education and learning will equip youth, women, owners, and managers of businesses with appropriate skills, knowledge, attributes, and tools to start and grow their businesses.

Learning is an area of intense academic interest and many theories have been proposed to describe "how individuals, teams, and organisations learn”, (Gemmell, 2017, p.446). Researchers may readily conclude that entrepreneurship education should stimulate development, (Ramsgaard & Christensen, 2018), but what has not been clearly determined as yet is what skills entrepreneurs need to cultivate to succeed and how best to imbue them with those skills, (Gemmell, 2017). Despite the many attempts by people to explain what forms of learning are effective and which

are not, there is little agreement on the influence and promotion of teaching methods, content, assessment practices, (Achampong et al., 2020; Ramsgaard & Christensen, 2018). In summary, scholars have focused primarily on understanding entrepreneurship education required at various stages of the entrepreneurship process.

Experiential Learning Theory may well be a useful framework in entrepreneurial research because it models learning as a knowledge-building process more similar to innovation and creative cognition, (Gemmell, 2017) which is a useful process to integrate theory and practice. However, few researchers have explored the impact of entrepreneurial experiential learning on the development of entrepreneurial-specific competencies that drive firm performance. Therefore, this study seeks to understand the role of experiential learning as an antecedent on entrepreneurial competencies that lead to business performance. The next section presents the research problem which will be explained from an academic and practical perspective.

1.3. Theoretical relevance

Entrepreneurship Education is based on the teaching and learning of entrepreneurship, according to Neck & Corbett, (2018). Providing students with entrepreneurship-related knowledge, skills, competencies, and attitudes allows them to decide early on whether they want to pursue entrepreneurship as a career option (Isabelle, 2020; Neck & Corbett, 2018). Despite the value of entrepreneurship education, recent research showed that it hasn't advanced at the same rate as entrepreneurship research in general (Liguori, Winkler, Neck & Terjesen, 2019).

Furthermore, there is a growing body of research that looks at “students' perspectives, rather than educators' perspective and how entrepreneurship is taught in the classroom”, (Neck & Corbett, 2018, p. 14). This gap illustrates there is insufficient theoretical foundations regarding pedagogical or training strategies adopted in programs, (Loi, Fayolle, van Gelderen, Riot, Higgins, Haloub, Salusse, Lamy, Verzat & Carvarretta, 2019). It has been documented that experience-based approaches lead to the development of entrepreneurial skills, especially as the individual becomes a "constructivist" who constructs their learning from experience,

(Bell & Bell, 2020; Reis, Fleury & Carvalho, 2021; Scott, Penaluna & Thompson, 2016). In view of the importance of Entrepreneurship Education and the need for learning environments that depart from traditional pedagogy, an improved understanding of Experiential pedagogy aimed at developing entrepreneurial competencies through experiences is a critical contribution to the existing literature.

In addition, a meta-analytic study by (Reis et al., 2021), indicates there is a significant gap in research on entrepreneurial competence that identifies the entrepreneurial competencies associated with business success. The aim of entrepreneurial education is also to help entrepreneurs develop the entrepreneurial mindset and skills necessary for success (Santos, Neumeyer & Morris, 2019). Skills such as opportunity recognition, market orientation, networking, and financial skills are some of the important skills for business development. Considering that skills contribute to competencies, the focus of the research is to study the specific entrepreneurial competencies needed by entrepreneurs to ensure business performance and the mediating role of entrepreneurial competencies on experiential learning and business performance. In addition, a meta-analytic study by (Reis et al., 2021), indicates there is a significant gap in research on entrepreneurial competence that identifies the entrepreneurial competencies associated with business success. The aim of entrepreneurial education is also to help entrepreneurs develop the entrepreneurial mindset and skills necessary for success (Santos et al., 2019). Considering that skills contribute to competencies, the focus of the research is to study the specific entrepreneurial competencies needed by entrepreneurs to ensure business performance and the mediating role of entrepreneurial competencies on experiential learning and business performance.

Furthermore, there is a need in literature to understand the importance of how entrepreneurial competencies develop, particularly understanding the entrepreneurship-specific training interventions that have the potential to contribute to entrepreneurial behaviours, subsequently venture performance, (Gumusay & Bohne, 2017). In contrast to the established literature supporting general competencies, there has been an emergence of entrepreneurship literature contesting the phenomena and presenting evidence of a positive effect of entrepreneurial competencies on business success, (Botha, 2020; Minai, Raza, Hasim, Zain & Tariq, 2018; Mitchelmore & Rowley, 2010). Human Capital construct

has been central in entrepreneurship research and advises that there are generic and entrepreneurship-specific competencies, (Dimov, 2021). However, Dimov (2021) argues that the relationship between Human capital inputs and entrepreneurial outcomes presents mixed evidence on its strength. This suggests that human capital investments modalities should be investigated further to improve the link between inputs and outcomes. Morris, Webb, Fu, & Singhal, (2013); Minai et.al, (2018) describe how finding, defining, and measuring those key entrepreneurial competencies is valuable both in the advancement of entrepreneurship education and improving the practice of entrepreneurship.

Compelling arguments have been made that proficiency in a particular competency, results in higher performance, yet competency remains a grey area concept, (Al Mamun, Fazal & Muniady, 2019; Mitchelmore & Rowley, 2010; Morris et al., 2013). Researchers have shown that a distinct set of entrepreneurial competencies is necessary and must be synchronously developed with general business competencies for success, (Mamabolo et al., 2017). There remains an academic need in entrepreneurship education and pedagogy to evaluate the effectiveness and impact of, experiential learning on the development of entrepreneurial competencies that enable business performance. This study will use two theories, the Human Capital Theory and Experiential Learning Theory to explore this phenomenon.

The Human Capital Theory argues that education is at the core of economic development and therefore investing in it is crucial for individuals and the economic prosperity of a country, (Becker, 1964; Tan, 2014). The assumption of Human Capital Theory is that investment in education results in skills and abilities that enhance performance. Using the Human Capital Theory to support the study, this research will seek to understand the role that education has on the development of competencies that have been used to understand how people operate and perform in vocational and business contexts, (Mitchelmore & Rowley, 2010). Human capital theory may be limited to explaining learning in the social environment, therefore this study will add the Experiential Learning Theory.

Rooted in the constructivist and socio-constructivist paradigms of learning, Experiential Learning Theory includes learning through action and reflection, (Kozlinska, Rebmann & Mets, 2020). Kozlinska et.al, (2020) posit that Experiential

pedagogy in entrepreneurship education is fashionable, yet empirical evidence of its effectiveness is uncommon. Therefore, the application of the Experiential Learning Theory to this study will assist us to understand the impact of experiential learning on the development of competencies that enable an entrepreneur to apply to dynamic situations and demands. This will help us know how to design interventions that capacitate entrepreneurs to ensure business sustainability.

1.4. Business relevance of the Research

Universities around the world are concentrating on developing capabilities in entrepreneurship education and training and governments and industry are directly and indirectly supporting this by focusing on investing in the development of the entrepreneur, (Martin et al., 2013). Entrepreneurial universities achieve three core purposes simultaneously - teaching, research, and entrepreneurship - while providing an appropriate environment for the university community to develop and implement their ideas (Guerrero, Urbano & Gajon, 2020). In South Africa, both public and private sector businesses are mandated to develop and grow SMMEs as part of the Broad-Based Black Economic Empowerment (BBBEE) scorecard to strengthen and transform the economy, (Vahedna, 2019). The key driver of this transformation is provided for through the Enterprise and Supplier Development priority element of the scorecard and the support extended to the SMMEs may be financial or non-financial support, with the latter focusing on capacity building in the form of entrepreneurial skills development.

The assumption made by this focus is that 'entrepreneurs can be made', (Tjan, 2012) and research from the GEM (2020) report indicates that education, specifically entrepreneurial education, is a foundational requirement for starting a business and succeeding as an entrepreneur. Yet, the South African education system does not align with supporting entrepreneurial activity in its curriculum to develop at a minimum, individual-level competencies such as knowledge, skills, and attitudes that are crucial for people undertaking entrepreneurial actions, (Kozlinska et al., 2020). Consequently, entrepreneurship education has emerged as an important tool for the development of the necessary competencies for creating businesses, and government, universities, and corporates must continue to make that investment, (Sánchez, 2013). Within higher education, there seems to be a consensus that

university-educated entrepreneurs are more likely to succeed and achieve firm performance than their non-academic counterparts, (von Graevenitz, Harhoff & Weber, 2010).

Management is studied in universities and business schools, and the traditional role of the university has evolved, now there is a need for entrepreneurial universities that can redirect new knowledge for economic development, (Hassan, 2020). Throughout the years, in a broader context, universities have created entrepreneurial ecosystems in order to provide multiple work opportunities, such as self-employment, intrapreneurship, and academic entrepreneurship, so that it is relevant in modern careers that emphasize flexibility, (Guerrero et al., 2020; Küttim, Kallaste, Venesaar & Kiss, 2014). The university community (students, alumni, academics, staff) is supported through this ecosystem in acquiring skills, identifying innovative and entrepreneurial initiatives, developing and commercializing them, and incubating them, (Guerrero et al., 2020).

The knowledge and skills are delivered through training programs such as undergraduate and postgraduate courses. Studies show that individuals with a university degree have an inclination to start businesses and students with firms that participated in entrepreneurship programs have greater growth and innovation potential, (Kozlinska, 2011) Entrepreneurs already engaged in business care about receiving such training because it develops and enhances their skills and knowledge. The literature argues that the programs and environments offered by higher education institutions are not consistent with the needs of the contemporary business environment, (Binks, Starkey & Mahon, 2006).

1.5. Purpose of the study

The purpose of the study is to use existing theories of Experiential Learning Theory and Human Capital Theory to determine the impact of entrepreneurial experiential learning on developing entrepreneurial competencies that enable entrepreneurs to achieve business performance outcomes. The research objectives is to

- To determine the impact of Experiential learning on Entrepreneurial competencies

- To investigate the impact of Entrepreneurial competencies on Enterprise performance
- To determine the impact of Experiential learning on Enterprise performance and;
- To investigate the mediating role of Entrepreneurial competencies on Experiential learning and Enterprise performance.

1.6. Significance of the study

1.6.1. Academic contribution

Entrepreneurship education and pedagogy have gained increasing scholarly attention because of the potential impact it has on society as well as individuals, meaning that it is a field with great potential for growth (Loi et al., 2019). Despite the various entrepreneurial education programmes, there is little agreement on pedagogy, leading to a lack of consensus which has led to differences in programme outcomes, (Achampong et al., 2020). Understanding what, how, and to whom entrepreneurship should be taught, is important, (Loi et al., 2019). Several scholars Haase & Lautenschläger, (2011) claim that future entrepreneurial education should move away from teaching the basics and instead emphasize hands-on experiences. The academic contribution of the study aims to expand the knowledge on pedagogy, specifically experiential learning pedagogy, and its impact on developing human capital skills, knowledge, and abilities that lead to business performance for entrepreneurs.

Furthermore, the study will use entrepreneurial competencies to explain the process through which experiential learning and business performance are related. By so doing, it will help educators in higher education to design programmes that will develop entrepreneurial competencies through experiential pedagogy, to achieve business performance. For the individual student, the academic contribution of the study will provide guidance and knowledge on entrepreneurial skills that enable business performance and how to experiment with concepts actively in their business.

1.6.2. Practical contribution

The aim is to conduct research that can be academically and practically applied to deepen understanding of the entrepreneurial competencies required for entrepreneurs at various stages of business in South Africa. Currently, education and training institutions offer a 'one size fits all approach to training aimed at developing entrepreneurs at various stages of business, which is not effective, (Mamabolo & Myres, 2020). Due to the dynamic nature of the entrepreneurial process, dynamic competencies which are those that can be acquired and developed such as self-efficacy, and knowledge on a particular topic are important as they can be improved with the appropriate training and practice, (M. H. Morris et al., 2013).

The digital revolution and related breakthrough innovations pose new challenges to entrepreneurial competency development and require new angles for entrepreneurship research, (Reis et al., 2021). Therefore, the goal will be to understand whether designing suitable entrepreneurship training interventions can lead to the development of entrepreneurial competencies that would help the development and performance of South African entrepreneurs. The overall goal is to design a competency framework to inform the entrepreneurial competencies required by entrepreneurial businesses at the various stages.

1.7. Conclusion

The study is outlined in Chapter 1 along with reasons why this kind of research is necessary. In the introduction, the current context of entrepreneurship and the purpose of the study were briefly discussed. In addition, it examined the link between entrepreneurship education, entrepreneurial competencies, and business performance in order to determine which hypotheses should be tested in this study. In the chapter, the study's objectives, contribution to the entrepreneurship literature, and practical business implications are discussed.

Chapter 2 will present a literature review of past and present research into the field of entrepreneurship, with a theoretical underpinning. The literature will analyse the key constructs of entrepreneurial competencies, experiential learning, and business performance and define and evaluate their importance and relationship.

Based on the gaps identified for the literature review, chapter 3 presents hypotheses to be tested. The research methodology includes the selection of the population for this study, the unit of analysis, the sampling method and sample size, the method of data collection, the analysis method for the data once collected, and quality control.

A detailed discussion of methodology is provided in Chapter 4, including the purpose of the research design, philosophy, approach selected, methodological choices, strategy, and time horizon.

The results of the study are presented in Chapter 5 based on the data gathered in the application of methodology.

In chapter 6, the results are analysed and each hypothesis is discussed in turn.

A discussion of the implications of the research for academia and business is presented in Chapter 7. It also outlines limitations and recommendations.

CHAPTER 2: LITERATURE REVIEW

2.1. Introduction

The literature review draws on multiple theories from literature to inform the areas being investigated. First, it reviewed the Human Capital and Experiential Learning theories. These are the theoretical lenses that provided an understanding of how individuals or groups obtained enhanced levels of competencies to achieve greater performance and how those capabilities and competencies are valuable resources, that can be utilised as a firm's source of competitive advantage, (al Mamun et al., 2019). Second, the importance of Entrepreneurship Education and Experiential Learning was explored to ascertain its effect on the development of entrepreneurial competencies that contribute to increased business performance. Thirdly, the section investigated the importance of entrepreneurial competencies and their significant role in business performance. Lastly, the literature reviewed the importance of business performance and how much of it is affected by entrepreneurial competencies.

2.2. Theoretical framework

A distinctive feature of entrepreneurial education is that it is centered on interactive learning that is linked to business and community ideas (Ratten & Usmanij, 2021). This indicates that the learning approach is experience-based, linking education to practice. Educators can move toward a constructivist view of entrepreneurship by understanding the educational theories and philosophies that influence the learning process and underpin the teacher's role in experiential teaching, (Bell & Bell, 2020). In this paper, experiential learning theory will be used as a theoretical lens to understand whether scholarly engagement develops entrepreneurial competencies that enable business performance. Additionally, Human Capital Theory will be used, as a theoretical lens, to understand the task-specific skills needed for business performance.

2.2.1. Human Capital Theory

Human Capital Theory comes from the neoclassical school of economics and postulates that an individual's human behaviour is inclined to seek opportunities to maximize their economic interests, rightfully so from an economic perspective (Becker, 1964). Human Capital theory was developed to explain how continuing education for a workforce could enhance productivity, (Marvel, Davis & Sproul, 2016) and the main proposition is that humans are a resource that needs to be developed. Scholarly, Adam Smith's identification of "the acquired and useful abilities" of individuals as a source of revenue or profit growth in the sixties, emphasized the importance of human capital, (Ployhart & Moliterno, 2011). The construct, developed by two academicians, Theodore Schultz and Gary Becker, is applicable in multi-disciplinary traditions from psychology to economics, and in the last 20 years, has gained prominence due to the growth of the concept of the 'knowledge economy, (Gillies, 2015). A growing number of studies that attempt to predict entrepreneurial success have included human capital development in their models (Unger, Rauch, Frese & Rosenbusch, 2011).

Research on the relationship between human capital and entrepreneurship outcomes has widely applied the construct of human capital, according to a recent meta-analytical study on entrepreneurship research, (Dimov, 2017; Martin et al., 2013). The theory builds on the fundamental insight that individuals possess a wealth of skills, knowledge, and experiences that can be used to achieve greater performance and entrepreneurial success, (Human capital and skills development, 2011; Unger et al., 2011). As an established theory, according to Martin et al., (2013), Human Capital Theory helps us understand how entrepreneurship education impacts success and could explain the connection between education and entrepreneurial behaviour. The Human capital outcomes (knowledge or skills) and the human capital investments themselves (education or experience) differ in their impact on entrepreneurial performance, according to Unger et al., (2011) and Martin et al., (2013).

The theory postulates that there are generic and specific skills and individuals bring a set that is relevant to the context to improve task performance, (Dimov, 2016). In the field of research, there is a difference between these two concepts, and their

meaning varies, but they can be viewed as providing high-level and broad skills (general), as well as low-level and narrow (specific) skills (Christenko, Martinaitis & Gausas, 2020).

For human capital to lead to high performance, it must be related to the specific tasks that need to be performed by the business owner, (Unger et al., 2011). Using scenario-response elements as a means of transferring strategic skills to business modeling is the most successful approach (Unger et al., 2011). Human capital should be distinguished from non-task-related human capital (Unger et al., 2011). To develop these capabilities, education is at the forefront to increase the productivity and knowledge base of individuals, making education an important investment towards economic development, (Tan, 2014). To develop entrepreneurship, and investment in developing the required competencies through entrepreneurship education is pivotal to increasing productivity and performance. This study is focused on entrepreneurship-specific experiential learning.

The Human Capital Theory is appropriate in this study for multiple reasons. In entrepreneurship education and training, scholars have studied the relationship between human capital and entrepreneurship outcomes at the individual, group, and business venture level, (Martin et al., 2013). At an individual level, research over the years shows that specific entrepreneurship education and training develops the skills, knowledge, and motives that enable entrepreneurs to be successful. Martin et.al (2013) in their meta-analysis of the theory, argued that human capital assets, such as skills and knowledge that are specific to entrepreneurship have a direct link to new venture creation and firm performance than generic human capital assets.

This link supplies arguments documented in seminal work that postulates the importance of human capital to the field of entrepreneurship. Marvel et al., (2016; Unger et al., (2011) discuss that human capital is important in the entrepreneurial phases of discovery, opportunity seeking, and exploitation and it forms the basis of selection criteria for venture capitalists when evaluating potential venture performance. Thus, its importance extends throughout the lifecycle of a business venture. It is considered an intuitively appealing theory of predicting entrepreneurial outcomes by (Dimov, 2017). As mentioned above, Human Capital Theory is applicable in multidisciplinary industries. To date, Marvel et al. (2016) criticism of the

theory is that whilst it is well researched in the entrepreneurship field, it could benefit from integration with other theories.

Additionally, Dimov (2017) contends that education and experience are disjointed and that human capital must be viewed holistically. In order to develop the construct, traditional human capital indicators, such as education and work experience, should be combined with three indicators of human capital relevant to entrepreneurship, such as entrepreneurial experience, industry experience, and managerial experience (Dimov, 2017). What has dominated the conversation in human capital entrepreneurship literature to date are theoretical perspectives like the resource-based view from strategic management, consistent with other areas of entrepreneurship research, (Marvel et al., 2016). It is important to examine learning theories in entrepreneurship as few empirical studies are available. Learning theory focuses on the cumulative nature of human capital, and the importance of knowledge learning and human capital entrepreneurship research can benefit from the integration of learning, cognition, and motivational perspectives, (Marvel et al., 2016). Thus, this study will incorporate the Experiential Learning Theory to explore the importance of learning theories in entrepreneurship.

2.2.2. Experiential Learning Theory

Learning is at the center of the management process and it is defined holistically as the basic process of human adaptation, (Kolb & Kolb, 2009). Experiential Learning tells us that the acquisition and transformation experience is central to the learning process, (Kolb & Kolb, 2009). Over the years, the definitions incorporate a specialised managerial process of entrepreneurial learning, strategy formulation, creativity, leadership, problem-solving, and decision making, (Kolb & Kolb, 2009). This shift in perspective draws from the work of prominent twentieth-century scholars, notably John Dewey, Kurt Lewin, Jean Piaget, and others, who put experience and context at the centre in their theories of human learning and development, (Bell & Bell, 2020; Kolb & Kolb, 2009; Rasiah, Somasundram & Tee, 2019).

According to Kolb & Kolb, (2009), Experiential Learning Theory is a dynamic theory that involves the whole person, with the learning cycle being driven by the resolution

of the dual tensions of action or reflection and experience of abstraction. Important to this learning cycle is how individuals acquire, store, transform and use the information within the process of opportunity identification and exploitation, (Corbett, 2005). Because individuals transform their experiences into new knowledge, Experiential Learning Theory can be considered a cognitive and situative learning theory which is key for entrepreneurs as they go through the entrepreneurial process of seeking new opportunities and learning through their experiences, (Corbett, 2005).

Kolb's Experiential Learning theory denotes that learning is the process whereby knowledge is created through the transformation of experience, (Kolb & Kolb, 2009). According to the theory, experiential learning can take different forms, addressing four types of learning: (i) experience (feeling); (ii) observation; (iii) thought processes; and (iv) active experimentation (doing), (Bell & Bell, 2020). Below, an explanation of the stages as per Pamungkas, Widiastuti & Suharno, (2019):

- Experience stage - helps individuals think openly and systematically when solving problems;
- Observation stage - in this stage, individuals view virtual visualisations of simple demonstrations and reflect on why and how
- Thought processes stage - individuals are encouraged to use logical reasoning to solve problems
- Active experimental stage – after developing abstract theories through abstract concepts, individuals can apply those theories to the active experimental stage to formulate predictions for the future.

The students gain concrete experience through simulations, reflect on observations through guest lectures, develop abstract concepts through theory, and gain active experiential learning when they develop a business plan. Even the most powerless people can ignite their entrepreneurial spirit by doing, feeling, and thinking. Thus, experiential learning can play a vital role in promoting the "thinking-doing" link in entrepreneurship education in order to develop an entrepreneurial mindset and bolster the entrepreneurial spirit (Santos et al., 2019).

The Experiential Learning Theory is appropriate in this study for a couple of reasons. Considering the dynamism of entrepreneurship, experiential pedagogy is considered

to be the most appropriate method of teaching for entrepreneurship education (Bell & Bell, 2020). In order to acquire experiential knowledge, learners should engage in entrepreneurial activities in order to develop the necessary entrepreneurial competencies (Bell & Bell, 2020). Experiential Learning Theory contributes to the development of a constructivist approach to learning, in which the concept of 'social knowledge' is constructed in the mind of the student (Bell & Bell, 2020). The Experiential Learning Theory provides a theoretical lens through which we may understand entrepreneurial competence development since learners are encouraged to explore and experience entrepreneurial concepts in action. By reflecting on an experience, the Kolb cycle emphasizes the importance of authentic learning that enables entrepreneurs to develop competencies for success as entrepreneurs (Bell & Bell, 2020). This methodology disintegrates the borderlines between professional and educational settings, thereby reflecting reality (Kozlinska et al, 2020). Therefore, its contribution to entrepreneurial pedagogy is important to building entrepreneurial capabilities that closely mirror reality and the cyclical nature of the entrepreneurship process.

2.3. Entrepreneurship education

Burgeoning entrepreneurs have an assortment of certain competencies and attributes which are derived from entrepreneurship education and training, (Minai et al., 2018). Entrepreneurship education has evolved over the years, and its advancement is pertinent to entrepreneurship development. Research into the effects of entrepreneurship education has grown considerably in recent years, (Isabelle, 2020; Rasiah et al., 2019). Throughout the years, entrepreneurship scholars have pointed out the most influential factors such as entrepreneurial competencies, knowledge, and actions as related to the accomplishment of important venturing outcomes and success, (Botha & Pietersen, 2020). To develop these factors, innovative approaches to entrepreneurship education and training are needed and should be action-orientated to encourage experiential learning, (Dhliwayo, 2008). In this way, entrepreneurs are given the opportunity to learn by doing, experimenting, and reflecting which is much more meaningful than the traditional approach to entrepreneurship education.

2.3.1. Definition of Entrepreneurship education

Around the world, higher education institutions are focusing on creating entrepreneurial universities, focusing on the growth of entrepreneurship faculty and research output in this field. Kozlinska, (2011), defines entrepreneurship education as a flexible combination of skills, attributes, and methods that can enable an individual to contribute to the world in a unique, innovative, and creative manner, whether in employment or in self-employment. Entrepreneurship education is also defined as "any pedagogical programme or process that fosters entrepreneurial attitudes and skills" (Secundo et al., 2020, p.1313).

It is clear that entrepreneurship education has several definitions, but in essence, it is about developing skills that propel an individual to start and sustain a business. In his three-category framework, Jamieson poses a basic classification of entrepreneurship education and training, categorizing it into education "about", "for" or "in" for a business (Henry & Lewis, 2018). According to this model, as educational needs differ between business development phases, different skills need to be developed. This implies that every phase of education unlocks competencies that are crucial for a firm's success. Entrepreneurship education is defined in this study as a pedagogy that develops entrepreneurial competencies for firm success through the development of skills, knowledge, and values.

2.3.2. Importance of Entrepreneurship education

In the face of uncertainty, entrepreneurship education allows individuals to acquire the skills, learn how to acquire resources, and develop the behaviour of how to discover opportunities for entrepreneurship (Isabelle, 2020). In their study, Santos et al. (2019), argue that empowerment is an understudied element of entrepreneurial education. Especially in developing nations like South Africa, where unemployment, inequality, and poverty inhibit progress, entrepreneurship education could play an important role in encouraging self-employment. Low-income individuals and those that have entrepreneurial ventures have a crucial need for entrepreneurship education to provide them with the knowledge, skills, and attitudes they need in order to start and maintain a business.

Murray, Crammond, Omeihe & Scuotto, (2018) noted that upon reviewing the entrepreneurship education literature by Kuratko and others, there may be positive links between Entrepreneurship Education and Training and human capital assets and entrepreneurship outcomes. According to their findings, people who have taken a course in entrepreneurship go on to express an intention to start a business versus people who have not taken a course in entrepreneurship. As a result, entrepreneurial self-efficacy is built, which increases entrepreneurial intention (Isabelle, 2020). A small body of research, however, showed that entrepreneurship education and training has a negative effect on the outcomes that are listed above in contrast to the above results. Others, however, have found a positive relationship between entrepreneurship education and training and a variety of outcomes. In summary, at the present and in the future, entrepreneurship training interventions should be evaluated for efficacy and design to ensure positive performance.

2.4. Experiential learning

Learning is a lifelong and continuous process, and as a subject, it has been the subject of extensive research with multiple theories being offered. Theories of learning provide insight into how individuals, groups, and entire organisations learn. According to Gemmell, (2017), the Kolb Experiential Learning Theory has emerged as a useful tool in entrepreneurship. For learning to take place, experiences must occur. Because individuals are unique, they learn in different ways. Honig and Hopp, (2019) argue that learning orientations are an important and largely unexplored aspect of entrepreneurship. Because both entrepreneurs and organizations are looking to learn continuously Castaldi, Sepe, Turi & Iscaro, (2020), it is important to understand different learning orientations and different learning environments.

2.4.1. Definition of Experiential learning

Experiential learning theory has played a major role in defining the concept. A typical definition of entrepreneurial learning is that it is an “experiential process in which entrepreneurs acquire knowledge through different means: experiencing, reflecting, thinking, and acting”, (Calstaldi et al., 2020, p.183). Bell & Bell (2020, p.990) define experiential learning as the process whereby “knowledge results from the combination of grasping and transforming experience”. Similarly, Scott et al., (2016)

believe that experiential learning can encourage reflection, active learning, and learning by doing. Experiential learning lies at the heart of constructivism, where educators facilitate a social setting that goes beyond teaching “about” entrepreneurship to teaching “for” entrepreneurship, (Bell & Bell, 2020). The Experiential Learning Theory provides a holistic framework for thinking about the learning process and emphasizes that the experience is the most essential aspect of learning, distinguishing it from cognitive and behavioural theories (Castaldi et al, 2020). This study defines Experiential Learning as an active learning process, where skills and knowledge are acquired through experience, thought, and action.

2.4.2. Entrepreneurial Experiential learning

Entrepreneurs who rely on strategic growth need to learn from their experiences as they seek out new opportunities to survive that rely on behaviour and habit, (Corbett, 2005). In order to learn entrepreneurship, students need to be able to think creatively and take innovative actions to create opportunities, according to Pamungkas et al., (2019). Developing entrepreneurial skills requires the engagement of entrepreneurs in their own business practices and being involved in business processes to gain practical experience. As a participatory form of learning, experiential learning involves learners syncing information in an active, immersive, and active environment through a variety of mental processes, (Bell & Bell, 2020). By so doing, the entrepreneurs are capacitated with personal and business toolkits that they can at once practically apply to their businesses.

By using real-life business modelling, students have the opportunity to gain theoretical knowledge by experiencing different stages of the entrepreneurial process (Kozlinska et al, 2020). In contrast, traditional pedagogies focus more on lecturing rather than active learning. Furthermore, Castaldi et al., (2020) found that the traditional education model currently in use has a mismatch between what is taught to students and what the industry needs. Therefore, programs are now moving towards more participatory methods of producing entrepreneurs who are analytical and critical thinkers (Castaldi et al., 2020). Based on the findings, experiential learning contributes positively to entrepreneurial learning, which is the acquisition of entrepreneurial competencies. However, according to Aidara, Mamun, Nasir, Mohiuddin, Nawi & Zainol, (2021; Pamungkas et al., (2019) the degree to which

learning is experiential is important, yet the challenge still remains regarding how to best facilitate the learning activities to support entrepreneurs in the process.

2.4.3. Importance of Entrepreneurial Experiential learning

According to research conducted by Bell & Bell, (2020); Castaldi et al., (2020); Hyams-Ssekasi & Caldwell, (2018), entrepreneurship education is moving away from traditional approaches that are lecture-based and passive and toward more constructivist approaches that are action-oriented, problem-solving, and immersive. Bell & Bell (2020) argue that experiential entrepreneurial learning is at the core of social constructivism and that constructionism has become influential in the relationship between teaching methods and learning processes in higher education. Through the use of constructivist methods of teaching, experiential learning can be fostered through 'action learning', and learners are encouraged to engage in the entrepreneurial process rather than just read about it (Scott et al., 2016). Unlike relying only on theoretical knowledge, action learning focuses on doing in practice.

This approach goes beyond merely teaching "about" or "through" entrepreneurship, but focuses on developing learners' entrepreneurial abilities and competencies that are ready to engage in entrepreneurship or educating them "by" entrepreneurship, which encourages learning by doing. Kolbs' framework has been criticised for its lack of focus on the emotional learning aspects. Even so, entrepreneurship education has largely adopted the model. Thus, experiential pedagogy in entrepreneurship education is important for enhancing the learning process. It provides learners with opportunities to work on their entrepreneurial skills, which are critical for building their entrepreneurial competencies (Bell & Bell, 2020).

Since the first entrepreneurship course was taught 70 years ago at Harvard Business School, an emphasis on academic delivery methods prevailed. However, in the 2000s, there has been a shift to understand how entrepreneurship can be taught. Yet, theoretical arguments on entrepreneurship education have not reached a consensus on the types of methodologies for teaching entrepreneurship, (Krakauer, Serra & de Almeida, 2017).

2.5. Entrepreneurial competency

Over the years, scholarly interest in determining the key competencies for achieving desired outcomes in an entrepreneurial context has grown significantly, (Botha & Pietersen, 2020). As a concept, Entrepreneurial Competencies have been conceptualized in various ways, wherein in some instances, it's more of a performance standard or actions of individuals in a specific context. The following sections define Entrepreneurial Competency and describe the different kinds of Entrepreneurial Competencies, the importance of Entrepreneurial Competencies, and discusses their relationship between business performance and experiential learning.

2.5.1. Definition of Entrepreneurial competencies

Competencies bridge the gap between educational attainment and job performance because they can be developed through training (Silveyra, Herrero & Perez, 2021). Because it crosses several disciplines, such as education, psychology, and organizational behavior, and law, entrepreneurial competencies have been defined differently in literature. In the study of Al Mamun et al., (2019), and Kozlinska et al., (2020), it is argued that entrepreneurship is best understood as a set of capabilities that firms should use to improve their performance. A similar definition can be found in Silveyra et al., (2021, p. 3) who define them as "skills, abilities, and attitudes which, together with performance, lead to greater satisfaction in a professional job". In this study, entrepreneurship competence is defined as the skills, knowledge, and attitudes required to ensure performance.

The concept of competence firstly describes the personal qualities that facilitate superior performance, and secondly, the skills needed for the development of sustainable business models (Reis et al., 2021; Schneider, 2018). A meta-analysis published by Reis et.al, (2021) demonstrated that earlier research into entrepreneurial competencies associated them with inborn traits, but a wider body of work demonstrated that entrepreneurs can learn, develop, and practice entrepreneurial competencies. According to Mitchelmore and Rowley (2010), competence is multi-faceted and entrepreneurial competence is grounded in these

various approaches and to be proficient in something, people are eager to achieve excellent performance, thereby gaining potential financial gains or business success.

2.5.2. Importance of Entrepreneurial Competencies

Entrepreneurial competencies as Bird, (1995) in Katz & Corbett, (2019) posits, are important for policymakers, educators, and researchers as they predict venture outcomes. Entrepreneurial ecosystems, the interconnected system of forces that lead to and sustain regional entrepreneurship are on the minds of policymakers in emerging and developed economies, (Roundy & Fayard, 2019). Job creation, technological advancement, and economic growth are made possible through the novel approach to innovation and products that entrepreneurs create.

Job creation

In 1979, D. Birch showed that small firms with fewer than 20 employees created 66% of net employment growth in the US economy from 1969 to 1976 (Cieslik, 2014). Globally, entrepreneurship is seen as a tool for uplifting nations out of poverty and for improving socio-economic development for the benefit of society, (Shafiu, Manaf & Muslim, 2020). In South Africa, to increase the countries competitiveness, the National Development Plan 2030, which is South Africa's blueprint of how South Africa will reduce poverty, unemployment, and inequality, stipulates that 90% of jobs are going to come from small businesses, (National Planning Commission, 2011). Since SMMEs are the main sources of entrepreneurial ideas and make a nation more competitive, it is imperative to focus on their growth and development to drive productivity (Tehseen, Ahmed, Qureshi, Uddin & Ramayah, 2019). By encouraging self-employment, innovative entrepreneurship can be promoted, helping to reduce unemployment, poverty, and inequality.

Technological advancement

Today's age is characterised by digital technologies, where artificial intelligence, machine learning, and robotics are influencing new business models. In addition to new business models arising due to digitization, existing businesses are exploring opportunities to keep up with technological advancement in their fields, (Kraus, Palmer, Kailer, Kallinger & Spitzer 2019). Innovativeness is considered one of the key instruments that drive business growth. To keep up with rapidly changing

conditions, entrepreneurs need competencies and dynamic capabilities to succeed, (Morris & König, 2021).

Economic growth

The role of entrepreneurship in stimulating economic growth is of utmost importance, as it carries our innovations and enhances a country's competitiveness, (Carree & Thurik, 2010). Entrepreneurs contribute to the economy's productive output by organising resources, capabilities, labour, knowledge, and finances to deliver goods and services to the net output of an economy, (Bosma et al., 2018) In addition to its economic impact, entrepreneurship also appears to be able to influence institutions and communities and to provide solutions to social challenges. COVID-19 and the digital environment have catalysed the development of entrepreneurship, and there is a need for a new set of entrepreneurial competencies that are supported by digital platforms, planned and organized to facilitate innovation (Reis et al., 2021).

For a long while, researchers in entrepreneurship have long posited that entrepreneurial competencies are the key to business performance, (Gümüsay & Bohné, 2018). Understanding the transformative entrepreneurial process of a business is key for entrepreneurship researchers to spot the link between competencies at birth, survival, and growth, (Bird, 1995; Mitchelmore & Rowley, 2010). Therefore, Mitchelmore and Rowley (2010, p.96) summarize it aptly that "competencies are learnable, therefore recognising the importance of competencies and identifying these is crucial for educators and the development of learning opportunities".

2.5.3. Entrepreneurial Competencies, Human Capital Theory and Experiential Learning Theory

Both the Human Capital Theory and Experiential Learning Theory provides us a framework to study the relationship between human capital investments, which are the inputs such as time and money, human capital assets, representing the capabilities to be received through the investments and the outcomes such as business performance, (Martin et al., 2013). Thus, understanding the different human capital investments across the phases is key to developing the entrepreneur's competencies necessary for business growth.

2.5.4. Types of Entrepreneurial competencies

Over the years, researchers have sort to understand entrepreneurial competencies, with varying levels of categorisation in different contexts. Mitchelmore and Rowley (2010) integrated and summarised the work of researchers in the field and offered a foundation on entrepreneurial competencies. Entrepreneurial competencies are clustered in entrepreneurship literature and described as a specific set of competencies, abilities, and knowledge that enable an entrepreneur to utilise resources to improve and achieve sustainable growth in a competitive business environment (al Mamun et al., 2019; Gümüsay & Bohné, 2018; Jena & Sahoo, 2014). Various opinions agree that entrepreneurial competencies capture the entrepreneur's ability to start and develop businesses and successfully integrate resources to ensure performance. Competencies such as opportunity, idea generation, and exploitation of opportunities are just a few of the competencies that fall under this categorization. Different scholars have identified different sets of competencies that contribute to business performance. These individual-level competencies have been categorised into four and described as follows:

Opportunity competence

A group of competencies that lead to improving performance is embodied in the entrepreneur that adds value through resource management and creating opportunities for his or her business. According to Kyndt & Baert, (2015), entrepreneurs possess risk-taking traits, and those traits enable them to identify and capitalize on opportunities, ensuring their success. Consequently, the entrepreneur has the advantage of assessing the business for both financial and non-financial returns. An entrepreneur needs to engage in activities that allow them to recognize a market niche opportunity, generate ideas, formulate strategies and develop new products. Innovation is one of the most important capabilities that entrepreneurs need to enhance a firm's performance, resulting in a larger market and financial return (Gunday et al., 2011). Furthermore, Ibidunni, Ogundana & Okonkwo, (2021), state that concerning innovative performance, entrepreneurial competencies facilitate the entrepreneur’s capability to identify industry opportunities, exploit collaborative platforms across sectors and define a suitable pathway for future success.

Network competence

The core competence of a firm is its ability to develop and manage relationships with customers, key suppliers, business networks, and other organisation. This has an impact on the firm's performance and its competitive strength, (Ritter, Wilkinson & Johnston, 2002). Network competence was introduced in earlier work by Ritter and Gemunden in 1997 and they introduced it as a firm-specific characteristic. However, Tehseen et al., (2019) refer to network competence at both the individual and firm-level. In the early stages of an enterprise, networking is vital as it provides the entrepreneur with expertise, such as social networks and business networking activities that can benefit the entrepreneur and the enterprise (al Mamun, Fazal & Muniady, 2019).

Return on investment competence

Recent studies have used different performance metrics to evaluate an organization's competitiveness, productivity, and efficiency (Gunday, Ulusoy, Kilic & Alpkan, 2011). Competitiveness can be enhanced by measuring performance effectively. Innovation is considered as a firm's core value creation capacity and one of the most important factors that impact financial performance, (Bigliardi, 2013). A company must be innovative in order to enter new markets, increase market share, and develop a competitive advantage (Gunday et al., 2011). Thus, companies need to be aware of the factors affecting their performance, and manage them efficiently, Bigliardi, (2013). By being aware, entrepreneurs can aspire to innovate by investing capital to scale up their operations.

A business can expect to gain a certain level of Return on Investment (ROI) when it searches for and exploits business opportunities. This return provides the entrepreneur with information on the potential profits and losses that may result from the business (Kyndt & Baert, 2015). The study by Gunday et al., (2011) found a direct positive correlation between innovative performance and financial performance. An Italian study of 98 SMMEs by Bigliardi (2013) found that innovations designed for customers and those designed to differentiate the company from its competitors can increase financial performance. As a result, if customer needs are considered and differentiated products from competitors are offered to customers, companies can gain a competitive advantage that adds to their profitability.

Insights into the market competence

The globalised business sector has provided entrepreneurs and entrepreneurial firms with a wide array of market opportunities, such as e-commerce, to access markets. A market orientation refers to a company's approach to collecting, disseminating, and responding to market intelligence in order to meet customer needs and guarantee its success (al Mamun et al., 2019). Market orientation is a learning construct through which entrepreneurs and their companies learn more about their industry, customers, and products or processes for continuous improvement (Baker & Sinkula, 2009). The awareness and rapid improvement enhance a firm's innovative and dynamic performance, placing it on the cusp of competitive advantage. According to Baker and Sinkula's (2009) study, market orientation has a more direct effect on profitability than entrepreneurial orientation. Another study by Bhuian, Menguc & Bell, (2005) concurs that the best combination is one where the entrepreneur has a moderate entrepreneurial orientation and a high-market orientation. The ability to generate, disseminate, and respond to market intelligence is crucial to achieving a competitive advantage (Bhuian et al., 2005). As a result, creating new markets is critical to driving profitability for businesses. Therefore, entrepreneurs should have a market as well as a business orientation to be able to recognize opportunities so they can provide the right solutions that will generate financial profit in order to sustain the business.

Table 1:Entrepreneurial Competencies

Authors and article	Main Hypothesis/Research Question	Synopsis of the findings
Kyguolienė & Švipas, (2019). Personal Entrepreneurial Competencies of Participants in Experiential Entrepreneurship Education	The object of the research was to analyse the personal entrepreneurship competencies of students participating in the experiential	Educating about entrepreneurship competencies is important. Also invest in more innovative, untypical, and practical experiential learning methods in order to influence students'

	entrepreneurship program.	competencies, values, and beliefs.
González-López, Perez-Lopez & Rodriguez-Ariza, (2021). From potential to early nascent entrepreneurship: the role of entrepreneurial competencies	In the pre-actional phase of the entrepreneurial process, the perceived entrepreneurial competencies are important.	Entrepreneurial intention and competencies related to commitment, planning, and organization have a significant and direct influence on nascent entrepreneurial behaviour, and that the whole set of entrepreneurial competency factors enhances the relationship between entrepreneurial intention and entrepreneurial gestation activities.
Kozlinska, I, Rebmann, A & Mets, (2020). Entrepreneurial competencies and employment status of business graduates: the role of experiential entrepreneurship pedagogy	An examination of the relationship between experiential entrepreneurship pedagogy, entrepreneurial competencies, and the employment status of business graduates in two countries in Europe is presented here.	Developing entrepreneurial skills through experiential pedagogy can be more effective in developing all three competencies, and can help moderate the relationship between the different competencies and the employment status of graduates.

Morris & Konig, (2020). Self-directed experiential learning to meet ever-changing entrepreneurship demands	Entrepreneurship has indeed changed with the digital age. In this respect, Self-directed Learning (SDL) is fundamental and its role for entrepreneurship was examined.	The combination of SDL competence with experiential learning supports the kind of adaptivity needed for entrepreneurial success, especially under rapidly changing conditions.
Gumusay & Bohne, (2018). Individual and organizational inhibitors to the development of entrepreneurial competencies in universities	Inhibitors to nascent academic entrepreneurs' development of entrepreneurial competencies. Classifies inhibitors into relational, structural, and cultural-cognitive categories.	The three types of inhibitors together influence the development of entrepreneurial competencies in direct and indirect ways before venture formation.
Bell & Bell, (2020). Applying educational theory to develop a framework to support the entrepreneurship	Conceptual paper reviewing educational theories and philosophies	Three-stage framework which informs the roles of an educator and a learner in experiential entrepreneurship education within further and higher education
Reis et al., (2021). Consolidating core entrepreneurial competencies: toward a meta-competence framework.	Entrepreneurial competencies - What are they? In what ways can entrepreneurial competencies be	When designing entrepreneurship training, there are four meta-competencies to consider: Personal and behavioural, functional, knowledge and

	clustered and classified?	cognitive, and values and ethical.
Raza et al., (2020.) Linking entrepreneurial education with firm performance through entrepreneurial competencies: A proposed conceptual framework	Literature review to propose a conceptual framework of examining firm performance from the perspective of entrepreneurial education and entrepreneurial competencies as a mediator.	Entrepreneurship education and entrepreneurial competencies are related, as are the links between entrepreneurial competencies and firm performance.
Hwang, Choi & Shin, (2020). A mediating role of innovation capability between entrepreneurial competencies and competitive advantage	Innovation capabilities at the organisational level are mediated by entrepreneurial competencies at the individual level.	Entrepreneurial competencies have much stronger indirect effects on competitive advantage than their direct effects.

Source: Author's literature synthesis

2.6. Business Performance

A company's long-term performance, i.e., its competitiveness, is determined by its dynamism, its orientation, its controllability, and its relativity (Man, Lau & Chan, 2002). Businesses have valuable resources that allow them to perform better than competitors, enabling them to gain a competitive advantage. Under highly uncertain business conditions, entrepreneurial behaviour is an essential component of successful business performance (Cho & Lee, 2018). Entrepreneurs, according to Drucker, anticipate future changes and adjust to dynamism. Businesses that take advantage of this change will have an advantage in the business sector (Cho & Lee, 2018).

2.6.1. Definition of Business Performance

Due to the varying definitions of entrepreneurship, it is not surprising that the definitions and measures of success for small businesses differ as well (Trailer, Murphy & Hill, 1996). Cho & Lee (2018) define business performance as an organization's capability to manage fluctuating external factors, such as profits, productivity, employee satisfaction, and social responsibility. To gain a competitive advantage, companies compete by converting resources into products and services (Zhao, Song & Storm, 2013). In order to gain a competitive advantage, a firm must "transform its resources into products that customers need and are willing to pay more for than those which its competitors offer " (Zhao, 2013, p.791). Business performance is defined in this study as the ability of a firm to combine resources, internal factors, and external factors to achieve a competitive advantage.

2.6.2. Entrepreneurial competencies and business performance

In the context of entrepreneurship, it is known that the birth, survival, and growth of a firm are linked to entrepreneurial competencies (Minai, et.al, 2018). This demonstrates the significance of entrepreneurial competencies for business performance. Increasing entrepreneurial competence can improve the performance of SMMEs, both financially and non-financially, (Sungkawati, 2019). Human capital is a tangible asset that is significant to business performance, (Barazandeh, Parvizian, Alizadeh & Khosravi, 2015). At the start of a new venture, one of the few resources available to the business is its human capital, (Zhao et al., 2013). The founding team’s human capital, especially entrepreneurial competencies, enables opportunity recognition and strategic foresight leading to firm performance, (Sungkawati, 2019). Martin et.al (2013) posit that those individuals who possess greater competencies and knowledge will achieve greater individual and firm performance. Mitchelmore and Rowley (2010) concur with this view that competency is related to superior performance and with practice, can be enhanced over time.

In economics, competitiveness is often considered a long-term measure of success, performance, or profitability (Man et al., 2002). In the entrepreneurial context, SMMEs use creativity and innovative activities to establish and develop firms, (Hwang et al., 2020; Minai et al., 2018). The ability of the entrepreneur to successfully

innovate and create is linked to their human capital skills and knowledge which increases cognitive abilities, leading to higher levels of productivity, (Aidis & van Praag, 2007; Man et al., 2002).

A conceptual model of SMME competitiveness proposed by Man et al. (2002) implies and makes the central role of an entrepreneur's skills in entrepreneurial tasks an integral part of the overall performance of a firm. Without entrepreneurial competencies, a firm’s long-term performance is inhibited. However, an implication found in the study calls for a balance between competencies, as an overemphasis of a cluster of competencies may impact the use of other competencies, (Man et al., 2002). Thus, competency development in entrepreneurship development programmes should develop long-term entrepreneurial competencies to enable business performance and sustain change, as opposed to merely providing market access and funding.

Man et al., (2008), identified six major areas of entrepreneurial competencies associated with business performance. These competencies relate to SMMEs and include "opportunities, relationships, conceptual, organizational, strategic, and commitment competencies" (p.259). Several competencies are related to business performance, categorized by Mitchelmore & Rowley (2010): concept and relational competencies, managerial competencies, entrepreneurial competencies, and human relations competencies. Competencies also relate to personal characteristics, such as skills, and personal traits, which enable entrepreneurs to perform.

Despite this, current research shows that there is no agreement on which entrepreneurial competencies specifically are associated with success (Reis et al., 2020). According to the meta-analysis of entrepreneurial competencies conducted by Reis et.al, (2021), there is an essential gap in literature where entrepreneurial competencies are not clustered and no research to date has examined entrepreneurial competencies taking into account a single meta-competence framework. Meta-competences are generic and overarching strengths that describe a person's ability to comprehend current situations and acquire additional skills, as defined by (Cheetham & Chivers, 1996; Sims, 1983). Therefore, in a dynamic business environment, it is important to adopt a meta-competence to allow for

progressive research building on new competencies. Meta-competences framework by Reis et al., (2020) highlights four main meta-competencies: personal and behavioural related to adopting appropriate behaviour during the entrepreneurial process, functional being the ability to perform business tasks, knowledge and cognitive related to mastering business and technical knowledge and values and ethical refers to one's moral philosophy and ability to make sound judgments.

A study by Hwang et al. (2020) examined the entrepreneurial skills of individuals and firm performance and found a correlation between entrepreneurial skills and competitive advantage. The study also found that innovation capabilities are required for a firm to remain a leader in the market. Furthermore, Minai et al., (2018) developed a conceptual framework that discussed the importance of entrepreneurial competencies in firm performance and suggested future research should test the mediating effect of entrepreneurial competency on firm performance in entrepreneurship education. The present study examines that relationship.

2.6.3. Entrepreneurial Experiential Learning and Business Performance

Entrepreneurship education and entrepreneurial competencies, according to (Minai, et.al, 2018), are critical aspects of business performance. In the context of the South African ailing SMME sector, the importance of entrepreneurship education and the development of entrepreneurial competencies is pivotal to ensure entrepreneurial business sustainability. Entrepreneurs learn by doing, learning from what works and what does not work. Through this experiential learning paradigm, they can acquire the attributes and competencies required for firm performance and for succeeding in the dynamic world of business, (Dhliwayo, 2008).

In Kolb's Experiential Learning Theory experience is a means of assessing skills and abilities (Sims, 1983). Therefore, matching the person to the job should improve individual and organizational effectiveness, resulting in increased performance. Adaptive competence is crucial in this learning environment since entrepreneurs have to apply what they are learning practically to their businesses. Learning by doing is assumed to be the fundamental instructional model for entrepreneurship, for it enhances creativity and develops competencies, leading to the achievement of

desired learning outcomes (Kakouris, 2015). The entrepreneur gains opportunity-seeking capabilities by broadening their perspectives, which is one of the key competencies to achieving business performance. A study focused on assessing how experiential learning impacts soft skills development demonstrated that the experiential learning model is able to enhance students' soft skills and increase self-confidence, (Pamungkas et al., 2019). This demonstrates that experiential learning pedagogy is able to bridge the gap between theory and practice, with the outcome leading to more competitive individuals and organisations.

However, it remains uncertain whether experiential learning is effective in achieving desired learning outcomes. Scott et al. (2015) note that effectiveness is a function of purpose, as well as the ability to create value perceived by those who care. For entrepreneurship development programs to be effective in delivering desired learning outcomes that lead to success, they should consider the context and recipients of education.

2.6.4. Experiential Learning, Entrepreneurial Competencies, and Business Performance

Man et al., (2002) emphasize the need to use sound theoretical frameworks to investigate how an SMME's performance and its antecedents are related. As a result of the analysis of these issues, Man et al., (2002) developed a conceptual model to link the traits of SMME owner-managers to their firms' long-run performance. Despite the importance of internal capabilities and resources in developing competitive scope, Man et al. (2002) found that without entrepreneurial skills, an organization would not be successful over the long term. Likewise, Minai et al., (2018) argue that entrepreneurial skills are critical for firms' success. The authors developed a conceptual framework acknowledging the importance of entrepreneurial education and entrepreneurial competencies towards firm performance. Further theoretical and empirical research is required to examine the effect of entrepreneurial competencies as a mediator (Minai et al., 2018).

According to (Chen & Chang, 2013), entrepreneurial success or failure can be determined not only by the amount of human capital involved in the business venture but also by the technical skills possessed by the team and firm. Learning by doing

enables an individual to continuously improve his or her capabilities. Bell & Bell (2020) contributed to the discourse by stating that an educator plays a critical role in the delivery of experiential entrepreneurship education and that competence and understanding are both necessary to ensure that the practice succeeds.

Understanding business success and failure requires precise performance measurements (Trailer et al., 1996). According to Trailer et al. (1996), entrepreneurship research employs several performance measures, but no studies have examined how frequently the measures are used. Murray et al. (1996) analysed studies in which firm performance was a dependent variable and small- and medium-sized enterprises were the sample to determine what performance dimensions had been studied and how they were measured. In the review, researchers used the term 'performance' to describe a number of different aspects of performance. According to the results, the majority of performance measures were associated with at least one of the eight dimensions, with efficiency, growth, and profit being the most prevalent. Overall, it is important to measure as many performance characteristics as possible when multiple dimensions exist.

A review of the impact of experiential learning on the development of entrepreneurial abilities was conducted. Man et al., (2002) demonstrated the importance of entrepreneurship education in developing entrepreneurial competencies that enable firm performance, which sparked academic studies to investigate the mediating role of entrepreneurial competencies.

2.7. Conclusion

Chapter two began by providing a theoretical lens describing the theories applied. The chapter provided a review of the literature by examining the definition of entrepreneurial competence and described the types of entrepreneurial competencies that are needed to ensure business performance. Experiential learning and business performance as constructs were also defined and highlighted their importance to the development of entrepreneurial competencies. Following the review of the literature and the identification of gaps based on these constructs, the next chapter discusses the research questions the study attempts to answer.

CHAPTER 3: HYPOTHESIS AND CONCEPTUAL MODEL

Following the review on experiential learning, entrepreneurial competencies and business performance literature, this chapter presents hypotheses that will be tested and which this current study intends to answer.

3.1. Entrepreneurial Experiential learning and Entrepreneurial Competencies

Experience-based learning is regarded as particularly effective in entrepreneurship education (Bell & Bell, 2020). Participants in this form of learning engage in active learning, where simulations of reality develop new skills and entrepreneurial competencies. Moreover, Man et al., (2002) concur that successful entrepreneurs often possess a set of competencies derived from entrepreneurial education.

The following hypothesis will be evaluated:

H1: The role of Entrepreneurial Experiential Learning to Entrepreneurial competencies

3.2. Entrepreneurial Experiential learning and Business performance

For a firm to compete successfully, it needs the knowledge, skills, and resources to gain a competitive advantage. SMMEs face increasingly competitive business environments, which makes it difficult to increase or sustain business performance as a result of globalization, (Barazandeh et al., 2015). Business performance has multiple dimensions and it is important to consider both financial and non-financial measures when evaluating total organisation performance, (Murphy et al., 1996). Learning by doing and learner-led approaches facilitate linkages to real-life experiences that develop human capital skills that an entrepreneur can use to spot opportunities and respond strategically and improve non-financial measures to improve business performance (Bell & Bell, 2020).

The following hypotheses will be evaluated:

H2: The role of Entrepreneurial Experiential Learning on Entrepreneurial Business Performance

3.3. Entrepreneurial competencies and Business Performance

Human capital, which represents the skills of an owner-manager, has a significant influence on business performance (Barazandeh et al., 2015). The importance of entrepreneurial competencies to business success and growth is widely recognized (Reis et al., 2020). A business model that is profitable and sustainable can be built by entrepreneurs with these entrepreneurial competencies (Reis et al., 2020).

There are different types of competencies and the following hypothesis will be tested:

H3: Entrepreneurial competencies do contribute to the overall business performance
H3a: Developing opportunity competencies lead to overall business performance
H3b: Developing network competencies lead to overall business performance
H3c: Developing return on investment competencies lead to overall business performance
H3d: Developing insights into the market competencies lead to overall business performance

3.4. Experiential Entrepreneurial Learning, Entrepreneurial competencies, and Business Performance

Experiential entrepreneurship education is delivered through dynamic and interactive learning and teaching methods. Ratten & Usmanji (2021) state that these learning processes focus on the acquisition of competencies that are necessary for entrepreneurship and also integrate the assessment and recognition of opportunities for future engagement. Several entrepreneurial competencies have been linked to firm performance and can also benefit firms in gaining a competitive advantage (Man et al., 2018). The following hypotheses will be evaluated:

H4: The mediating role of entrepreneurial competencies on the relationship between experiential learning and overall business performance

H4a: Opportunity competencies does have a mediating effect on the relationship between experiential learning and business performance
H4b: Network competencies does have a mediation effect on the relationship between experiential learning and business performance
H4c: Returns on investment does have a mediation effect on the relationship between experiential learning and business performance
H4d: Insights into the market does have a mediation effect on the relationship between experiential learning and business performance

Below is a diagrammatic representation of the model the study intends on using.

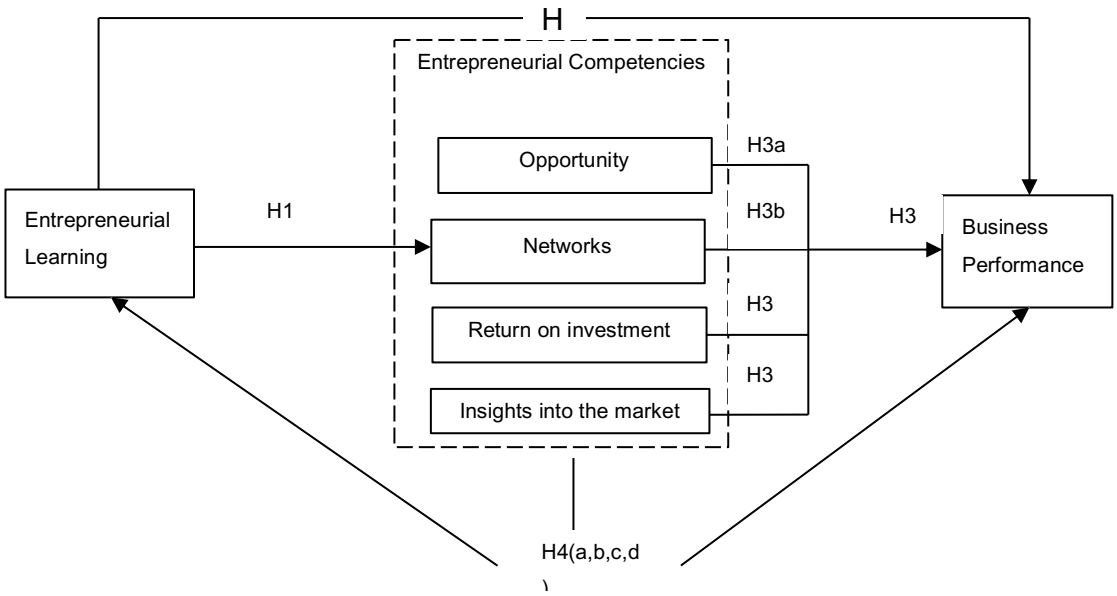


Figure 1: Diagrammatic representation of study including variables

3.5. Conclusion

Chapter 3 presented the hypotheses to be tested in this study. In order to fulfill its purpose, the study used the hypotheses to guide its methodology and the process is used to gather data. The next chapter describes the design of the research project and the methods used to collect the data.

CHAPTER 4: RESEARCH METHODOLOGY

4.1. Introduction

In chapter 4, the choice of methodology is explained and defended. Additionally, it discusses how data was analysed statistically as well as descriptive statistics about the sample population. Further, it shows how the hypotheses outlined in Chapter 3 can be tested using the statistical methods presented in this chapter. It concludes with a discussion on the limitations of this explanatory research.

4.2. Research Methodology

4.2.1. Research Philosophy

Since the initiation of entrepreneurship research, quantitative research approaches have been increasingly used due in part to the advancement and maturation of the field, (Marvel et.al, 2016). The research followed a positivist research philosophy to guide the research methods and analysis, (Saunders & Lewis, 2012). In research, there are paradigms that consist of ontological and epistemological components. The researcher adopted a positivist epistemology which is one of objectivity versus a positivist ontology which is one of realism, to help clarify the research design (Scotland, 2012). The reason is that the aim of the research was to obtain meaning by relying on the object of the data and not the researcher's consciousness. The research also pursued objectivity so that the theories applied can be linked to practice versus ignoring the theory for the sake of facts.

To support the positivist philosophical stance, the researcher used scientific methods, such as literature review on the topic, constructing hypotheses and testing hypotheses, analysing and reporting findings objectively to generate knowledge that can lead to generalisations, Alharahsheh & Pius, (2020; Molina-Azorín, Lopez-Gamero, Pereira-Moliner & Pertusa-Ortega, (2012), and to describe the impact of entrepreneurial experiential learning on developing entrepreneurial competencies that enable firm performance.

4.2.2. Research Approach

Deductive research is characterised by a theory that becomes the framework for the study, as opposed to inductive research where theory is developed from observations of empirical data (Bahari, 2012). A deductive reasoning approach was used to allow the research and the research problem to be narrowed down from general to specific, (Ryan, 2018), using existing theories of Human Capital and Experiential Learning, which have been well researched to develop and test hypotheses that emerge from these theories. Hypotheses were formulated to test the relationship between the variables and to disprove or prove the theory.

A deductive approach allowed the researcher an opportunity to define variables from the hypotheses and design a survey questionnaire from existing measuring instruments. The study intended to increase the degree of understanding of whether entrepreneurial competencies mediate the relationship between experiential learning and business performance using a deductive approach. The research model consists of one independent variable (Experiential Learning), one dependent variable (Business performance), and a mediator variable (Entrepreneurial competencies), which informed the selection of the deductive approach to this study.

4.2.3. Purpose of research design

As the state of knowledge within the field increasingly moves from descriptive to explanatory, this study applied an explanatory approach to testing the theory through deductive reasoning. The research purpose was not to develop a theory. Rather, the study formulated hypotheses to test the theory. Researchers in entrepreneurial research has attempted to identify factors that predict entrepreneurship, such as learning and previous work experience, but their efforts have found low explanatory power (Segal, Borgia & Schoenfeld, 2005). The researcher determined that an explanatory study would be most useful in helping gain richer insight from entrepreneurs on the extent to which experiential learning has developed entrepreneurial competencies that make it possible for businesses to prosper.

4.2.4. Methodological choices

The explanatory nature of the study informed a structured survey research strategy. The online survey questionnaire was used because it was a cost-effective efficient means for obtaining quantitative data from a large sample size for the purpose of statistical analysis, (Dana, 2005).

4.2.5. Research strategy

Many studies of entrepreneurship and small business focus on the firm and the entrepreneur (Dana & Dana, 2005). Given the methodological choice of this study, the strategy using a survey questionnaire involved carrying out a cross-sectional study to collect the data of the group of entrepreneurs at a point in time. The survey is used to collect rich and reliable data and provides explanatory information, (Cohen, Manion & Morrison, 2017). A self-administered survey questionnaire was appropriate for this study to enable generalisations to be made about the given variables, (Cohen et al., 2017).

4.2.6. Research time horizon

A longitudinal study, which gathers data over an extended period of time would have been beneficial to the study. Due to the time constraints in completing this research, the time horizon for the study was cross-sectional. By collecting data from entrepreneurs at a point in time, the research provided a ‘snapshot’ of the current thinking and prevailing characteristics of the population (Saunders & Lewis, 2012) and ties in with the methodological choice. Aidara et al., (2021), the study examined the relationship between entrepreneurial competencies and economic sustainability performance using a cross-sectional research design. They also acknowledged the limitations of cross-sectional studies and suggested a longitudinal study would have been more beneficial. Using a cross-sectional design, Politis & Gabrielsson, (2009) examined experiential learning and entrepreneurs' attitudes towards failure and it presented limitations to causality. Furthermore, to eliminate bias, the researcher included factors in the questionnaire that promoted respondents’ views rather than promote the researcher’s agenda, (Cohen et al., 2017).

4.3. Research Design

4.3.1. Population

Saunders and Lewis, (2012, p.138) defined a population as "the complete set of group members". The population for this research was randomly selected with over 2 700 entrepreneurs on the GIBS Entrepreneurship Development Academy database. This random selection method is important as it demonstrated the commitment to producing findings that can be generalized beyond the scope of those who participated in the study Bryman & Cramer, (2005). Thus the population relevant to this study was defined as the owner-managers that are running established businesses in South Africa. According to Bowmaker-Falconer & Herrington, (2020), the established business ownership rate in South Africa is the "percentage of the adult population that is aged between 18 and 64 years, who own or manage businesses that have been in operation for more than 42 months". Whilst this rate has increased from 2.2% in 2017 to 3.5% in 2019, the business discontinuance rate of those businesses closing was much higher indicating that various support is needed to enable business continuity. This made for an interesting study to ascertain what competencies are required to circumvent this occurrence and can be developed through entrepreneurial experiential training to enable business performance.

4.3.2. Unit of analysis

This research used the organization level as the unit of analysis and the owner-managers of these entrepreneurial organizations in different sectors were surveyed. A successful business is driven by entrepreneurial competencies, which made the selection of owner-managers crucial as these managers must develop entrepreneurial competencies to make their business profitable, (Barazandeh et al., 2015)

4.3.3. Sampling method and size

Samples represent a subset of all group members or the entire population (Saunders & Lewis, 2012, p.138). Due to the inability to access the entire population in the time allocated to complete the study, this research drew a sample from a smaller group

of beneficiaries who are currently completing or had completed a training programme in such a way that the knowledge gained is representative of the total population of entrepreneurial businesses in South Africa. The sample size is 120 students who are currently completing their programmes and ones who have completed any of the GIBS Entrepreneurship Development Academy (EDA) entrepreneurship training programmes and were selected at random using a probability sampling technique. GIBS' Entrepreneurship Development Academy is at the center of entrepreneurship education and provides customised training in business development support for entrepreneurs in various growth stages. Entrepreneurs who are currently completing or have completed training between 2014 and 2021, are in various industries and have a minimum revenue turnover of R50 000.00 per annum were sampled. The sampling approach appropriately aligned with the research goal and helped the researcher make inferences about the population based on the research method selected.

4.3.4. Measurement instrument

The measurement instrument selected for this study was a survey questionnaire. Since this was a quantitative study, a questionnaire was a useful tool as it included all methods of data collection that allowed the same set of questions to be asked to a large number of respondents, (Saunders & Lewis, 2012). The design of the questionnaire included questions that were clear and could be easily understood and this ensured there is no misunderstanding so that the respondents could complete the questionnaire. The benefit of the questionnaire is its reliability because it is anonymous, encourages honesty, and is inexpensive, and ensures that the researcher did not manipulate any of the variables of interest (Bryman & Cramer, 2005b; L. Cohen et al., 2017). However, the questionnaire was not without its disadvantages as Cohen et.al (2017) stated that because of its intrusive nature, one must consider ethical considerations when designing the instrument. The primary objective of the questionnaire was to obtain a detailed list of competencies that owner-managers of entrepreneurial businesses needed to achieve business performance given the context in which they operate which relates to the research objective. The questionnaire used a Likert scale and was semi-structured which is a format that is close-ended and enabled the respondents to respond objectively, (Cohen et.al, 2017). The survey questionnaire is provided in appendix 2.

The survey questionnaire was divided into three sections. Section one included items measuring the student's perceptions of meaning or value of experience-based educational instruction, rooted in experiential learning theory, (Clem et al., 2014). The second part of the survey questionnaire contained items borrowed from a performance questionnaire designed by Gunday et al., (2011) which measured the innovation and financial performance constructs. The third part of the survey questionnaire consisted of questions focused on entrepreneurial competencies and included items from the scale which measured seeing an opportunity, network building capabilities, awareness of potential returns on investments, and insights into the market. These items were designed as behavioural indicators to demonstrate that simply possessing skills does not necessarily make someone a competent entrepreneur. A person's behavior and actions demonstrate their competencies, (Kyndt & Baert, 2015).

4.3.4.1. Experiential learning

Fundamentally, experiential learning is a holistic process that puts the learner in the center of the learning process, (Krakauer et al., 2017). Clem et al., (2014) designed an instrument, the Experiential Learning Survey (ELS), and the scale was designed to measure a "student's perception of meaning or value of experience-based educational instruction, and it is rooted in experiential learning theory", (Clem et.al, p.493, 2014). The scale included 28 questions covering "four domains for subscales: authenticity, active learning, relevance and utility", (p.495), measured on a 7-point Likert scale (1 = strongly disagree to 7 = strong agree). To assess for reliability and internal consistency, a scale of Cronbach's alpha score of .70 and above was acceptable. The ELS's score was .680 which is below the conventional range however it approached acceptability.

4.3.5. Entrepreneurial competencies

There are many definitions of entrepreneurial competencies in literature but they all converge on the idea that the construct entails "personality traits, skills, knowledge, and attributes that bring about the ability to accomplish something through the use of resources", (Gumusay & Bohne, p.363, 2017). Kyndt & Baert, (2015) designed an

instrument that contained 12 competencies relevant for entrepreneurs in different sectors. 113 items were included, however, for the study, only subsections were included as indicated above. All items were answered on 6 points Likert scale with the following response options (1 = never, 2 = seldom, 3 = sometimes, 4 = often, 5 = most of the times, and 6 = always). The internal consistency for the scale ranged from .60 to .87, suggesting satisfactory levels of construct reliability.

4.3.6. Performance

Innovation is one of the basic tools of a growth strategy to enter new markets, increase existing market shares, and give a company a competitive advantage, (Gunday et al., 2011). In the long run, innovative performance can exert then positive effects on firms' production, market, and financial performances. The Innovation performance scale by Gunday et al., (2011) was used and the Cronbach Alpha ranged from .90 to .76 suggesting satisfactory levels of construct reliability. The questions about innovation and financial performance are asked using a 5 point Likert scale, where 1 = very unsuccessful, 2 = unsuccessful, 3 = neither unsuccessful or successful, 4 = successful and 5 = very successful, (Gunday et al., 2011).

4.3.7. Pilot Study

The distribution of the questionnaire was preceded by a process of ethical consideration. Ethical clearance was obtained as detailed in appendix 2. In the first pilot project, the survey was given to a cohort of entrepreneurs enrolled in the National Home Builders Regulators Council's (NHBRC's) women empowerment program. Thirty entrepreneurs participated in the survey. The entrepreneurs were selected based on their ability to provide feedback quickly and easily. To ensure content validity and to ensure that the questionnaire included an adequate and representative set of items to cover the above-mentioned constructs of experiential learning, entrepreneurial competencies, and performance, the researcher sought questionnaires that have already been developed. A few measures and scales were left out of the original study and the researcher had to resubmit a survey questionnaire that included the measures and scales described in the studies considered. Another pilot project was run, but due to time constraints, only two

people participated. The feedback indicated that the survey questionnaire is too long and may discourage respondents and lead to incomplete surveys.

4.4. Data gathering process

Many entrepreneurship studies, including a study by Zizile & Tendai, (2018) on how entrepreneurial competencies influence women entrepreneurs' performance, collected data using a questionnaire. The self-administered survey questionnaire was designed and distributed using an online platform via Google forms. This allowed participants to answer in their own time and high response rate compared to other methods. The survey questionnaire was pre-tested in both pilots before collecting the data. It was a cost-effective medium and easy for participants to use. The survey questionnaire was sent to individuals in the target population through media channels such as email, social media platforms such as LinkedIn, Instagram, Twitter, and WhatsApp. The sequence approach targeted current programme and GIBS EDA alumni WhatsApp groups, followed by a social media post on the GIBS EDA social media platforms. The GIBS EDA allowed the distribution of the survey questionnaire to their database. The first survey was distributed from August 2021 until September 2021, with weekly reminders. The second updated survey was sent in October for two weeks. Data was password protected on Excel and stored on Google drive. The results are presented in Chapter 5.

4.5. Data Analysis

4.5.1. Data preparation

The process of analysing data involves organizing, interpreting, and explaining the information that may be inconsistent or incomplete (L. Cohen et al., 2017; Khalid et al., 2012). The sample data were analysed using IBM Statistical Package for Social Sciences (SPSS) because the study is quantitative and numerical. As a result of the statistical method selected, the researcher was able to answer the research questions (Disman et al., 2017). The data was analysed, explained, and presented using descriptive and inferential statistical techniques (Khalid et al., 2012). The purpose of the research design is to explain the nature of the relationship between the variables under study, so the researcher used regression models for this

purpose, as they are a powerful tool for summarizing the nature of the relationship (Bryman & Cramer, 2005). The Exploratory Factor Analysis (EFA) technique was used to clarify the relationships between variables.

4.5.2. Missing Data

It is important to evaluate the reasons for missing data in research before any further analysis is done (Li, 2013). There are several reasons for this, including the inability of participants to complete the survey questionnaire, incomplete understanding of the question and leaving it out, or no participation from the entire population (Brick & Kalton, 1996). The missingness of the data was checked using Little's Missing Completely at Random (MCAR) test in order to ensure that it wasn't influenced by the observed or unobserved data (Li, 2013). An MCAR test is better than a complete case analysis because only MCAR can cover the missing data (Li, 2013). In the prepared dataset, there were no missing values. Following the analysis of the missing value, the data were analysed for extreme outliers. This is discussed in Chapter 5.

4.6. Statistical Analysis

4.6.1. Normality

Statistical techniques assume that data is normally distributed. Normal curves are symmetrical, bell-shaped curves with the highest frequency of scores at the middle and the lowest frequencies at the ends (Pallant, 2007). Normality can be assessed using two different methods: numerical methods through statistical tests or graphic methods through visual inspection. These numerical methods examined the skewness and kurtosis values as well as the Shapiro-Wilk test. The direction of skewness and kurtosis values indicates the type of normality present (Laerd Statistics, 2015e). Due to researcher involvement, graph interpretation is less objective, although they are still effective. They use the Normal Q-Q and histograms.

4.6.2. Outliers

The term outlier is used to describe "data points that are markedly different from other data points" (Gibbert, Nair, Weiss & Hoegl, 2021, p.172). There are a number of factors that can cause outliers, including participant response errors and data entry errors (Kwak & Kim, 2017). The box plot test was used to identify outliers. An outlier is a data point that falls outside the upper or lower fence lines of a vertical box plot (Kwak & Kim, 2017). The outliers were handled in such a way as to not drastically affect the results of the analysis. There are several ways to deal with outliers. This analysis used trimming to exclude outliers. Chapter 5 presents the results.

4.6.3. Reliability

As described earlier, primary data was collected through survey questionnaires as the measurement instrument. According to Khalid et.al (2012), reliability is the extent to which an instrument measures what it intends to measure and gives consistent results free from random error. Furthermore, (Oluwatayo, 2012, p.395) states reliability in quantitative research is “synonymous to dependability, consistency, reproducibility or replicability over time, over instruments and groups of respondents". The study aimed to produce a replicable study that can be applied in different contexts and still yield the same results. To achieve this, the researcher ensured that the measurement instrument or scale had internal consistency to ensure homogeneity and reflected the same construct, (Khalid et.al, 2012). To ensure this, a Cronbach alpha coefficient, which is most widely used to measure internal consistency was reported. To ensure validity, the researcher ensured that the measurement instrument explored the concepts that the study intends from a content validity and predictive validity perspective. Furthermore, the researcher tested for convergent and divergent validity to ensure construct validity. Furthermore, the SPSS data set was imported to SPSS Analysis of a Moment Structures (AMOS) for statistical analysis.

4.6.4. Validity

The validity of this study refers to how it measures what it sets out to measure. Both content and construct validity were examined. As a result of sampling validity, the study examined business performance from a broader and not a narrow perspective. In quantitative research, construct validity is important, so the researcher used pre-existing measuring scales and a pilot study as a pre-test of the measurement instrument (Sürücü & Maslakçi, 2020). The validity of a construct is evaluated by examining its relationship (convergent validity) and its unrelatedness (discriminant validity), (Pallant, 2007). Exploratory Factor Analysis (EFA) was performed before any comprehensive testing of the data and to test for convergent validity.

The Kaiser-Meyer-Olkin (KMO) test is a method that measures sampling adequacy for the overall sample and allows identification of any meaningful underlying structure, (Laerd Statistics, 2015c). KMO indicates whether there are linear relationships between variables and whether a principal component analysis should be conducted (Laerd Statistics, 2015c). Bartlett's test checks the correlation matrix to make sure all 1's are on diagonals and Principal Component Analysis can be used to reduce the variables under study (Laerd Statistics, 2015c). Based on the KMO and Bartlett's test scores, a Principal Component Analysis was used to reduce the variables to dimensions. Results are presented in Chapter 5.

4.6.5. Dimension reduction

Factor analysis is used when you have many related variables and to explore the underlying structure of this set of variables, (Pallant, 2007). To simplify the remaining survey items, principal component analysis was used to reduce them into their respective dimensions (Govender, 2020). The sample size is an important consideration. Several opinions exist on the adequate size to conduct factor analysis and Bartlett, Kotrilik & Higgins, (2001) suggest that the sample size should be 100 and greater, which this study fulfills. A component correlation matrix was used to display the relationship between the individual variables. The categorized loadings were over 0.30 which is the minimum required factorability, indicating that factor analysis was the appropriate statistical method to utilize, (Williams Onsman & Brown,

2010). The results are presented in chapter 5. Furthermore, experiential learning, opportunity, return on investment, network, and insights to markets competencies dimensions as well as innovative and financial performance dimensions were extracted to enable the following descriptive and inferential statistics.

4.7. Descriptive Statistics

The purpose of descriptive statistics is to describe, show, and summarize data in a meaningful manner, (Laerd Statistics, 2015a). Data is described using demographic information captured by the survey questionnaire to help to interpret the data and findings. The analysis included measures of central tendency and spread of the data. The results are presented in chapter 5.

4.7.1. Population demographics

The demographic data provided insights into the behaviour of the measured variables. A frequencies test was conducted to gather the statistics that describe the population of the study, (Govender, 2020).

4.8. Inferential Statistics

4.8.1. Hierarchical multiple regression

Regression analysis was used to investigate the linear relationships and predict business performance as a dependent variable based on multiple independent variables. Regression analysis is a statistical method that investigates the relationships between variables to ascertain cause and effect and to measure the strength of the estimated relationships, (Sykes, 1993). This study used hierarchical regression to explore the possible causal effect of the independent variables when predicting business performance.

4.8.2. Pearson's r correlation

Sedgwick, (2012) correlation measures the strength of linear association, that is, how closely the points lie on a straight line. The Pearson correlation coefficient, also known as the product-moment correlation coefficient, was used and is represented in the sample by r, and it is this coefficient that measured the strength and direction firstly between experiential learning and entrepreneurial competencies, secondly between experiential learning and business performance, thirdly, between entrepreneurial competencies and business performance and lastly the mediation relationship, (Laerd Statistics, 2015b). The relationship exists when a change in one variable affects or influences a change in the other variable, (Isaac & Chikweru, 2018). They vary from -1 for a perfect negative linear relationship to a +1 for a perfect positive linear relationship, (Laerd Statistics, 2015b). A scatter plot was also analysed as it visually displays the correlation between two sets of bivariate data, (Isaac & Chikweru, 2018). The results of the regression analysis are presented in chapter 5.

4.8.3. Simple Linear regression

Known as bivariate linear regression, simple linear regression assesses a linear relationship between two continuous variables to predict a dependent variable's value based on an independent variable's value, (Laerd Statistics, 2015d). It differs from the coefficient as it evaluates the impact on a particular outcome rather than the strength and direction, (Zou, Tuncali & Silverman, 2003). The following equation expresses the relationship:

$$Y = a + bX$$

where the regression parameter, *a* indicates the intercept, where X = 0, b is the slope of the least-squares line, indicating the value of Y with a change in X.

4.9. Mediation Analysis

A mediating effect of entrepreneurial competencies was examined through applying multiple linear regression analysis. Most studies use structural equation modelling

(SEM) to understand the effect of entrepreneurial competencies as a mediator on the independent and dependent variables. An SEM was attempted for this study however due to its small size; it was not feasible. Studies have used similar statistical approaches to establish the effect of the mediator variable on the independent and dependent variables, (Khan, Rathore &. Sial, 2020; Rosli & Sidek, 2007). A simple mediation model is depicted below in Figure 2:

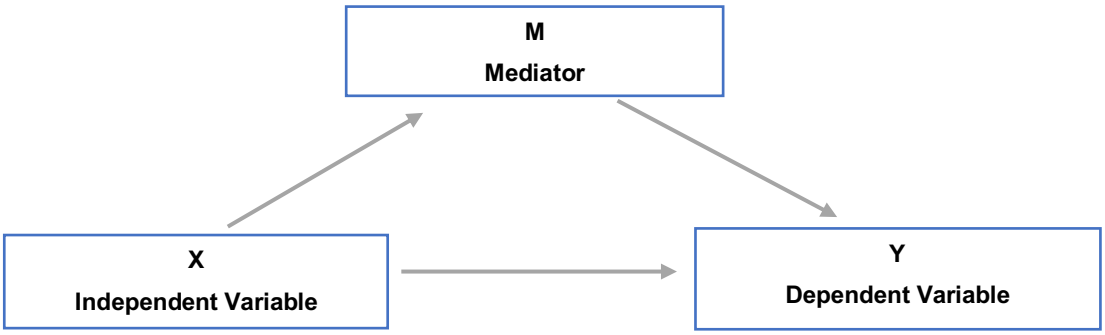


Figure 2: Mediation model adapted from Mackinnon, Fairchild & Fritz, (2017).

Figure 2 shows the mediation model where X, M, and Y are the variables and the arrows represent the relationship between the variables, (MacKinnon, Fairchild & Fritz, 2007). The statistical procedure and results are presented in chapter 5.

The regression terms for this study can be represented as follows:

Y – Business performance, Innovative performance, financial performance
M – Entrepreneurial competencies, Opportunity competence, Network competence, Return on investment, Insights into the markets
X – Experiential Learning

4.10. Ethical considerations

Written permission from the database holders was obtained to distribute the research. Participant consent to receiving marketing and research correspondence has been obtained. Members of the database who had opted in to receive ongoing information were sent the survey questionnaire in accordance with the Protection of Personal Information Act (POPIA). In the consent statement, participants were advised of the study's purpose and had the option to participate. The contact

information for the researcher and supervisor was provided in case of any concerns. Participants in the study were assured of their anonymity and confidentiality. As part of the information provided, participants were informed that participation is voluntary and that they can withdraw at any time.

4.11. Limitations

Due to the quantitative nature of the study, some of the limitations to the research related to data collection, and subjectivity on the part of the participants, (Hughes & Scholtz, 2019). The limitations pertaining to this study are discussed below.

4.11.1. Sample size

The final sample size of 123 valid respondents, which was adequate to test the statistical significance of the relationships. However, the small sample size of respondents from the different entrepreneurship programmes was representative of the established businesses in South Africa.

4.11.2. Business owners bias

Due to the survey being distributed among a database of students from an entrepreneurship development academy, the comparison was limited to students from its programs. It remains to be seen whether the approach would work elsewhere given the findings of the academy programme. As students of the academy, their responses to business performance and experiential learning questions may be biased since they expect to enhance their performances in the academy.

4.11.3. Business performance

A cross-sectional study is limited in its ability to track changes over time. A longitudinal study is best suited to measure the effect of experiential learning on the development of entrepreneurial competencies that lead to business performance.

4.12. Conclusion

In Chapter 4, the hypotheses developed were discussed, along with the methodology and research design selected to test them. In addition, it provided the descriptive statistics of the sample population as well as the statistical methods used for the statistical analysis of the data. The chapter also discussed the mediation model used to test the hypotheses. The conclusion highlights the limitations of this exploratory research design. The results and analysis are presented in Chapter 5.

CHAPTER 5: RESULTS

5.1. Introduction

Chapter 5 presents the results for the data collection process and data analysis. Additionally, it presents the results for the statistical analysis and the descriptive statistics. Lastly, it presents the results of the hypotheses testing that was conducted.

5.2. Data analysis

5.2.1. Data preparation

Response data were consolidated by the platform hosting the data based on the listed questions and the associated answers. The raw data are presented in appendix 3. The raw data analysis revealed that one respondent specified they had attended an entrepreneurship development programme rather than selecting or typing the name of the programme as required. This entry was recorded under the option 'other' and included in the study. All respondents selected their gender from the options provided in the questionnaire. The respondents specified their age group from the list provided.

There were some respondents who did not choose from the categories for highest education. The respondents selected other, i.e., certificate, Ph.D., NQF level 4, etc. Judgment was used to re-categorize these responses into their respective categories or ‘other’ option so that the data can be consistent, which enabled the coding process.

5.2.2. Missing data

The total sample size of completed survey respondents was 123. No missing data was recorded as per the complete data set in Appendix 4. Below is Table 3: Percentage of missing cases indicating the number of missing records as per Little’s MCAR test.

Table 2:Missing data

Percentage of missing data	
Number of data records (N)	123
Number of missing records (N)	0
Percentage of missing records	0%

5.3. Statistical analysis

5.3.1. Normality

To apply more rigor, graphical and numerical methods were applied to assess tests for normality. Skewness and kurtosis were applied to assess the normal distribution of the data as the first procedure in SPSS. All variables were assessed for skewness and fell outside of the range, +-2,58 and for kurtosis +-7, therefore the data is not normally distributed.

The second procedure applied the Shapiro-Wilk test to test for normality. The sig values as seen in table 4 below, for all variables are $p < 0.05$ and therefore the assumption for normality has been violated, meaning that the test is significant at the $p < 0.05$ level, (Laerd Statistics, 2015e). Scores for all variables were not normally distributed.

Table 3: Tests of Normality Shapiro-Wilk

Tests for Normality						
	Kolmogorov-Smirnova			Shapiro-Wilk		
Constructs	Statistics	Df	Sig	Statistic	Df	Sig.
Experiential learning	0.123	110	0.000	0.940	110	0.000
Innovative business performance	0.107	110	0.003	0.958	110	0.002
Financial business performance	0.169	110	0.000	0.941	110	0.000
Total business performance	0.097	110	0.012	0.966	110	0.006
Opportunity competence	0.069	110	0.200*	0.971	110	0.005
Network competence	0.102	110	0.007	0.964	110	0.005

Return on investment competence	0.095	110	0.017	0.944	110	0.000
Insights into the market competence	0.075	110	0.156	0.978	110	0.063

*This is lower bound of the true significance.

a. Lilliefors Significance Correction.

An inspection of the Normal Q-Q plot and histograms was conducted to assess for normality, graphically. Analysed values were quite close to the expected normal, which signals a normal distribution of data across all variables, which is reflected in appendix 5.

5.3.2. Outliers

The box plot results indicated that were 13 outliers across questions 43, 92, 50, 117, 23, 123, 96, 49, 65, 31, 111, 19, and 55 as presented in Appendix 6. Trimming was used where the 13 outliers were removed from the study.

5.3.3. Validity

Exploratory Factor Analysis (EFA) is a widely used and widely applied statistical technique in the social sciences that can be used for interpreting self-administrated questionnaires (Costello & Osborne, 2005; Williams et al., 2010). The number of variables was reduced from 60 to 40 by using factor analysis in this study. Furthermore, factor analysis was employed to identify the dimensions between measured variables and latent constructs, which enabled the formulation and refinement of theory, and, finally, to verify the validity of the questions the study was based on (Williams et al., 2010).

A Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's Test of Sphericity were performed before factor analysis (Williams et al., 2010). Overall, the KMO test of sampling adequacy was closer to 1, with individual KMO scores greater than 0.7, and Bartlett's test of sphericity statistically significant at 0.05, indicating that the data could be factored. Table 6 shows that factor analysis of the collected data is possible.

The Principal Component Analysis (PCA), which is the default method in many statistical programs such as SPSS, (Williams et al., 2010), was conducted to extract the factors, and inspection of the correlation matrix showed that all variables had at least one correlation coefficient greater than 0.3. Experiential learning had the highest Eigenvalue at 17.216 which explains 61,49% of the total variance. This is based on the Kaiser criterion (eigenvalue > 1 rule) that must be retained.

Table 4:KMO, Bartletts, Eigenvalues, and variance

		Total Variance Explained		
Construct	**KMO**	**Total**	**% Of variance**	**% Cumulative**
Experiential Learning	0.948	17.216	61,49	61,49
Total business performance	0.893	6.359	57.81	57.81
Innovative business performance	0.890	4.648	66.40	66.40
Financial business performance	0.825	3.292	82.30	82.30
Opportunity competencies	0.907	4.596	65.66	65.66
Network competencies	0.867	4.478	55.97	55.97
Return on investment competencies	0.873	4.188	69.80	69.80
Insights into the market competencies	0.833	3.711	53.02	53.02

5.3.4. Reliability

Reliability was tested using Cronbach's Alpha to provide a measure of internal consistency of the scales used in this study and it is expressed as a value between 0 and 1, (Tavakol & Dennick, 2011). A survey questionnaire was employed to measure different, underlying constructs. Alpha is reported for each construct as the test has more than one construct. This is done to ensure that the larger set of questions don't inflate the Alpha score, (Tavakol & Dennick, 2011). The first construct, Experiential Learning, consisted of 28 questions. The scale had a high level of internal consistency, as determined by a Cronbach's Alpha of 0,961. The second construct, Business performance, consisted of 11 questions. The scale had a high level of internal consistency, as determined by a Cronbach's Alpha of 0.925. The third construct, Entrepreneurial competencies, consisted of 28 questions. The scale had a high level of internal consistency, as determined by a Cronbach's Alpha

of 0.911. Results are shown below in Table 7. The value of the Cronbach's Alpha on all scales is high, indicating that the items of the test were correlated to each other, (Tavakol & Dennick, 2011).

Table 5:Reliability - Cronbach's Alpha

Scale	Cronbach's Alpha	N of items
Experiential Learning	0.961	28
Total Business Performance	0.925	11
Innovative business performance	0.912	7
Financial business performance	0.927	4
Opportunity competencies	0.911	7
Network competencies	0.880	8
Returns on investment competencies	0.913	6
Insights into the market competencies	0.838	7
Total Entrepreneurial competencies	0.932	28

The researcher concludes that the scales are reliable.

5.4. Descriptive Statistics

5.4.1. Population Demographics

The survey used four demographic questions to profile the respondents. Gender, GIBS EDA programme completing or completed, education level, and age were collected and analysed. The descriptive statistics of the population are presented below.

5.4.2. Gender Demographics

The gender question was categorised into two groups, male and female. The final sample size consisted of 123 valid responses of which 23% were male and 77% were females as presented in figure 2.

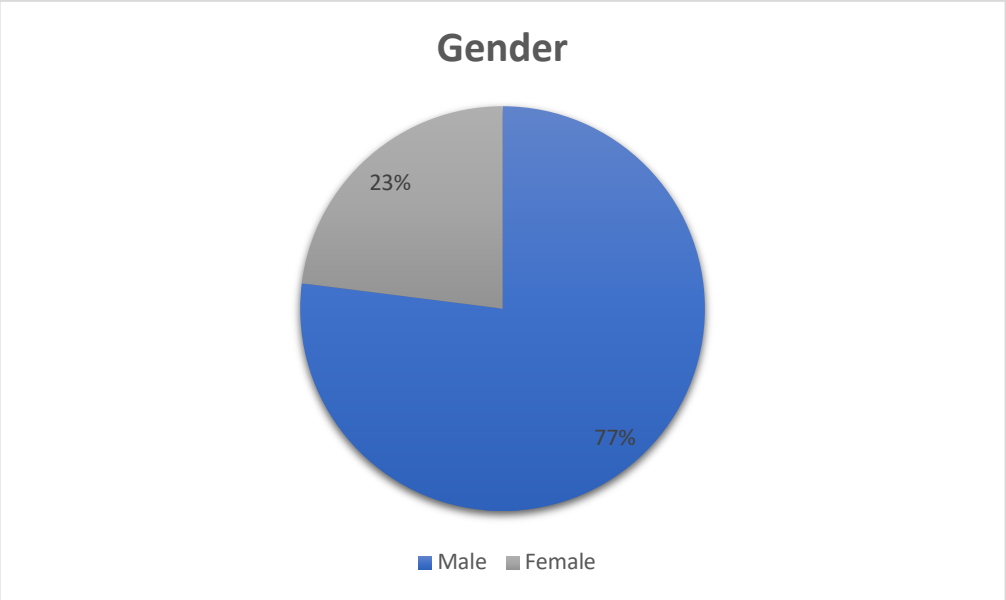


Figure 3: Gender demographics

5.4.3. Education Level Demographics

The education level question was categorised into six groups, higher education – secondary Grade 8 -12, diploma, bachelor's degree, honours degree, master's degree, or other. The final sample size consisted of 123 valid responses of which 24,6% of the population possessed bachelor's degrees, 21,4% possessed diploma's, 20,6% possessed higher education – secondary Grade 8 – 12, 18,3% possessed honours degrees, 4,8% with a master's degree and 10,4% had other qualifications. This data is graphically presented in figure 3.

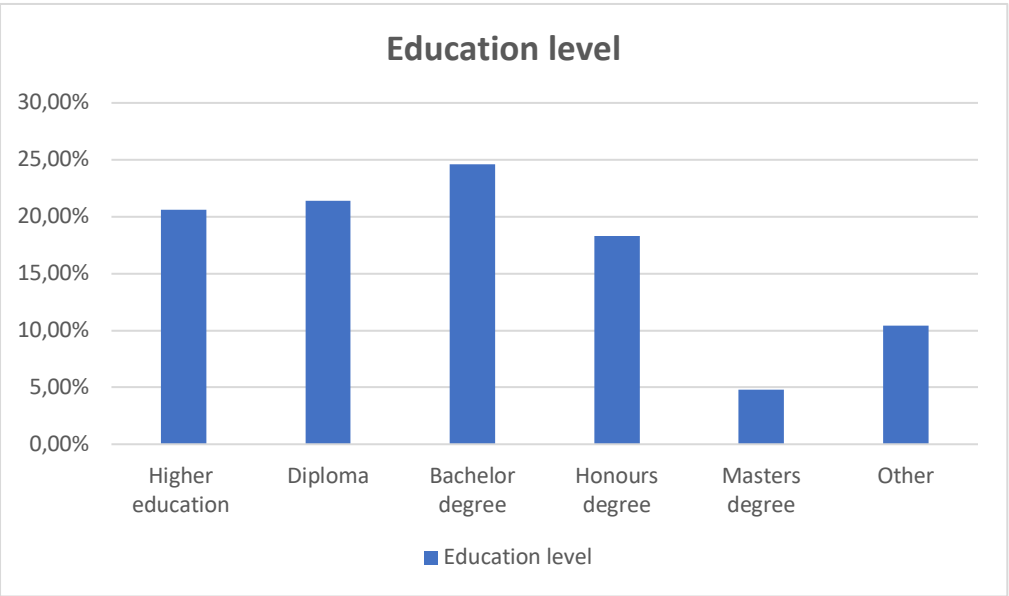


Figure 4: Education levels

5.4.4. Age demographics

The age question was categorised into six groups i.e., younger than 20 years, 21 - 30 years, 31 – 40 years, 41 – 50 years, 51 – 60 years, and 60 years and older. The final sample size consisted of 126 valid responses of which 49,2% were 31 – 40 years, 22,2% were 21 – 30 years, 20,6% were 41 – 50 years, 4,8% were 51 – 60 years, 0,8% were younger than 20 years and 2,4% was 60 years and older. The data is represented in figure 4 below.

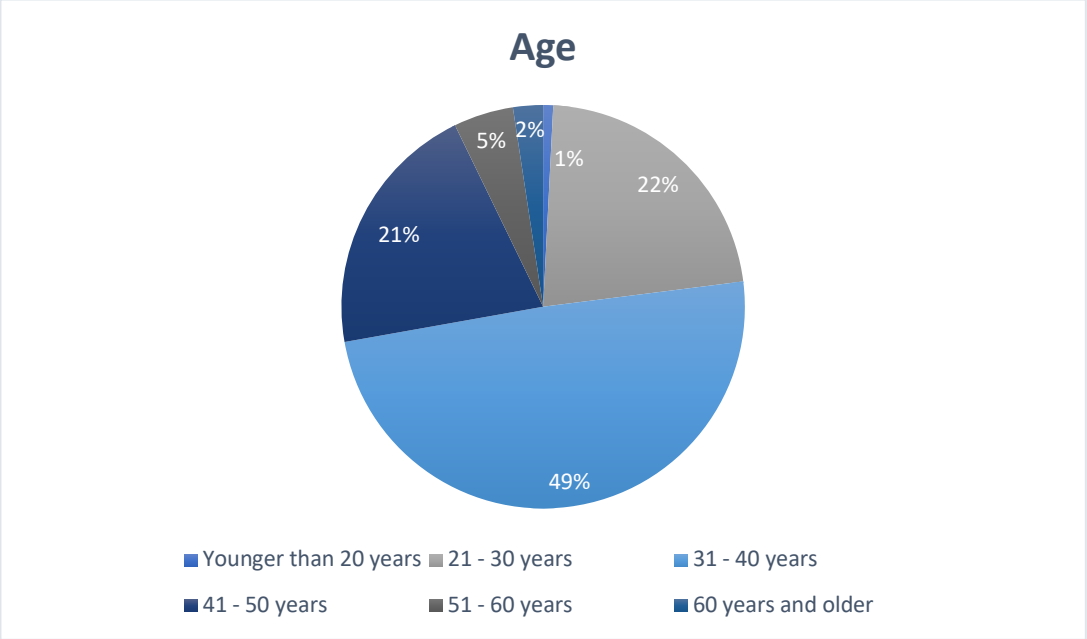


Figure 5: Age demographics

5.4.5. GIBS Entrepreneurship Development Academy programme demographics

The GIBS Entrepreneurship Development Academy programme was categorised into eight groups. The eight groups are presented in Table 6.

Table 6: Entrepreneurship Development Programme demographics

Entrepreneurship Development Programme name
NHBRC Women Empowerment programme
Walmart #GrowYourBiz programme
Exxaro Contractors Development programme
Corteva Women Agripreneurs programme

Circle for Global Businesswomen programme
French Embassy Leaders of Entrepreneurship Associations
Embassy of France Women Agripreneurs programme
JP Morgan Small business boost programme
Other

123 valid responses from the final sample size were collected and comprised of 23% Walmart #GrowYourBiz, 19,8% Exxaro Contractors Development programme, 10,3%, NHBRC Women Empowerment programme, 8,7% Corteva Women Agripreneurs programme, 9,5% Embassy of France Women Agripreneurs programme, 7,1% JP Morgan Small business boost programme, 5,6% Circle for Global Businesswomen programme, 4,8% French Embassy Leaders of Entrepreneurship Associations and 5,4% as other programmes of the EDA.

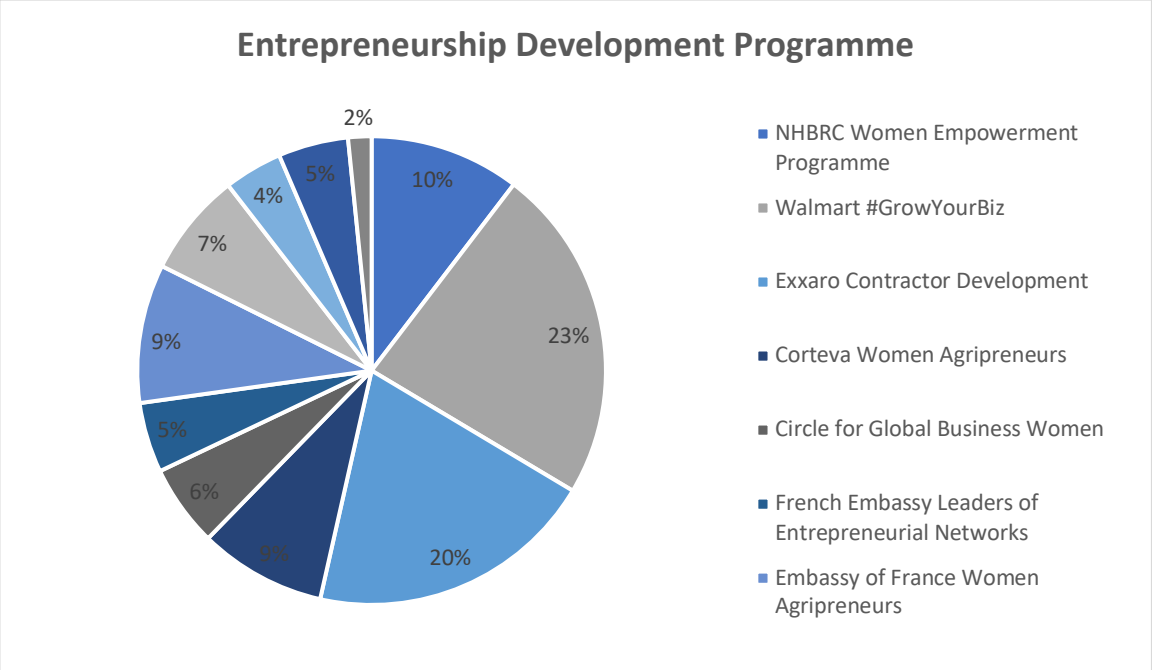


Figure 6: Entrepreneurship Development Programme Demographics

5.5. Hypotheses testing

This section is dedicated to the presentation of findings on each hypothesis listed in the conceptual model in Chapter 3. Pearson correlation and hierarchical multiple regression analysis were conducted to test the relationship between the hypotheses.

The data passed the assumptions, where there was a linear relationship found, the data was further trimmed to remove outliers and the normality test showed a normal distribution upon inspection of the Normal Q-Q test and histogram. Table 8 shows the Pearson Correlation between the constructs. There was a statistically significant relationship between the variables with p-values of less than 0.05.

Table 7:Pearson Correlation

Correlation Matrix									
Statistics	**Factors**	**Experiential Learning**	**Total Business performance**	**Innovation performance**	**Financial performance**	**Opportunity competencies**	**Network competencies**	**Returns on investment competencies**	**Insights into the market competencies**
Correlations	**Experiential learning**	1.000							
	Total Business performance	0.314**	1.000						
	Innovation performance	0.326**	0.930**	1.000					
	Financial performance	0.195*	0.801**	0.525**	1.000				
	Opportunity competencies	0.245*	0.482**	0.491**	0.318**	1.000			
	Network competencies	0.238*	0.298**	0.275**	0.244*	0.512**	1.000		
	Returns on investment	0.230*	0.421**	0.336**	0.428**	0.540**	0.498**	1.000	
	Insights into the market	0.185	0.446**	0.432**	0.328**	0.532**	0.507**	0.487**	1.000

** Sig. (2-tailed) at the P-value < 0.01 level

*Sig. (2-tailed) at the P-value < 0.05 level

Source: Authors compilatio

5.5.1. The role of Entrepreneurial Experiential Learning and Entrepreneurial competencies

H1 – There is a relationship between Experiential Learning and Entrepreneurial Competencies

A multiple regression analysis was run and established that there is a statistically significant relationship between experiential learning and entrepreneurial competencies. To assess linearity, a scatterplot of experiential learning against entrepreneurial competencies with a superimposed regression line was plotted. Visual inspection of the plot indicated a linear relationship between the variables. This can be found in appendix 5. There was homoscedasticity and normality of the residuals. Table 9 shows the results of the regression analysis of this relationship. A significant regression equation was found on the ANOVA table where F = 9.405, $p < 0.05$, with R, squared of 0.080., a small size effect according to Cohen (1988). The adjusted R-square in the results indicates that experiential learning explains 8% of the variability of entrepreneurial competencies. The regression coefficient is significant where the p-value of experiential learning to entrepreneurial competencies is 0.003 which is less than 0.05. This means we accept the alternative hypotheses and conclude that experiential learning does have a positive influence on developing entrepreneurial competencies.

Table 8:Multiple regression outputs - Experiential learning and Entrepreneurial competencies

Model Summary[b]					
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**Durbin-Watson**
1	0.283	0.080	0.072	0.68183	1.693

ANOVA[a]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	4.372	1	4.372	9.405	0.003
	Residual	50.209	108	0.465		
	Total	54.581	109			

Coefficients[a]						
Model	**Unstand-ardised B**	**Coefficients Std. Error**	**Standard ised**	**t**	**Sig.**	**95% Confidence interval for B**

			Coefficients Beta			Lower bound	Upper bound
1 (Constant)	1.817	0.890		2.401	0.044	0.052	3.582
AVE_ALE	0.431	0.141	0.283	3.067	0.003	0.153	0.710

a. Dependent variable: AVE_TOTALEC

b. Predictors: (Constant), AVE_ALE.

5.5.2. Hypothesis 2 – Experiential Learning and Business performance

H2: There is a relationship between Experiential Learning and Business performance

A multiple regression analysis was run and established that there is a statistically significant relationship between experiential learning and business performance. To assess linearity, a scatterplot of experiential learning against business performance with a superimposed regression line was plotted. Visual inspection of the plot indicated a linear relationship between the variables. This can be found in appendix 5. There was homoscedasticity and normality of the residuals. Table 10 shows the results of the regression analysis of this relationship. A significant regression equation was found on the ANOVA table where $F = 11.795$, $p < 0.001$, with R squared of 0.098. a small size effect according to Cohen (1988). The adjusted R-square in the results indicates that experiential learning explains 9,8% of the variability of business performance. The regression coefficient is significant where the p-value of experiential learning to business performance is 0.001, $p < 0.05$. This means we accept the alternative hypotheses and conclude that experiential learning does have a positive influence on business performance.

Table 9:Multiple regression - Experiential learning and business performance

Model Summary[b]					
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**Durbin-Watson**
1	0.314	0.098	0.090	0.64451	1.797

ANOVA[a]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	4.899	1	4.899	11.795	0.001
	Residual	44.862	108	0.415		
	Total	49.762	109			

Coefficients[a]							
Model	**Unstand-ardised B**	**Coefficients Std. Error**	**Standardised Coefficients Beta**	**t**	**Sig.**	**95% Confidence interval for B**	
						Lower bound	**Upper bound**
1 (Constant)	1.817	0.890		2.401	0.044	0.052	3.582
AVE_ALE	0.431	0.141	0.283	3.067	0.003	0.153	0.710

a. Dependent Variable: AVE_TOTALBP

b. Predictors: (Constant), AVE_ALE

5.5.3. Hypotheses 3 – Entrepreneurial competencies and Business performance

H3: Entrepreneurial competencies do contribute to the overall business performance

Multiple regression analysis was conducted to test the relationship between entrepreneurial competencies and business performance. Table 11 reflects the results of the regression analysis for this relationship. A significant regression equation was found on the ANOVA table where $F = 38.433$, $p < 0.05$, with an R squared of 0.512. The correlation coefficient R 0.256 indicates that Entrepreneurial competencies are moderately correlated to Total business performance. The adjusted R-square in the results indicates that Entrepreneurial competencies explain 51.2% of the variability of total business performance. The regression coefficient is significant, with a p-value of less than 0.05.

Table 10:Entrepreneurial competencies and Business performance

Model Summary[b]					
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**Durbin-Watson**
1	0.512	0.262	0.256	0.58295	2.061

ANOVA[a]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	13.060	1	13.060	38.433	0.000
	Residual	36.701	108	0.340		
	Total	49.762	109			

Coefficients[a]							
Model	**Unstand-ardised B**	**Coefficients Std. Error**	**Standardised Coefficients Beta**	**t**	**Sig.**	**95% Confidence interval for B**	
						Lower bound	**Upper bound**
1 (Constant)	1.448	0.363		3.994	0.000	.0729	2.166
AVE_TOTALEC	0.489	0.079	0.512	6.199	0.000	0.333	0.646

a. Dependent Variable: AVE_TOTAL_BP

b. Predictors: (Constant), AVE_TOTALEC

5.5.4. Experiential Learning, Entrepreneurial Competencies and Business performance

H4: The mediation role of entrepreneurial competencies on the relationship between experiential learning and total business performance.

Hierarchical multiple regression analysis was conducted to test the mediating relationship of entrepreneurial competencies on experiential learning that leads to business performance. Table 12 shows the results of the regression test.

The full model of experiential learning, total entrepreneurial competencies to predict total business (Model 4) was statistically significant R square of 0.293, F (22.218), p

< 0.05, and adjusted R square of 0.280. Results of the full regression are included in appendix 8.

Table 11:Mediating effect of Entrepreneurial competencies

	Entrepreneurial competencies Mediator results							
	Model 1		Model 2		Model 3		Model 4	
Constructs	**Independent variable**		**Dependent variable Innovative Business Performance**		**Dependent variable Financial performance**		**Dependent variable Total business performance**	
	Co-efficient Beta	**p-value**	**Co-efficient Beta**	**p-value**	**Co-efficient Beta**	**p-value**	**Co-efficient Beta**	**p-value**
Opportunities	0.208	0.016	0.437	0.000	0.287	0.003	0.432	0.000
Networks	0.257	0.006	0.209	0.25	0.209	0.31	0.237	0.11
Returns on investment	0.229	0.010	0.275	0.003	0.404	0.000	0.368	0.000
Insights into the market	0.240	0.006	0.385	0.000	0.302	0.001	0.401	0.000
Total Entrepreneur-ial competencies	0.183	0.033	0.421	0.000	0.381	0.000	0.460	0.000

*p-value < 0.05

Dependent variable – AVE_TOTAL_BP

Independent variable – AVE_ALE

Mediation – AVE_TOTALEC, AVE_OPPORTUNITIES, AVE_NETWORKS, AVE_RETURNS, AVE_INSIGHTS

H4a: Opportunity competencies does have a mediating effect on the relationship between experiential learning and business performance

The regression analysis was used to investigate the hypothesis that opportunity competencies mediate the effect of experiential learning on business performance. Results in Table 12 indicated that there was a significant correlation between opportunity competencies and innovative business performance, Beta = 0.437, p < 0.05, there is a correlation between opportunity competencies and financial business

performance with Beta = 0.287, $p < 0.05$ and there is a correlation between opportunity competencies and total business performance with Beta 0.432, $p < 0.05$. These results support the mediation hypothesis. Refer to appendix 8 for full regression output.

H4b: Network competencies does have a mediation effect on the relationship between experiential learning and business performance

The regression analysis was used to investigate the hypothesis that network competencies mediate the effect of experiential learning on business performance. Results in Table 12 indicated that there was no significant correlation between network competencies and innovative business performance with Beta = 0.209, $p > 0.25$, there is no correlation between network competencies and financial business performance with Beta = 0.209, $p > 0.05$ and there was no correlation between network competencies and total business performance with Beta = 0.237, $p > 0.05$. These results do not support the mediation hypothesis Refer to appendix 8 for full regression output.

H4c: Returns on investment does have a mediation effect on the relationship between experiential learning and business performance

The regression analysis was used to investigate the hypothesis that returns on investment competencies mediate the effect of experiential learning on business performance. Results in Table 12 indicated that there was a significant correlation between returns on investment competencies and innovative business performance with Beta = 0.275, $p < 0.05$, there is a correlation between returns on investment and financial business performance with Beta = 0.404, $p < 0.05$ and there was a correlation between returns on investment and total business performance with Beta = 0.368, $p < 0.05$. These results support the mediation hypothesis Refer to appendix 8 for full regression output.

H4d: Insights into the market does have a mediation effect on the relationship between experiential learning and business performance

The regression analysis was used to investigate the hypothesis that insights into the market competencies mediate the effect of experiential learning on business performance. Results in Table 12 indicated that there was a significant correlation between insights into the market competencies and innovative business performance with Beta = 0.385, $p < 0.05$, there is a correlation between insights into the market and financial business performance with Beta = 0.302, $p < 0.05$ and there was a correlation between insights into the market and total business performance with Beta = 0.401, $p < 0.05$. These results support the mediation hypothesis Refer to appendix 8 for full regression output.

5.6. Summary

Chapter 5 presented the findings of the primary data collection process and data analysis. The results presented included descriptive statistics and statistical analysis. Additionally, results of validity and reliability of the measurement instrument were conducted to establish the level of applicability to the study and findings. Lastly, the chapter presented the results of the regression analysis to test the hypotheses. The table 12 below indicated the hypotheses tested and results.

Table 12:Summary of the hypothesis tested

Hypothesis	Statement	Results
H1	*There is a relationship between Experiential Learning and Entrepreneurial Competencies*	Supported
H2	*There is a relationship between Experiential Learning and Business performance*	Supported
H3	*Entrepreneurial competencies do contribute to the overall business performance*	Supported
H4	*The mediation role of entrepreneurial competencies on the relationship between experiential learning and total business performance.*	Supported

Analysis and discussion of the results is presented in Chapter 6

CHAPTER 6: DISCUSSION OF RESULTS

Chapter 6 presents a summary of the results and a discussion of the results from the data collection process. Additionally, it presents a discussion of the results for the statistical analysis and descriptive statistics. Lastly, it presents a discussion of the results from the hypotheses testing that was conducted. Table 13 presents a summary of the results.

6.1. Summary of Results

Table 13 presents a summary of the results, as presented in chapter 5.

Table 13:Summary of Results

Section	Sub-section	Results Summary
Data Analysis	Data collection	The raw sample size comprised of 126 respondents. There were no participants removed and no missing data recorded.
Statistical Analysis	Normality	The results of the tests for Skewness, Kurtosis, and Shapiro-Wilk, showed that data was not normally distributed. An examination of the Normal Q-Q plots and treatment of outliers showed a normal distribution of data.
	Outliers	Trimming was used to treat outliers that were excluded from the study.
	Validity	EFA was used to confirm construct validity
	Reliability	Cronbach Alpha was used to measure construct reliability.
	Dimension reduction	Factorised variables were confirmed to be in excellent range by using the KMO tests.

Descriptive Statistics	Demographics	Data reported included demographics of the population such as age, gender, programme attended or currently attending, and education level.
Hypothesis testing	H1, H2, H3	All hypotheses were supported which showed that experiential learning does have a relationship with developing entrepreneurial competencies needed for business performance.
	H4	All variables were confirmed to be significant. The mediating effect of entrepreneurial competencies on the variables was significant.

6.2. Data collection

The final sample size comprised 123 respondents. Although the sample size was lower than the recommended sample size of 200, the sample size was considered suitable to perform descriptive and inferential statistical analysis, (Bartlett et al., 2001). Similar studies by Chen & Chang, (2013), used a sample size of 155 technology-based SMMEs, and Zizile & Tendai, (2018), used a sample size of 144 established women entrepreneurs to explore the relationship between performance and entrepreneurial competencies.

6.3. Statistical Analysis

The data presented a negatively skewed distribution. This was mitigated by trimming the outliers to allow data to be treated as normal. 13 questions were removed from the study with some being negatively worded to establish construct validity using EFA. Results from Cronbach's Alpha indicated a high rate of internal consistency which indicated that the measuring instrument was valid.

6.4. Descriptive Statistics

The researcher explored the descriptive statistics to contextualise the results. Looking at the results, the profile of the respondent would be seen as a female, young entrepreneur between ages 21 to 40 with a post-graduate education level.

6.4.1. Population Demographics

Four variables were collected to determine the profile of respondents. These included, educational level, GIBS EDA programme attended or currently attending, age and gender. According to the results, 77% of respondents were female and 23% were male. Additionally, 49.2% of the population was between the ages of 31 and 40, and 22,2% were between the ages of 21 and 30. Furthermore, the data revealed that 24,6% of the population holds a university bachelor's degree, while 21,4% possess a university diploma. From the study, it can be deduced that the study population is primarily female and young and possessed of postsecondary education. This is a significant contribution to the study as the background information indicated that a low number of women and youth participated in entrepreneurial activities. According to GEM global report, graduates are significantly more likely to start and run their own businesses than non-graduates (Bosma et al., 2021). In this context, entrepreneurship education plays a crucial role in developing the mindset and capabilities needed to effectively run a business.

In addition, this finding indicates that women and young entrepreneurs participate in education and entrepreneurial education programs to build their human capital skills, which are the knowledge and skills that enable individuals to perform well and that aligns with Dimov's (2017) study that shows it improves task performance. Furthermore, the GEM global report 2020 reveals that when entrepreneurs perceive themselves to have the skills and experience to start and scale their businesses, they are in the best position to seize opportunities. In addition, the digital nature of entrepreneurial opportunities has encouraged more young people to embrace entrepreneurship. With such a high percentage of women participating, it indicates a positive trend for women entrepreneurs, conforming to the GEM 2020 South Africa report that women entrepreneurs are on the rise (Bowmaker-Falconer & Herrington, 2020).

6.5. Hypothesis testing

6.5.1. H1: There is a relationship between Experiential learning and entrepreneurial competencies

The hypothesis was tested to determine the strength and direction of experiential learning's impact on entrepreneurial competency development. This relationship is illustrated by the results of regression analysis in Table 9. These results were confirmed through Pearson's correlation and multiple regression analysis with results showing a significant relationship with $p < 0.05$. However, a small size effect according to Cohen, (1988), was found with an R squared of 0.080. The adjusted R-square in the results indicated that experiential learning explains 8% of the variability of entrepreneurial competencies.

Entrepreneurship education and competencies have been found to be important in enhancing entrepreneurial success and firm performance. Similarly, the findings of this study corroborate Kozlinska et al., (2020) who found that experiential entrepreneurial education is associated with superior entrepreneurial development in students. Dimov, (2017) found that human capital development is influenced by certain combinations of its indicators, namely education, entrepreneurial experience, and work experience.

According to Kozlinska et al., (2020) and Minai et al., (2018), entrepreneurial success is dependent on entrepreneurial competencies. Bell & Bell (2020) found that experiential pedagogy in entrepreneurship education aims to provide students with key skills that will help them succeed as entrepreneurs. They describe this as a participatory process of learning that actively builds entrepreneurial competencies, preparing entrepreneurs for the realities they will face in their businesses. The study shows how experiential learning helps develop entrepreneurial competencies essential to business success. Pamungkas et al., (2019) endorsed this finding since they advocate that one of the features of entrepreneurial learning is experiential learning that develops a form of skill and aptitude through the process of engagement.

According to the above demographic data, the results of this study also show the relationship between entrepreneurial activity and education, where graduates and

those with human capital task-specific training are in the best position to develop the entrepreneurial competencies needed for success. The GEM Global 2021 study shows that education has a strong influence on expectations, and according to human capital theory, growth aspirations are higher for those with higher education (Bosma et al., 2021). Therefore, entrepreneurship education has a positive effect on an individual because of its potential impact on their personal and business growth. For the reasons listed above, experiential learning methods can enhance more than just entrepreneurial competence development, which in turn enhances business prospects. It can also lead to greater personal development and a more positive mindset.

6.5.2. H2: There is a relationship between Experiential Learning and Business performance

In this study, entrepreneurial experiential learning is defined as an active learning process where skills and knowledge are acquired through experience, reflection, and action. Due to the fact that experiential learning methods have been shown to be more effective than deductive or inductive models, entrepreneurs need the ability to learn by doing and reflecting (Scott et al., 2016). As outlined in chapter 2, experiential learning assumes different types of learning styles, which are context-dependent, and through these methods, students gain concrete experience through simulations, reflection exercises, to develop learning outcomes. An entrepreneur grows their skill set through this transforming process, which leads to achieving the desired performance. Furthermore, learning outcomes can be used to measure the effectiveness of experiential pedagogy, since Scott et al., (2016) found that experiential learning makes students better at generating and implementing business ideas that improve business performance, which can then be measured as learning outcomes.

Corbett, (2015), on the other hand, found that measuring the Kolb framework's outcomes limits the model's ability to transform and turn learning into a process, rather than actual experience. In contrast, Kolb's framework allows individuals to discover new outcomes from their learning by transforming experience into new knowledge. In addition, research by Matsuo (2015) showed that the model needs to include elements that can help entrepreneurs learn from their experience, such as

competencies, goal-setting, mentoring, and positive psychology. By incorporating these factors into the model, entrepreneurs can achieve business success.

The results from testing H2 have shown an overall significant relationship between experiential learning and business performance, where $p < 0.05$. Dhliwayo (2008) argues that through experiential learning, entrepreneurs learn crucial competencies and attributes required for success on the turbulent and uncertain entrepreneurial journey. The findings of this study are further supported by the findings of Kakouris (2015) that learning by doing is fundamental to entrepreneurship development because it enhances creativity and broadens perspectives, which results in the desired learning outcomes. To conclude, the Kolb Experiential Learning Theory has emerged as an important theoretical lens for entrepreneurship development, because entrepreneurs learn by doing, making cognitive connections between what they are learning in theory and what they are implementing in practice.

6.5.3. H3: Entrepreneurial competencies and business performance

Entrepreneurial competencies describe the skills, abilities, and knowledge that an entrepreneur possesses to improve business performance.
In this context, this study, as well as a study by Scheinder (2017), examined entrepreneurial competencies as being a higher-order latent construct that could be operationalized through various factors, such as opportunity, network, return on investment, and insights into market competencies. Among the measures of business, performance is innovative and financial performance, which are considered important outcomes of entrepreneurial journeys by policymakers, educators, and researchers (Katz & Corbett, 2019). Accordingly, the purpose of this hypothesis was to examine the relationship between entrepreneurial competencies and business performance.

The results from the multiple regression analysis showed that a significant regression equation was found on the ANOVA table where $F = 38.433$, $p < 0.05$, with R squared of 0.512. The correlation coefficient R indicated that entrepreneurial competencies are moderately positively correlated to overall business performance. The adjusted R-square means that 51.2% of the variability was explained by entrepreneurial

competencies on total business performance. The regression coefficient was significant, with a p-value of less than 0.05. Similarly, the findings of this study are in line with those of Man et al. (2012), who demonstrated direct and indirect effects of entrepreneurship on firm performance. Furthermore, they assert that entrepreneurs are severely limited in their ability to achieve long-term firm performance without a combination of capabilities that differentiate them from their competitors. In contrast, a study by Khan et al., (2020), found a positive weak relationship between entrepreneurial competencies and business performance. Conversely, they acknowledge the importance of this relationship as a key determinant of performance.

According to our study, opportunities, networks, returns on investment, and insights into market competencies and task-related skills were strongly correlated with firm performance. Additionally, this study has revealed the positive effects of opportunities and insights into market competencies.

Business continuation is higher in South Africa than on the rest of the continent, at 8.3%, with factors contributing to these results being a lack of funding, skills, and markets. (Bowmaker-Falconer & Herrington, 2020). However, there are indications that entrepreneurs are leveraging their skills to determine what drives their profitability and existence by focusing on opportunities and market insights. Thus, entrepreneurial activity is understood as the result of an interplay between an individual's perception of an opportunity, their ability to act on that opportunity, and their location relative to the opportunity.

Additionally, the findings also concur with Sungkawati (2019) that human capital possessed by owner-managers in the form of entrepreneurial competencies, enables opportunity recognition and strategic foresight that led to business performance. This study has provided a theoretical framework that links constructs (experiential learning and entrepreneurial competencies) to business performance. Like Man et al., (2012) this study has shown the importance of the role of the entrepreneur in determining firm performance.

Overall, entrepreneurial competencies have a positive effect on both individual and business performance. These reasons lead us to conclude hypothesis 3 informs the

design of entrepreneurial development programmes in terms of competencies that should be developed to boost entrepreneurial success.

6.5.4. H4: Experiential learning, Entrepreneurial competencies, and business performance

Opportunity competence

The hierarchical regression analysis was used to investigate the hypotheses that entrepreneurial competencies mediate the effect of experiential learning on business performance. The results from this study indicated that there was a significant correlation between opportunity competencies and innovative business performance, Beta = 0.437, $p < 0.05$, a significant correlation between opportunity competencies and financial business performance with Beta = 0.287, $p < 0.05$ and there was a significant correlation between opportunity competencies and total business performance with Beta 0.432, $p < 0.05$. According to Gunday et al., (2011), innovation and spotting opportunities are among the most important capabilities that can improve a firm's performance, resulting in a larger market and higher profits. The notion that entrepreneurs are risk-takers is congruent with the belief that the core of their success lies in identifying, securing, and converting opportunities to add value over time. In addition, the results presented above match those of Kamuri, (2021) study in which they found that opportunity competence was one of the six competencies that had a significant relationship with innovation performance. Therefore, opportunity competence is a crucial competence as it enables a firm to build credibility within the market, thereby resulting in better performance. It was Schumpeter who made the observation that entrepreneurs take on the responsibility of combining resources and find new economic opportunities, resulting in growth and improved competitiveness.

Network competence

Business owners can gain access to resources not within their control through networking (Ezuma & Ismail, 2017). However, the results of the hierarchical regression indicated that network competence does not mediate between experiential learning and business performance. The results show that $p > 0.05$ is found across all variables of business performance. As a result, the study participants did not perceive networking as contributing to financial or innovative performance.

For a while, COVID-19 impacted the world dramatically, preventing large crowds from attending business meetings and personal meetings, thus making it difficult for entrepreneurs to meet for social networking or business meetings. Chell and Baines, (2000) found that because of dynamism and fluidity, as well as the difficulty of capturing every instance of contact, quantitative studies provide only partial insight into networking behavior. Study findings contradict those of Tehseen et al., (2019), who discovered networking competence is a strategic asset for SMMEs, particularly those in emerging economies like South Africa, which face extreme economic pressures, high costs, and corruption.

Additionally, the study results suggest a paradox as most of the entrepreneurs who participated in the study were members of professional associations and entrepreneurial networks, suggesting that networking was an important aspect of their business relationships.

However, Watson, (2007) found that networking was positively associated with firm survival and, to a lesser degree, growth, but not with Return on Equity (ROE) for established companies. These results are in line with those in this study. The highly skewed profile of women in this study also results in them having fewer business-oriented networks than their male counterparts. This may lead them to network primarily for survival rather than growth (Bosma et al., 2021). According to Watson, (2017), building networks is critical to a business's survival and growth, but managers must strike the right balance between frequency and intensity of access to informal and formal networks. In summary, entrepreneur accelerators and business development support companies need to identify key factors that contribute to SMME success. Watson (2017) found that networking does not significantly affect profitability, regardless of the size of the business, its age or industry. The entrepreneur should consider the intensity and range of connections he or she will use to build their social capital that will contribute to both their survival and success.

Return on investment competence

It is widely assumed that entrepreneurs need to have an innovative edge to compete (Rosenbusch et al., 2011). Where money and resources are needed to innovate, human capital skills are necessary. The hierarchical regression was used to investigate the hypothesis that return on investment (ROI) has a mediating effect on experiential learning on business performance. Results in Table 12 indicated that

there was a significant correlation between ROI competencies and innovative business performance with Beta = 0.275, $p < 0.05$, there was a significant correlation between ROI and financial business performance with Beta = 0.404, $p < 0.05$ and there was a significant correlation between ROI and total business performance with Beta = 0.368, $p < 0.05$. These results supported the mediation hypothesis.

The results from this study are consistent with Gunday et al., (2011) and Bigliardi, (2013) who demonstrated that innovative performance has an indirect positive impact on financial performance, which measures a company's ability to generate revenue and profits. In addition, a study by Gunday et al. (2011) found that innovative performance leads to production and market performance, which directly affects financial performance. Based on the results of this study, it can be concluded that SMMEs exhibit innovative orientations, which have a positive effect on business performance, as demonstrated by Rosenbusch et al., (2011). The results suggest that entrepreneurs adopt innovative approaches to their processes, how they service their customers, and how they introduce new products to the market.

Seventy-seven percent of this research's participants are female and work in diversified industries, which include construction, agriculture, retail, and mining. 71.4% of all participants in this study are between the ages of 21 and 40. The demographic profile suggests that most businesses are young. This is in line with Rosenbusch et al., (2011) meta-analysis which shows that innovation has a stronger impact on young SMMEs than more established SMMEs. The smaller the company, the more nimble and agile it is to implement innovative ideas. As a result, this finding emphasizes the importance of innovation orientation and diligent management of the innovation process with adequate financial resources. The digital economy is driving innovation amongst women and young entrepreneurs. This has provided new opportunities for ecommerce, and eased the constraint on women working from home.

Consequently, Fombang and Adjasi (2018) found that finance influences all types of firms' innovation capabilities. In this study, entrepreneurs were asked to evaluate the costs and benefits of investing in their businesses to differentiate themselves. A strong association was found between investment and financial resources, implying that access to finance is one of the main drivers of innovation.

Due to the timeframe of this study, when digital business models, new customers, and innovations occupy many business owners' minds, these findings are not surprising. The interaction between competencies, market conditions, networks, and financial factors is important when determining what drives firm performance. In addition, Kyndt & Baert (2015) found that when matched with specific tasks, personal characteristics can have a greater effect on performance. Entrepreneurs must therefore think creatively, use networks, and take advantage of funding opportunities to grow their business.

In conclusion, entrepreneurs support innovative ideas that improve their business processes, leading to increased profitability. Likewise, Schumpeter posits that innovation enhances creativity, opportunity recognition, and growth potential by enabling businesses to take advantage of emerging markets.

Insights to the market competence

The regression analysis was used to investigate the hypothesis that insights into the market competencies mediate the effect of experiential learning on business performance. Results in Table 12 indicated that there was a significant correlation between insights into the market competencies and innovative business performance with Beta = 0.385, $p < 0.05$, there was a correlation between insights into the market and financial business performance with Beta = 0.302, $p < 0.05$ and there was a correlation between insights into the market and total business performance with Beta = 0.401, $p < 0.05$. These results support the mediation hypothesis.

Policymakers, industry, and educators need to recognize that SMME development needs go beyond skills development and funding. Access to markets is vital for the growth of SMME businesses. Baker and Sinkula (2009) found that both market orientation and entrepreneurial orientation, which is how entrepreneurs identify and exploit opportunities, contribute to a firm's profitability. This study shows a direct correlation between market orientation and profitability, showing its strength.
Similarly, the study aligns with Kyndt & Baert, (2015) that found that market insights were significantly positively correlated to entrepreneurship. Additionally, this study aligns with a study by Bhuian et al., (2005) who concur that the best combination is

one where the entrepreneur has a high-market and moderate entrepreneurial orientation.

Participants in this study have a market-oriented approach to gathering and responding to market intelligence to meet customer needs in order to ensure competitive advantage, as demonstrated by Mamun et al., (2019). Competitive intelligence and customer satisfaction drive market orientation. Compared to externally focused innovation projects requiring collaboration, Rosenbusch et al., (2011) found that internal innovation projects are more aligned with increasing firm performance. Consequently, entrepreneurs should strive to make improvements that positively impact their customers for better market access. Furthermore, this study challenges the notion of networking and the importance of collaborations, as it could be observed that entrepreneurs did not find the importance of social and network capital to be beneficial.

In addition to market competence, ROI also indicates the needs of entrepreneurs, i.e. supply chain and procurement opportunities for supplying goods and services so that they can make a return on investment in innovation orientation, processes, and projects. It is evident from this study that experiential learning provides firm-specific entrepreneurial competencies. Entrepreneurs value education that develops their capabilities to become profitable.

6.6. Summary

Hypotheses were confirmed by results of hypothesis testing. According to these findings, entrepreneurial experiential pedagogy helps develop entrepreneurial competencies that are task-specific and contribute to business success. These were found to be opportunity, ROI and market competence. While network competence was not supported, its effect on building external collaboration on successful business performance cannot be ruled out. Various active learning activities are incorporated into the EDA programmes to help teach entrepreneurship competencies. The following chart summarizes the hypothesis.

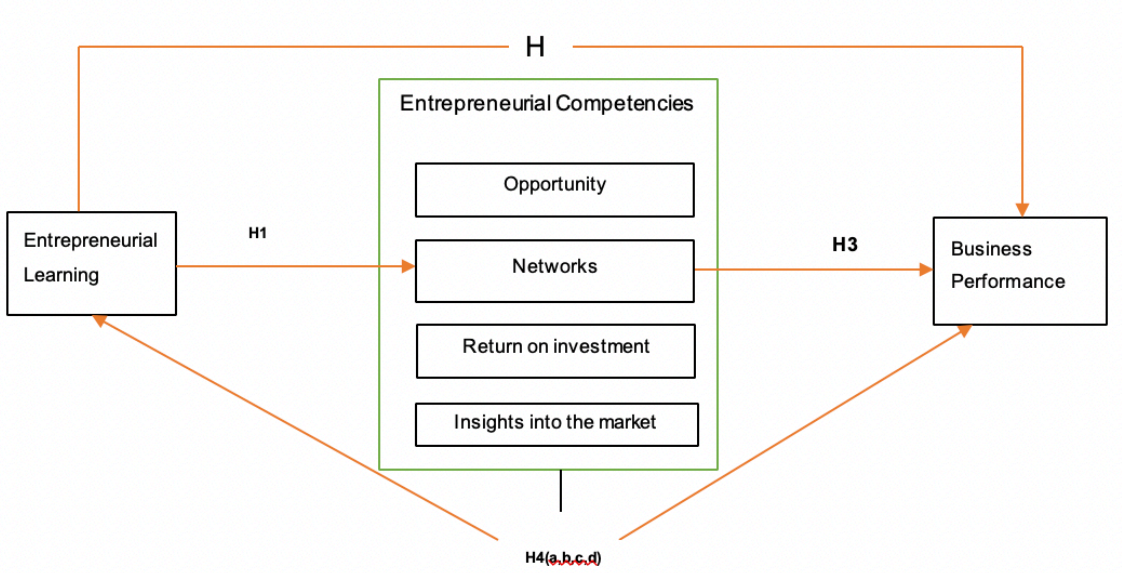


Figure 7: Summary of results from the hypothesis testing

6.7. Conclusion

A summary of the results and a discussion of the data collection process are presented in Chapter 6. The paper also presented a description of the results of the statistical analysis and descriptive statistics. Lastly, it outlined the findings from the hypothesis testing that was completed. A conclusion and recommendations for future research are provided in the next chapter.

CHAPTER 7: CONCLUSION AND RECOMMENDATIONS

A discussion of the implications of the research for business and management is provided in this chapter. The chapter will start with a reflection on the study's objectives. In addition, it includes a discussion about the implications of the study for academia as well as a discussion of its limitations. In conclusion, recommendations are provided for future research in the areas of entrepreneurship education, experiential learning, and entrepreneurial competencies.

7.1. Reflection of the study's objectives

The purpose of the study was to use existing theories of Experiential Learning Theory and Human Capital Theory to determine the impact of entrepreneurial experiential learning on developing entrepreneurial competencies that enable entrepreneurs to achieve business performance. As outlined in chapter 1, each stated objective aligned with the hypothesis tested in chapter 5, and results thereof were discussed in chapter 6. The hypothesis was supported and found that there is a mediated relationship between experiential learning and business performance. The objectives of this study have contributed to the growing literature in entrepreneurship education and training and shone a spotlight on its importance. The importance is linked to the increased attention on the role of SMMEs towards the growth of the economy and thus improving the skills, knowledge and abilities of entrepreneurs to become more competitive small business owners is pivotal.

Contemporary entrepreneurship education methodologies are beginning to incorporate experiential learning approaches moving away from the traditional approaches. Modern approaches embrace competence and stress the interrelation of knowledge, skills, and attitudes, and acknowledge the importance of the work context, (Lans, Hulsink, Baert & Mulder e, 2008). This study's findings showed that experiential learning pedagogy does contribute to building entrepreneurially competent individuals who learn by doing and are able to experiment. The research has shown learning "for" entrepreneurship is more effective learning than "about" entrepreneurship to building competence and successful business performance. Overall, based on these findings, the research problems were clearly answered and the objectives have been achieved.

7.2. Principal conclusions

In the context of this study, the measurement instruments were validated with a high-reliability score across all variables. The study advanced the conceptual framework by Minai et al., (2018), that entrepreneurial competencies do mediate the relationship between experiential learning and business performance. Similarly, the study enhanced Rahman, Amran, Ahmad & Taghizadeh, (2014) study on entrepreneurial competencies as a mediator for business success by showing an indirect relationship between training support through experiential learning pedagogy and competency development. Additionally, the study added to the body of knowledge in entrepreneurship of the relevance of entrepreneurship education in building knowledge, skills, and abilities that entrepreneurs can apply in a dynamic context to attain a competitive advantage. The study focused on entrepreneurs who are currently or have received experiential learning pedagogy and it is evidenced by the results of this study that the need for learning environments that mimic reality is key as entrepreneurs learning orientations and competencies development is strongly aligned to the experiences, they receive from training interventions.

The hypotheses that were tested are presented in chapter 3. The first hypotheses indicated a strong correlation between experiential learning and entrepreneurial competencies which is consistent with the findings by Kozlinska et al., (2020) that experiential entrepreneurial education is associated with superior competencies of entrepreneurship graduates, particularly knowledge and skills. In contrast, superior competencies suggest that there is one common set of individual capabilities no matter the situation or task requirements wherein there is a model type entrepreneur, independent of context, which is a weakness of the competency framework, (Lans et al., 2008). Conversely, experiential learning showed a high correlation to entrepreneurial competency development as it differs from traditional pedagogy to a more participatory form of learning which is beneficial to achieving desired learning outcomes of entrepreneurial success, (Scott et al., 2016). By viewing competence from a learning perspective, and showing the significant relationship between learning and competency, this study has contributed to Bird, (1995) conceptual model of entrepreneurial competence and considered that entrepreneurial competencies can be learned through education and training.

The second hypothesis found a moderate correlation relationship between entrepreneurial experiential learning and business performance. This is consistent with the theoretical lens of Kolb's framework that in an individual entrepreneur's context, learning is an ongoing process, and those who participate in experiential learning report higher confidence and professional abilities than those who don't, (Clem et al., 2014). Additionally, experiential learning builds entrepreneurship capabilities in the active experimental phase where entrepreneurs actively implement theory to practice as found by Krauker et al., (2017). This finding closely links with findings in hypothesis one above that competency is learned on a continuous and endless basis as entrepreneurs have a specific personality trait such as the high need for achievement and risk undertaking that drive them. Grounded on experiences that allow reflection on both theory and practice, the individual and collective, experiential allows students to experience holistically the dynamic world of entrepreneurship by experimenting and observing, (Krauker et al., 2017). Lastly, in the context of entrepreneurship, education, and training provided to SMMEs leads to competitive advantage and bring business success, (Rahman et al., 2014).

The third hypothesis found a strong correlation between entrepreneurial competencies and business performance. It is evident, from a motivational perspective, that self-efficacy and self-confidence contribute to the belief of an entrepreneur that specific behaviours result in performance. The analysis presented that the entrepreneurial competencies that advance business performance can be learned through training and development and that self-efficacy is a prerequisite for specifying the relationship between competence and performance (Lans et al., 2008). A successful entrepreneur looks for opportunities to improve the performance of their business and remain competitive and employs diverse competencies in order to function (Minai et al., 2018).

In contrast, developing competencies through training, a study by Mohamad & Sidek, (2013), showed a partial mediation of entrepreneurial competencies on the relationship between microfinance and business performance. In addition, the results indicated that including education and training will be significant and help SMMEs grow and develop, improving their skills to better negotiate, identify income-

generating opportunities, and gain more financial knowledge that will lead to a stronger moderation and has a direct effect on their businesses.

The fourth hypothesis showed a strong correlation of the mediating effect of entrepreneurial competencies between experiential learning and business performance which was the main objective of this study. The results provided confirmation to the entrepreneurial literature of the significance of entrepreneurial competencies in driving firm growth. As a higher-order construct, entrepreneurial competency was operationalised by four sub-constructs including opportunity, network, return on investment, and insights into the market competencies. Opportunity competence, return on investment and market competence were significantly correlated to business performance which signifies that entrepreneurs are risk-takers who innovate products and services that the market wants to obtain profitability and revenue growth.

7.3. Theoretical contribution

The current study contributed to the existing literature the suggestions that entrepreneurs are constructivists who thrive on experience-based approaches to develop human capital skills that are task-specific. Secondly, a contribution was made to identify the effectiveness of experiential pedagogy and that teaching “for” and not “through” entrepreneurship encourages experimentation where competencies can be learned practically. Third, competence development brought on by education could serve as a powerful theoretical construct for the development of learning environments such as entrepreneurial courses and accelerator programmes. Lastly, the study contributed to the awareness of the importance of certain competencies for the individual entrepreneur.

7.4. Implications for management and other relevant stakeholders

The findings of the research provide valuable insights into the field of entrepreneurship education and SMME development. Academia, governments, and industry around the world are looking to invest in the human capital development of entrepreneurs. Due to the high unemployment rate in South Africa, where there are limited job opportunities for women and youth, people need to start exploring self-

employment to get economically active. Entrepreneurial universities and industries can provide a supportive environment for skills development. Moreover, both can learn a lot from each other on how to tailor business development support for established entrepreneurs in South Africa. For entrepreneurial ecosystem players, the concept of competence is a powerful construct in entrepreneurship education and training, and focusing on it helps provide direction for interventions and provides entrepreneur self-awareness. Self-awareness provides the entrepreneur with the self-confidence and self-efficacy to act entrepreneurially.

The demographic profile of the businesses in this study indicates that youth and women entrepreneurs do seek out opportunities to further their education and immerse themselves in experiential learning programmes that bridge theory and practice. This is important for programme designers of entrepreneurial development programmes to ensure that the programme is designed to incorporate real word practical activities to allow experimentation and effectuation to build successful businesses.

Entrepreneurial competencies are important to the development of firm performance and should be treated by educators and business development practitioners as an item for discussion rather than a tick box approach, (Lans et al., 2008). Competencies such as opportunity, return on investment and market competence are important to SMMEs and significant for young firms who are agile to trying out new innovations to increase competitive advantage. Network competence does not have a significant relationship can indicate that women entrepreneurs, who are less confident in building external relationships and collaborations, need more opportunities to build this skill. An opportunity for programme designers and SMME development programmes to design networking skills courses into the intervention to build the confidence levels of women and youth entrepreneurs.

7.5. Limitations of the research

As Botha, (2020, p. 12) states, “no study is without its limitations”. First, business performance has attracted considerable interest in academia and industry due to the ability of a successful business to achieve market and innovative performance which led to job creation. A limitation to the study to holistically test innovative and financial

performance is the exclusion of factors such as the age of the firm and cultural context that affect the firm performance, (Rosenbusch et al., 2010).

Secondly, the time horizon for this study was cross-section due to the time allowed to complete the research. Thirdly, the sample size of the study was 123 which met the minimum requirement and but in the context of the universe, is relatively small and may not provide deeper understandings of the effect of experiential learning on the SMME sector. Fourth, the study was limited to the exploration effect of four competencies on business performance, (Tehseen, et al., 2019).

7.6. Suggestions for future research

Competencies are context-dependent and socially constructed and add to making training and education activities effective. Future research into competence development should include the industry and age of the business to contextualise the study so that generalisations can be made. Furthermore, future research may be strengthened by using a large sample size to test generalizability. This sample was small in proportion to the entire population of established businesses in South Africa. The development of theoretical models of competencies that predict entrepreneurial success at different target groups should be further explored, (Schiender, 2018). This will help compare results between groups for richer contributions to academic literature. A longitudinal study to assess the impact of training over time because this study was cross-sectional in nature.

REFERENCES

Achampong, J., Hill, C., & Yannakaris, E. (2020). National University Entrepreneurship Ecosystem Baseline Report. In *Entrepreneurship Development in Higher Education* (Issue 6). https://edhe.co.za/wp-content/uploads/National-University-Entrepreneurship-Ecosystem-Baseline-study__Interactive-Report-Feb-2020.pdf

African Development Bank. (2011). *Human capital and skills development* (Issue 1987).

Aidara, S., Mamun, A. al, Nasir, N. A. M., Mohiuddin, M., Nawi, N. C., & Zainol, N. R. (2021). Competitive advantages of the relationship between entrepreneurial competencies and economic sustainability performance. *Sustainability (Switzerland)*, *13*(2), 1–19. https://doi.org/10.3390/su13020864

Aidis, R., & van Praag, M. (2007). Illegal entrepreneurship experience: Does it make a difference for business performance and motivation? *Journal of Business Venturing*, *22*(2), 283–310. https://doi.org/10.1016/j.jbusvent.2006.02.002

al Mamun, A., Fazal, S. A., & Muniady, R. (2019). Entrepreneurial knowledge, skills, competencies and performance. *Asia Pacific Journal of Innovation and Entrepreneurship*, *13*(1), 29–48. https://doi.org/10.1108/apjie-11-2018-0067

Alharahsheh, H. H., & Pius, A. (2020). A review of key paradigms: Positivism vs interpretivism. *Global Academic Journal of Humanities and Social Sciences*, *2*(3), 39–43. https://www.researchgate.net/publication/338244145

Anakpo, G., & Mishi, S. (2021). Business response to COVID-19 impact: Effectiveness analysis in South Africa. *Southern African Journal of Entrepreneurship and Small Business Management*, *13*(1), 1–7. https://doi.org/10.4102/SAJESBM.V13I1.397

Baduel, B., Cuevas, F., & Fengler, W. (2021). Building back better from COVID-19, with a special focus on jobs. South Africa Economic Update. Edition 13. In *South Africa Economic Update;Edition 13 Washington, D.C.: World Bank Group.* www.worldbank.org

Bahari, S. F. (2012). Qualitative Versus Quantitative Research Strategies: Contrasting Epistemological And Ontological Assumptions. *Jurnal Teknologi*, 17–28. https://doi.org/10.11113/jt.v52.134

Baker, W., & Sinkula, J. (2009). The complementary effects of Market Orientation and Entrerepreneurial Orientation on profitability in Small businesses. *Journal of Small Business Management*, *47*(4), 443–464. https://doi.org/10.1108/ijebr.2009.16015faa.001

Barazandeh, M., Parvizian, K., Alizadeh, M., & Khosravi, S. (2015). Investigating the effect of entrepreneurial competencies on business performance among early stage

entrepreneurs Global Entrepreneurship Monitor (GEM 2010 survey data). *Journal of Global Entrepreneurship Research*, *5*(1). https://doi.org/10.1186/s40497-015-0037-4

Bartlett II, J. E., Kotrlik, J. W., & Higgins, C. C. (2001). Determining appropriate sample size in survey research. *Information Technology, Learning, and Performance Journal*, *19*(1), 43–50. https://www.opalco.com/wp-content/uploads/2014/10/Reading-Sample-Size1.pdf

Becker, G. S. (1964). Human capital: A theoretical and empirical analysis, with special reference to education. In *Sociology of Work: An Encyclopedia*. University of Chicago Press. https://doi.org/10.4135/9781452276199.n145

Bell, R., & Bell, H. (2020). Applying educational theory to develop a framework to support the delivery of experiential entrepreneurship education. *Journal of Small Business and Enterprise Development*, *27*(6), 987–1004. https://doi.org/10.1108/JSBED-01-2020-0012

Bhuian, S. N., Menguc, B., & Bell, S. J. (2005). Just entrepreneurial enough: The moderating effect of entrepreneurship on the relationship between market orientation and performance. *Journal of Business Research*, *58*(1 SPEC.ISS), 9–17. https://doi.org/10.1016/S0148-2963(03)00074-2

Bigliardi, B. (2013). The effect of innovation on financial performance: A research study involving SMEs. *Innovation: Management, Policy and Practice*, *15*(2), 245–255. https://doi.org/10.5172/impp.2013.15.2.245

Binks, M., Starkey, K., & Mahon, C. L. (2006). Entrepreneurship education and the business school. *Technology Analysis and Strategic Management*, *18*(1), 1–18. https://doi.org/10.1080/09537320500520411

Bosma, N., Content, J., Sanders, M., & Stam, E. (2018). Institutions, entrepreneurship, and economic growth in Europe. *Small Business Economics*, *51*(2), 483–499. https://doi.org/10.1007/s11187-018-0012-x

Bosma, N., Hill, S., Ionescu-Somers, A., Kelley, D., Levie, J., & Tarnawa, A. (2020). *GEM - Global entrepreneurshio monitor*.

Bosma, N., Hill, S., Kelley, D., Guerrero, M., Schott, T., & Ionescu-Somers, A. (2021). GEM Global Entrepreneurship Monitor 2020/2021. In *GEM Global Entrepreneurship Monitor*. https://www.gemconsortium.org/report/gem-20202021-global-report

Botha, M. (2020). Prior Entrepreneurial Exposure and Action of Women Entrepreneurs: Exploring the Moderation Effects of Entrepreneurial Competencies in a Developing

Country Context. *Frontiers in Psychology*, *11*(May). https://doi.org/10.3389/fpsyg.2020.00922

Botha, M., & Pietersen, M. (2020). Entrepreneurial action and competencies: Exploring pathways to venturing accomplishments. *Entrepreneurship Research Journal*. https://doi.org/10.1515/erj-2019-0347

Bowmaker-Falconer, A., & Herrington, M. (2020). *Igniting startups for economic growth and social change. Global Entrepreneurship Monitor South Africa 2019/2020 report.* (pp. 1–87).

Brick, J., & Kalton, G. (1996). Handling missing data in survey research. *Statistical Methods in Medical Research*, *5*(3), 215–238.

Bryman, A., & Cramer, D. (2005a). *Quantitative analysis with SPSS 12 and 13: A guide for social scientist*.

Bryman, A., & Cramer, D. (2005b). *Quantitative data analyasis with SPSS 12 and 13*. Routledge.

Carree, M. A., & Thurik, A. R. (2010). Handbook of entrepreneurship research. In *Handbook of Entrepreneurship Research* (Issue 2004). https://doi.org/10.1007/978-1-4419-1191-9

Castaldi, L., Sepe, E., Turi, C., & Iscaro, V. (2020). An experiential learning program for entrepreneurship education. *Global Business and Economics Review*, *22*(1–2), 178–197. https://doi.org/10.1504/GBER.2020.105050

Cheetham, G., & Chivers, G. (1996). Towards a holistic model of numeracy competence. *Journal of European Industrial Training*, *20*(5), 20–30.

Chell, E., & Baines, S. (2000). Networking, entrepreneurship and microbusiness behaviour. *Entrepreneurship and Regional Development*, *12*(3), 195–215. https://doi.org/10.1080/089856200413464

Chen, M., & Chang, Y. (2013). The impacts of human capital in enhancing new venture's performance. *Journal of Knowledge-Based Innovation in China*, *5*(2), 146–168. https://doi.org/10.1108/jkic-06-2013-0011

Cho, Y. H., & Lee, J.-H. (2018). Entrepreneurial orientation, entrepreneurial education and performance. *Asia Pacific Journal of Innovation and Entrepreneurship*, *12*(2), 124–134. https://doi.org/10.1108/apjie-05-2018-0028

Christenko, A., Martinaitis, Z., & Gausas, S. (2020). Specific and general skills : Concepts , dimensions , and measurements. *Competition and Change*, *24*(1), 44–69. https://doi.org/10.1177/1024529419882554

Cieslik, J. (2014). Entrepreneurship and job creation. *Management and Economic Policy Development*, *October*, 47–75.

Clem, J. M., Mennicke, A. M., & Beasley, C. (2014). Development and validation of the experiential learning survey. *Journal of Social Work Education*, *50*(3), 490–506. https://doi.org/10.1080/10437797.2014.917900

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences.* (2nd ed.). Psychology Press.

Cohen, L., Manion, L., & Morrison, K. (2017). Research methods in education. In *Research Methods in Education*. https://doi.org/10.4324/9781315456539

Corbett, A. C. (2005). Experiential learning within the process of opportunity identification and exploitation. *Entrepreneurship: Theory and Practice*, *29*(4), 473–491. https://doi.org/10.1111/j.1540-6520.2005.00094.x

Costello, A. B., & Osborne, J. W. (2005). Best practices in exploratory factor analysis: four recommendations for getting the most from your analysis. *Practical Assessment, Research and Evaluation*, *10*(7). https://doi.org/10.7275/jyj1-4868

Dana, L. P., & Dana, T. E. (2005). Expanding the scope of methodologies used in entrepreneurship research. *International Journal of Entrepreneurship and Small Business*, *2*(1), 79–88. https://doi.org/10.1504/IJESB.2005.006071

Dhliwayo, S. (2008). Experiential learning in entrepreneurship education: A prospective model for South African tertiary institutions. *Education and Training*, *50*(4), 329–340. https://doi.org/10.1108/00400910810880560

Dimov, D. (2017). Towards a qualitative understanding of human capital in entrepreneurship research. *International Journal of Entrepreneurial Behaviour and Research*, *23*(2), 210–227. https://doi.org/10.1108/IJEBR-01-2016-0016

Esezi Isaac, O., & Eric Chikweru, A. (2018). Test for Significance of Pearson's Correlation Coefficient (r). *International Journal of Innovative Mathematics, Statistics & Energy Policies*, *1*(1), 11–23. http://seahipaj.org/journals-ci/mar-2018/IJIMSEP/full/IJIMSEP-M-2-2018.pdf

Ezuma, K. E., & Ismail, M. (2017). Conceptualizing the influence of network competence on entrepreneurship growth in small and medium enterprises. *Global Business and Management Research*, *9*(2), 30–44. https://search.proquest.com/docview/1902418634?accountid=12870%0Ahttps://bibsys-almaprimo.hosted.exlibrisgroup.com/openurl/NTNU_UB/NTNU_UB_services_page?url_ver=Z39.88-

2004&rft_val_fmt=info:ofi/fmt:kev:mtx:journal&genre=article&sid=ProQ:ProQ%3Aabiglobal&a

Ferreira, J. J., Fayolle, A., Fernandes, C., & Raposo, M. (2017). Effects of Schumpeterian and Kirznerian entrepreneurship on economic growth: panel data evidence. *Entrepreneurship and Regional Development*, *29*(1–2), 27–50. https://doi.org/10.1080/08985626.2016.1255431

Fombang, M. P. S., & Adjasi, C. K. (2018). Access to finance and firm innovation. *Journal of Financial Economic Policy*, *10*(1), 73–94. https://doi.org/10.1108/JFEP-10-2016-0070

Gemmell, R. M. (2017). Learning styles of entrepreneurs in knowledge-intensive industries. *International Journal of Entrepreneurial Behaviour and Research*, *23*(3), 446–464. https://doi.org/10.1108/IJEBR-12-2015-0307

Gibbert, M., Nair, L. B., Weiss, M., & Hoegl, M. (2021). Using Outliers for Theory Building. *Organizational Research Methods*, *24*(1), 172–181. https://doi.org/10.1177/1094428119898877

Gillies, D. (2015). Human capital, education and sustainability. *Sustainability*. https://doi.org/10.3390/su3010097

González-López, M. J., Pérez-López, M. C., & Rodríguez-Ariza, L. (2021). From potential to early nascent entrepreneurship: the role of entrepreneurial competencies. *International Entrepreneurship and Management Journal*, *17*(3), 1387–1417. https://doi.org/10.1007/s11365-020-00658-x

Govender, D. (2020). *The moderating role of strategic agility on the relationship between entrepreneurial orientation and organisational performance*. *December*.

Guerrero, M., Urbano, D., & Gajón, E. (2020). Entrepreneurial university ecosystems and graduates' career patterns: do entrepreneurship education programmes and university business incubators matter? *Journal of Management Development*, *39*(5), 753–775. https://doi.org/10.1108/JMD-10-2019-0439

Gümüsay, A. A., & Bohné, T. M. (2018). Individual and organizational inhibitors to the development of entrepreneurial competencies in universities. *Research Policy*, *47*(2), 363–378. https://doi.org/10.1016/j.respol.2017.11.008

Gunday, G., Ulusoy, G., Kilic, K., & Alpkan, L. (2011). Effects of innovation types on firm performance. *International Journal of Production Economics*, *133*(2), 662–676. https://doi.org/10.1016/j.ijpe.2011.05.014

Haase, H., & Lautenschläger, A. (2011). The “teachability dilemma” of entrepreneurship. *International Entrepreneurship and Management Journal*, *7*(2), 145–162. https://doi.org/10.1007/s11365-010-0150-3

Hassan, N. A. (2020). University business incubators as a tool for accelerating entrepreneurship: theoretical perspective. *Review of Economics and Political Science*, *ahead-of-p*(ahead-of-print). https://doi.org/10.1108/reps-10-2019-0142

Henry, C., & Lewis, K. (2018). A review of entrepreneurship education research: Exploring the contribution of the Education + Training special issues. *Education and Training*, *60*(3), 263–286. https://doi.org/10.1108/ET-12-2017-0189

Honig, B., & Hopp, C. (2019). Learning orientations and learning dynamics: Understanding heterogeneous approaches and comparative success in nascent entrepreneurship. *Journal of Business Research*, *94*(April 2018), 28–41. https://doi.org/10.1016/j.jbusres.2018.09.014

Hwang, W. S., Choi, H., & Shin, J. (2020). A mediating role of innovation capability between entrepreneurial competencies and competitive advantage. *Technology Analysis and Strategic Management*, *32*(1), 1–14. https://doi.org/10.1080/09537325.2019.1632430

Hyams-Ssekasi, D., & Caldwell, E. F. (2018). Experiential learning for entrepreneurship: Theoretical and practical perspectives on enterprise education. In *Experiential Learning for Entrepreneurship: Theoretical and Practical Perspectives on Enterprise Education*. https://doi.org/10.1007/978-3-319-90005-6

Ibidunni, A. S., Ogundana, O. M., & Okonkwo, A. (2021). Entrepreneurial Competencies and the Performance of Informal SMEs: The Contingent Role of Business Environment. *Journal of African Business*, *22*(4), 468–490. https://doi.org/10.1080/15228916.2021.1874784

Isabelle, D. A. (2020). Gamification of Entrepreneurship Education. *Decision Sciences Journal of Innovative Education*, *18*(2), 203–223. https://doi.org/10.1111/dsji.12203

Jena, S., & Sahoo, C. K. (2014). Improving managerial performance: A study on entrepreneurial and leadership competencies. *Industrial and Commercial Training*, *46*(3), 143–149. https://doi.org/10.1108/ICT-10-2013-0066

Kakouris, A. (2015). Entrepreneurship pedagogies in lifelong learning: Emergence of criticality? *Learning, Culture and Social Interaction*, *6*, 87–97. https://doi.org/10.1016/j.lcsi.2015.04.004

Kamuri, S. (2021). Creating as an entrepreneurial competence, innovation and performance of value-system actors in Kenya's leather industry. *Scientific African*, *11*, e00664. https://doi.org/10.1016/j.sciaf.2020.e00664

Katz, J. A., & Corbett, A. C. (2019). *Seminal ideas for the next twenty-five years of advances*.

Khalid, K., Hilman, H., & Kumar, D. (2012). Get along with quantitative research process. *International Journal of Research in Management*, *2*(March), 15–29.

Khan, M. A., Rathore, K., & Sial, M. A. (2020). Entrepreneurial orientation and performance of small and medium enterprises: Mediating effect of entrepreneurial competencies. *Pakistan Journal of Commerce and Social Science*, *14*(2), 508–528.

Khan, M. A., Zubair, S. S., Rathore, K., Ijaz, M., Khalil, S., & Khalil, M. (2021). Impact of Entrepreneurial Orientation Dimensions on Performance of Small Enterprises: Do Entrepreneurial Competencies Matter? *Cogent Business & Management*, *8*(1), 1943241. https://doi.org/10.1080/23311975.2021.1943241

Kolb, A. Y., & Kolb, D. A. (2009). Experiential learning theory: A dynamic, holistic approach to management learning, education and development. *The SAGE Handbook of Management Learning, Education and Development*, *May 2015*, 42–68. https://doi.org/10.4135/9780857021038.n3

Kozlinska, I. (2011). Contemporary approaches to entrepreneurship education. *Journal of Business Management*, *4*, 205–220.

Kozlinska, I., Rebmann, A., & Mets, T. (2020). Entrepreneurial competencies and employment status of business graduates: The role of experiential entrepreneurship pedagogy. *Journal of Small Business and Entrepreneurship*, *0*(0), 1–38. https://doi.org/10.1080/08276331.2020.1821159

Krakauer, P. V. de C., Serra, F. A. R., & de Almeida, M. I. R. (2017). Using experiential learning to teach entrepreneurship: a study with Brazilian undergraduate students. *International Journal of Educational Management*, *31*(7), 986–999. https://doi.org/10.1108/IJEM-09-2016-0189

Kraus, S., Palmer, C., Kailer, N., Kallinger, F. L., & Spitzer, J. (2019). Digital entrepreneurship: A research agenda on new business models for the twenty-first century. *International Journal of Entrepreneurial Behaviour and Research*, *25*(2), 353–375. https://doi.org/10.1108/IJEBR-06-2018-0425

Küttim, M., Kallaste, M., Venesaar, U., & Kiis, A. (2014). Entrepreneurship Education at University Level and Students' Entrepreneurial Intentions. *Procedia - Social and Behavioral Sciences*, *110*, 658–668. https://doi.org/10.1016/j.sbspro.2013.12.910

Kwak, S. K., & Kim, J. H. (2017). Statistical data preparation: Management of missing values and outliers. *Korean Journal of Anesthesiology*, *70*(4), 407–411. https://doi.org/10.4097/kjae.2017.70.4.407

Kyguolienė, A., & Švipas, L. (2019). Personal Entrepreneurial Competencies of Participants in Experiential Entrepreneurship Education. *Management of Organizations: Systematic Research*, *82*(1), 37–51. https://doi.org/10.1515/mosr-2019-0012

Kyndt, E., & Baert, H. (2015). Entrepreneurial competencies: Assessment and predictive value for entrepreneurship. *Journal of Vocational Behavior*, *90*, 13–25. https://doi.org/10.1016/j.jvb.2015.07.002

Laerd Statistics. (2015a). *Descriptive and Inferential statistics*. Statistical Tutorials and Software Guides. https://statistics.laerd.com/statistical-guides/descriptive-inferential-statistics.php

Laerd Statistics. (2015b). *Pearson product-moment correlation*. Statistical Tutorials and Software Guides.

Laerd Statistics. (2015c). *Principal Component Analysis (PCA)*. Statistical Tutorials and Software Guides. https://statistics.laerd.com/premium/spss/pca/pca-in-spss-7.php

Laerd Statistics. (2015d). *Simple linear regression*. Statistical Tutorials and Software Guides.

Laerd Statistics. (2015e). *Testing for normality*. Statistical Tutorials and Software Guides. https://statistics.laerd.com/premium/spss/tfn/testing-for-normality-in-spss.php

LANS, T., HULSINK, W., BAERT, H., & MULDER, M. (2008). Entrepreneurship Education and Training in a Small Business Context: Insights From the Competence-Based Approach. *Journal of Enterprising Culture*, *16*(04), 363–383. https://doi.org/10.1142/s0218495808000193

Li, C. (2013). Little's test of missing completely at random. *Stata Journal*, *13*(4), 795–809. https://doi.org/10.1177/1536867x1301300407

Liguori, E. W., Winkler, C., Neck, H. M., & Terjesen, S. (2019). Editorial: Special Issue on Entrepreneurship Education. *Journal of Small Business Management*, *57*(S1), 4–5. https://doi.org/10.1111/jsbm.12542

Loi, M., Fayolle, A., van Gelderen, M., Riot, E., Higgins, D., Haloub, R., Salusse, M., Lamy, E., Verzat, C., & Cavarretta, F. (2019). Entrepreneurship education at the crossroads: Challenging taken-for-granted assumptions and opening new perspectives. *Journal of Management Inquiry*. https://eprints.whiterose.ac.uk/

LUCIAN, I. F., & SERGIU, R. (2019). The Role of Innovation and Entrepreneurship in Small and Medium Businesses. *Agricultural Management / Lucrari Stiintifice Seria I, Management Agricol*, *21*(1), 122–127. http://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=136949071&site=ehost-live

MacKinnon, D., Fairchild, A., & Fritz, M. (2007). Mediation analysis. *Annual Review of Psychology*, *58*(1), 593–614.

Malchow-Møller, N., Schjerning, B., & Sørensen, A. (2011). Entrepreneurship, job creation and wage growth. *Small Business Economics*, *36*(1), 15–32. https://doi.org/10.1007/s11187-009-9173-y

Maluleke, R. (2021). *Quarterly Labour Force Survey (QLFS) Q2:2021 COVID-19 Impact on Data Collection*. http://www.statssa.gov.za/publications/P0211/Presentation QLFS Q2_2021.pdf

Mamabolo, A., & Myres, K. (2020). A systematic literature review of skills required in the different phases of the entrepreneurial process. *Small Enterprise Research*, *27*(1), 39–63. https://doi.org/10.1080/13215906.2020.1730230

Mamabolo, M. A., Kerrin, M., & Kele, T. (2017). Entrepreneurship management skills requirements in an emerging economy: A South African outlook. *The Southern African Journal of Entrepreneurship and Small Business Management*, *9*(1), 10. https://doi.org/10.4102/sajesbm.v9i1.111

Man, T. W. Y., Lau, T., & Chan, K. F. (2002). The competitiveness of small and medium enterprises: A conceptualization with focus on entrepreneurial competencies. *Journal of Business Venturing*, *17*(2), 123–142. https://doi.org/10.1016/S0883-9026(00)00058-6

Man, T. W. Y., Lau, T., & Snape, E. (2008). Entrepreneurial Competencies and the Performance of Small and Medium Enterprises: An Investigation through a Framework of Competitiveness. *Journal of Small Business and Entrepreneurship*, *21*(3), 257–276. https://doi.org/10.1080/08276331.2008.10593424

Martin, B. C., McNally, J. J., & Kay, M. J. (2013). Examining the formation of human capital in entrepreneurship: A meta-analysis of entrepreneurship education outcomes. *Journal of Business Venturing*, *28*(2), 211–224. https://doi.org/10.1016/j.jbusvent.2012.03.002

Marvel, M. R., Davis, J. L., & Sproul, C. R. (2016). Human Capital and Entrepreneurship Research: A Critical Review and Future Directions. *Entrepreneurship: Theory and Practice*, *40*(3), 599–626. https://doi.org/10.1111/etap.12136

Matsuo, M. (2015). A Framework for Facilitating Experiential Learning. *Human Resource Development Review*, *14*(4), 442–461. https://doi.org/10.1177/1534484315598087

Miles, M. P., de Vries, H., Harrison, G., Bliemel, M., de Klerk, S., & Kasouf, C. J. (2017). Accelerators as authentic training experiences for nascent entrepreneurs. *Education and Training*, *59*(7–8), 811–824. https://doi.org/10.1108/ET-01-2017-0007

Minai, M. S., Raza, S., Bin Hashim, N. A., Md Zain, A. Y., & Ali Tariq, T. (2018). Linking entrepreneurial education with firm performance through entrepreneurial competencies: A proposed conceptual framework. *Journal of Entrepreneurship Education*, *21*(4).

Mitchelmore, S., & Rowley, J. (2010). Entrepreneurial competencies: A literature review and development agenda. *International Journal of Entrepreneurial Behaviour & Research*, *16*(2), 92–111. https://doi.org/10.1108/13552551011026995

Molina-Azorín, J. F., López-Gamero, M. D., Pereira-Moliner, J., & Pertusa-Ortega, E. M. (2012). Mixed methods studies in entrepreneurship research: Applications and contributions. *Entrepreneurship and Regional Development*, *24*(5–6), 425–456. https://doi.org/10.1080/08985626.2011.603363

Morris, M. H., Webb, J. W., Fu, J., & Singhal, S. (2013). A competency-based perspective on entrepreneurship education: Conceptual and empirical insights. *Journal of Small Business Management*, *51*(3), 352–369. https://doi.org/10.1111/jsbm.12023

Morris, T. H., & König, P. D. (2021). Self-directed experiential learning to meet ever-changing entrepreneurship demands. *Education and Training*, *63*(1), 23–49. https://doi.org/10.1108/ET-09-2019-0209

Murray, A., Crammond, R. J., Omeihe, K. O., & Scuotto, V. (2018). Establishing successful methods of entrepreneurship education in nurturing new entrepreneurs: Exploring entrepreneurial practice. *Journal of Higher Education Service Science and Management*, *1*(1), 1–11.

Naidoo, P. (2021). *South Africa Unemployment Rate Rises to Highest in the World*. Bloomberg.

National Planning Commission. (2011). *National Development Plan: Economy and employment* (pp. 110–158).

Neck, H. M., & Corbett, A. C. (2018). The Scholarship of Teaching and Learning Entrepreneurship. *Entrepreneurship Education and Pedagogy*, *1*(1), 8–41. https://doi.org/10.1177/2515127417737286

Oluwatayo, J. A. (2012). Validity and reliability issues in educational research. *Journal of Educational and Social Research*, *2*(May), 391–400. https://doi.org/10.5901/jesr.2012.v2n2.391

Pallant, J. (2007). *Statistic material for English International Learners (EIL) SPSS Survival Manual A Step by Step Guide to Data* (Issue 2).

Pamungkas, S. F., Widiastuti, I., & Suharno, S. (2019). Kolb'S Experiential Learning As an Effective Learning Model in Creative Product and Entrepreneurship Subjects. *Journal of Mechanical Engineering and Vocational Education (JoMEVE)*, *2*(1), 27. https://doi.org/10.20961/jomeve.v2i1.28352

Ployhart, R., & Moliterno, T. (2011). Emergence of the human capital resource: A multilevel model. *Academy of Management Review*, *36*(1), 127–150. https://doi.org/10.5465/amr.2009.0318

Politis, D., & Gabrielsson, J. (2009). Entrepreneurs' attitudes towards failure: An experiential learning approach. *International Journal of Entrepreneurial Behaviour and Research*, *15*(4), 364–383. https://doi.org/10.1108/13552550910967921

Rahman, S., Amran, A., Ahmad, N., & Taghizadeh, S. (2014). Overcoming the barriers to effective collaboration. *Journal of Global Business and Organizational Excellence*, *33*(5), 41–53. https://doi.org/10.1002/joe

Ramsgaard, M. B., & Christensen, M. E. (2018). Interplay of entrepreneurial learning forms: A case study of experiential learning settings. *Innovations in Education and Teaching International*, *55*(1), 55–64. https://doi.org/10.1080/14703297.2016.1228468

Rasiah, R., Somasundram, S., & Tee, K. P. L. (2019). Entrepreneurship in education: Innovations in higher education to promote experiential learning and develop future ready entrepreneurial graduates. *Journal of Engineering Science and Technology*, *14*, 99–110.

Ratten, V., & Usmanij, P. (2021). Entrepreneurship education: Time for a change in research direction? *The International Journal of Management Education*, *19*(1), 100367. https://doi.org/10.1016/j.ijme.2020.100367

Reis, D. A., Fleury, A. L., & Carvalho, M. M. (2021). Consolidating core entrepreneurial competences: toward a meta-competence framework. *International Journal of Entrepreneurial Behaviour and Research*, *27*(1), 179–204. https://doi.org/10.1108/IJEBR-02-2020-0079

Ribeiro-Soriano, D. (2017). Small business and entrepreneurship: their role in economic and social development. *Entrepreneurship and Regional Development*, *29*(1–2), 1–3. https://doi.org/10.1080/08985626.2016.1255438

Ritter, T., Wilkinson, I. F., & Johnston, W. J. (2002). Measuring network competence: Some international evidence. *Journal of Business and Industrial Marketing*, *17*(2–3), 119–138. https://doi.org/10.1108/08858620210419763

Rosenbusch, N., Brinckmann, J., & Bausch, A. (2011). Is innovation always beneficial? A meta-analysis of the relationship between innovation and performance in SMEs. *Journal of Business Venturing*, *26*(4), 441–457. https://doi.org/10.1016/j.jbusvent.2009.12.002

Rosli, M. M., & Sidek, S. (2007). Innovation and Firm Performance : Evidence from Malaysian Small and Medium Enterprises Literature Review Innovation. *Entrepreneurship Vision 2020: Innovation, Development SUstainability, Nad Economic Growth*, *1980*, 794–809.

Roundy, P. T., & Fayard, D. (2019). Dynamic capabilities and entrepreneurial ecosystems: The micro-foundations of regional entrepreneurship. *Journal of Entrepreneurship*, *28*(1), 94–120. https://doi.org/10.1177/0971355718810296

Ryan, G. (2018). Introduction to positivism, interpretivism and critical theory. *Nurse Researcher*, *25*(4), 14–20. https://doi.org/10.7748/nr.2018.e1466

Sánchez, J. C. (2013). The impact of an entrepreneurship education program on entrepreneurial competencies and intention. *Journal of Small Business Management*, *51*(3), 447–465. https://doi.org/10.1111/jsbm.12025

Santos, S. C., Neumeyer, X., & Morris, M. H. (2019). Entrepreneurship Education in a Poverty Context: An Empowerment Perspective. *Journal of Small Business Management*, *57*(S1), 6–32. https://doi.org/10.1111/jsbm.12485

Saunders, M. N. K., & Lewis, P. (2012). *Doing research in business & management: An essential guide to planning your project*. Pearson.

Schneider, K. (2017). Entrepreneurial Competencies of Women Entrepreneurs of Micro and Small Enterprises. *Science Journal of Education*, *5*(6), 252. https://doi.org/10.11648/j.sjedu.20170506.14

Schneider, K. (2018). Theoretical model of fundamental entrepreneurial competencies. *Science Journal of Education*, *6*(1), 8. https://doi.org/10.11648/j.sjedu.20180601.12

Schwab, K., & Zahidi, S. (2020). The global competitiveness report: How countries are performing on the road to recovery. In *World Economic Forum*.

Scotland, J. (2012). Exploring the philosophical underpinnings of research: Relating ontology and epistemology to the methodology and methods of the scientific, interpretive, and critical research paradigms. *English Language Teaching*, *5*(9), 9–16. https://doi.org/10.5539/elt.v5n9p9

Scott, J., Penaluna, A., & Thompson, J. L. (2016). A critical perspective on learning outcomes and the effectiveness of experiential approaches in entrepreneurship education: Do we innovate or implement? *Education and Training*, *58*(1), 82–93. https://doi.org/10.1108/ET-06-2014-0063

Secundo, G., Mele, G., Sansone, G., & Paolucci, E. (2020). Entrepreneurship Education Centres in universities: evidence and insights from Italian “Contamination Lab” cases. *International Journal of Entrepreneurial Behaviour and Research*, *26*(6), 1311–1333. https://doi.org/10.1108/IJEBR-12-2019-0687

Sedgwick, P. (2012). Pearson’s correlation coefficient. *BMJ (Online)*, *345*(7864), 1–2. https://doi.org/10.1136/bmj.e4483

Segal, G., Borgia, D., & Schoenfeld, J. (2005). The motivation to become an entrepreneur. *International Journal of Entrepreneurial Behaviour and Research*, *11*(1), 42–57. https://doi.org/10.1108/13552550510580834

Shafiu, A., Manaf, H., & Muslim, S. (2020). Utilization entrepreneurship for job creation, poverty reduction and national development. *The Journal of Social Sciences Research*, *6*(1), 97–102. https://www.researchgate.net/profile/Olimpia_Pino/publication/328307480_The_Role_of_Personality_in_Predicting_the_Effect_of_a_Road-Safety_Education_Program_on_the_Decrease_of_Reported_Violations/links/5bc5caa5299bf17a1c559f70/The-Role-of-Personality-in-Pr

Shane, S., & Venkataraman, S. (2000). The Promise of Entrepreneurship as a Field of Research Author (s): Scott Shane and S . Venkataraman Source : The Academy of Management Review , Vol . 25 , No . 1 (Jan ., 2000), pp . 217-226 Published by : Academy of Management Stable URL : http://www. *The Academy of Management Review*, *25*(1), 217–226. https://www.jstor.org/stable/259271

Silveyra, G., Herrero, Á., & Pérez, A. (2021). Model of Teachable Entrepreneurship Competencies (M-TEC): Scale development. *International Journal of Management Education*, *19*(1). https://doi.org/10.1016/j.ijme.2020.100392

Sims, R. R. (1983). Kolb’s Experiential Learning Theory: A Framework for Assessing Person-Job Interaction . *Academy of Management Review*, *8*(3), 501–508. https://doi.org/10.5465/amr.1983.4284610

South Africa Unemployment Rate. (2021). Trading Economics. https://tradingeconomics.com/south-africa/unemployment-rate

Spremo, T., & Mićić, J. (2016). Small Enterprises: Key Source of Employment and Economic Growth. *Зборник Радова Економског Факултета У Источном Сарајеву*, *1*(11), 63. https://doi.org/10.7251/zrefis1511063s

Sungkawati, E. (2019). *The Impact of Entrepreneurship Competence on Micro Business Performance*. *349*(Iccd), 183–186. https://doi.org/10.2991/iccd-19.2019.49

SÜRÜCÜ, L., & MASLAKÇI, A. (2020). Validity and Reliability in Quantitative Research. *Business & Management Studies: An International Journal*, *8*(3), 2694–2726. https://doi.org/10.15295/bmij.v8i3.1540

Sykes, A. (1993). *An introduction to regression analysis* (No. 20). https://doi.org/10.1002/9781118267912.ch6

Tan, E. (2014). Human capital theory: A holistic criticism. *Review of Educational Research*, *84*(3), 411–445. https://doi.org/10.3102/0034654314532696

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, *2*, 53–55. https://doi.org/10.5116/ijme.4dfb.8dfd

Tehseen, S., Ahmed, F. U., Qureshi, Z. H., Uddin, M. J., & Ramayah, T. (2019). Entrepreneurial competencies and SMEs' growth: the mediating role of network competence. *Asia-Pacific Journal of Business Administration*, *11*(1), 2–29. https://doi.org/10.1108/APJBA-05-2018-0084

Tjan, A. (2012). *Can entrepreneurs be made?* Harvard Business Review.

Trailer, J. W., Hill, R. C., & Murphy, G. B. (1996). Measuring performance in entrepreneurship research. *Journal of Business Research*, *36*(1), 15–23. https://doi.org/10.1016/0148-2963(95)00159-X

UNCTAD. (2017). *Promoting entrepreneurship for sustainable development: A selection of business cases*. 1–64.

Unger, J. M., Rauch, A., Frese, M., & Rosenbusch, N. (2011). Human capital and entrepreneurial success: A meta-analytical review. *Journal of Business Venturing*, *26*(3), 341–358. https://doi.org/10.1016/j.jbusvent.2009.09.004

Vahedna, S. (2019). *The nature and perceived value of mentoring for established business owner-managers in South Africa*. *November*.

von Graevenitz, G., Harhoff, D., & Weber, R. (2010). The effects of entrepreneurship education. *Journal of Economic Behavior & Organization*, *76*(1), 90–112. https://doi.org/10.1016/J.JEBO.2010.02.015

Watson, J. (2007). Modeling the relationship between networking and firm performance. *Journal of Business Venturing*, *22*(6), 852–874. https://doi.org/10.1016/j.jbusvent.2006.08.001

Williams, B., Onsman, A., & Brown, T. (2010). Exploratory factor analysis: A five-step guide for novices. *Journal of Emergency Primary Health Care*, *8*(3), 1–13. https://doi.org/10.33151/ajp.8.3.93

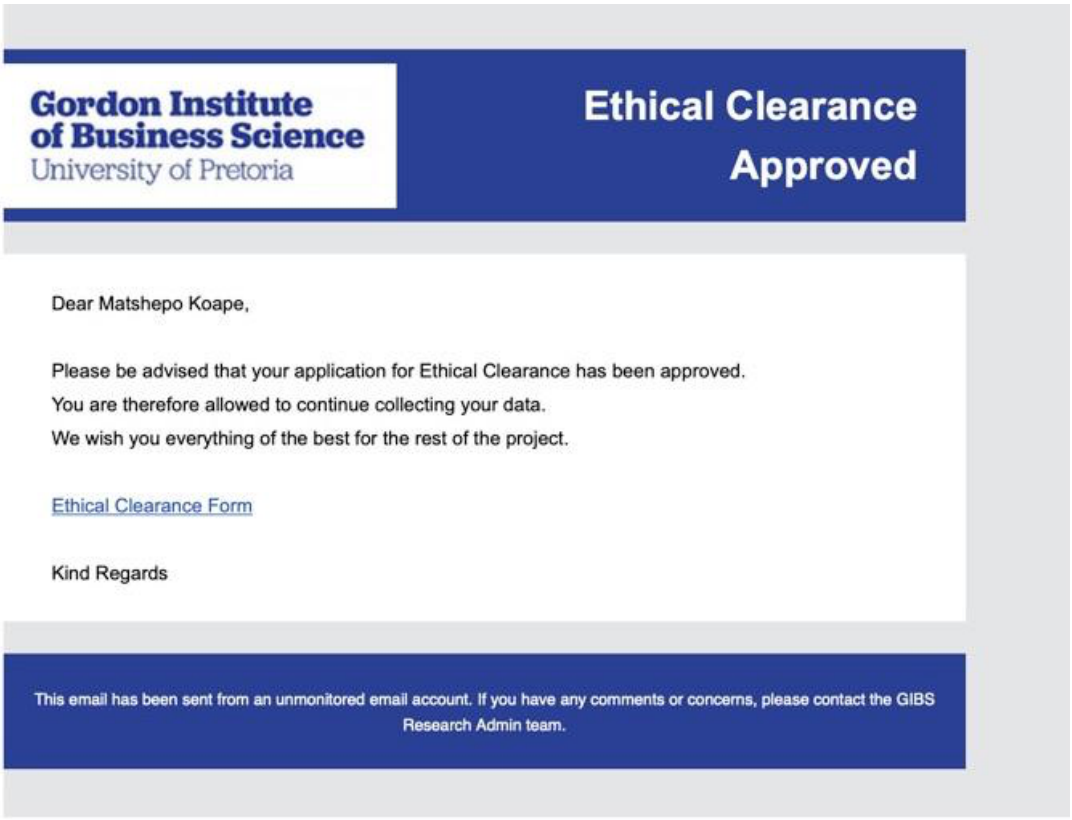
Zhao, Y. L., Song, M., & Storm, G. L. (2013). Founding team capabilities and new venture performance: The mediating role of strategic positional advantages. *Entrepreneurship: Theory and Practice*, *37*(4), 789–814. https://doi.org/10.1111/j.1540-6520.2012.00513.x

Zizile, T., & Tendai, C. (2018). The importance of entrepreneurial competencies on the performance of women entrepreneurs in South Africa. *Journal of Applied Business Research*, *34*(2), 223–236. https://doi.org/10.19030/jabr.v34i2.10122

Zou, K., Tuncali, K., & Silverman, S. (2003). Correlation and simple linear regression. *Radiology*, *227*(3), 617–628. https://doi.org/10.1007/978-3-319-89993-0_6

APPENDICES

Appendix 1 – Ethical Clearance approval



Gordon Institute of Business Science
University of Pretoria

Ethical Clearance Approved

Dear Matshepo Koape,

Please be advised that your application for Ethical Clearance has been approved.
You are therefore allowed to continue collecting your data.
We wish you everything of the best for the rest of the project.

Ethical Clearance Form

Kind Regards

This email has been sent from an unmonitored email account. If you have any comments or concerns, please contact the GIBS Research Admin team.

Appendix 2 – Survey Questionnaire

Informed Consent letter

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. I am conducting research on whether entrepreneurial experiential training and learning has an impact on the development of entrepreneurial competencies to ensure business performance.

To that end, you are asked to complete this questionnaire. This will help us better understand the type of entrepreneurial competencies needed to ensure business success and 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: Matshepo Koape

Email: 22222929@mygibs.co.za
Phone: (100) 771 4140

Research Supervisor: Prof Anastacia Mamabolo
Email: mamaboloa@gibs.co.za
Phone: (011) 771 4000

Section A – Demographic data

GIBS Entrepreneurship Development Academy programme	
Gender	Male Female Other
Age	Younger than 20 years 21 -30 years 31 – 40 years 41 – 50 years 51 – 60 years Older than 60 years
Education	Higher secondary education (Grade 8 – Grade 12) University Diploma University – Bachelor degree University – Honours degree University – Masters degree Other

Section B – Experiential learning, Business Performance and Entrepreneurial competencies

1. Strongly disagree 2. Disagree 3. Somewhat Disagree 4. Neither Agree nor Disagree 5. Somewhat Agree 6. Agree 7. Strongly Agree

Experiential learning is learning by doing - You are required to indicate how much you agree or disagree with certain items							
	1. Strongly disagree	**2. Disagree**	**3. Somewhat Disagree**	**4. Neither Agree nor Disagree**	**5. Somewhat Agree**	**6. Agree**	**7. Strongly Agree**
The setting where I learn helps me understand the material better.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
I expect real-world problems to come up during this learning experience.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
The environment I learn in does not enhance the learning experience.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
The learning experience requires me to interact with people other than students and lecturers	**1**	**2**	**3**	**4**	**5**	**6**	**7**
I expect to return to an environment similar to the one where this learning experience occurs.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
I am stimulated by what I am learning.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
The learning experience requires me to do more than just listen.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
The learning experience is presented to me in a challenging way.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
I find this learning experience boring.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
I feel like I am an active part of the learning experience.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
The learning experience requires me to really think about the information.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
I am emotionally invested in this experience.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
I care about the information I am being taught.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
The learning experience makes sense to me.	**1**	**2**	**3**	**4**	**5**	**6**	**7**

This learning experience has nothing to do with me.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
This learning experience is enjoyable to me.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
I can identify with the learning experience.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
This learning experience is applicable to me and my interests.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
My lecturer encourages me to share my ideas and past experiences.	1	2	3	4	5	6	7

2. Business Performance					
Innovative performance - How would you rate the level of achievement of the following innovative performance items in your organization in the last three years compared to the previous years?					
	1. Very unsuccessful	**2. Unsuc-cessful**	**3. Neither unsuc-cessful or successful**	**4. Succ-essful**	**5. Very successful**
Ability to introduce new products and services to the market before competitors	1	2	3	4	5
Percentage of new products in the existing product portfolio	1	2	3	4	5
Number of new product and service projects	1	2	3	4	5
Innovations introduced for work processes and methods	1	2	3	4	5
Quality of new products and services introduced	1	2	3	4	5
Number of innovations under intellectual property protection	1	2	3	4	5
Renewing the administrative system and the mind set in line with firm's environment	1	2	3	4	5
How would you rate the level of achievement of the following financial performance items in your organization in the last three years compared to the previous years?					
	1. Very unsuccessful	**2. Unsuc-cessful**	**3. Neither unsuc-cessful or successful**	**4. Succ-essful**	**5. Very successful**

Return on sales (profit/total sales)	1	2	3	4	5
Return on assets (profit/total assets)	1	2	3	4	5
General profitability of the firm	1	2	3	4	5
Cash flow excluding investments	1	2	3	4	5

3. Entrepreneurial competencies – knowledge, skills and attitudes						
How do you spot opportunities for your business?						
	1. Never	**2. Seldom**	**3. Sometimes**	**4. Often**	**5. Most times**	**6. Always**
I provide an original answer to what the market needs	1	2	3	4	5	6
I know what is (not yet) for sale in my sector	1	2	3	4	5	6
I have original ideas for new products or services for the market	1	2	3	4	5	6
I know when my (future) clients want new products or services	1	2	3	4	5	6
I can think ahead about new developments that will occur in the sector I am active in	1	2	3	4	5	6
I know which needs and requirements exist in my environment	1	2	3	4	5	6
I can respond creatively to opportunities	1	2	3	4	5	6
How do you build networks?						
I talk to other people on numerous occasions. I don't do this solely because I want something done	1	2	3	4	5	6
I approach other people spontaneously	1	2	3	4	5	6
I attend events where I can meet interesting people	1	2	3	4	5	6
I like meeting new people	1	2	3	4	5	6
I do what is necessary to maintain my contacts with others	1	2	3	4	5	6

I know who I can talk to when I need help	1	2	3	4	5	6
I dare to approach others when I need something	1	2	3	4	5	6
I help other by referring them to people I know	1	2	3	4	5	6
How aware are you of potential returns on investment?						
I monitor my budget constantly when I am working on something	1	2	3	4	5	6
Before I invest money, I examine other possibilities	1	2	3	4	5	6
I reflect about how I am going to use my resources. I try to use my resources in the best possible way	1	2	3	4	5	6
Before I start something, I try to think about what it will cost me and what I can gain from it	1	2	3	4	5	6
I know how I can keep the costs under control	1	2	3	4	5	6
I can get an advantage out of what I do	1	2	3	4	5	6
How do you gain insight into the market?						
I know who my competitors are	**1**	**2**	**3**	**4**	**5**	**6**
I know who could become my competitors	**1**	**2**	**3**	**4**	**5**	**6**
I try to collect information about my competitors	**1**	**2**	**3**	**4**	**5**	**6**
I dare to make contact with my competitors	**1**	**2**	**3**	**4**	**5**	**6**
I make sure that I am aware of the technological developments	**1**	**2**	**3**	**4**	**5**	**6**
I visit exhibitions in my field	**1**	**2**	**3**	**4**	**5**	**6**
I talk to other to know what is going on and what is needed	**1**	**2**	**3**	**4**	**5**	**6**

Appendix 3 – Sample of Raw data

GIBS Entrepr	Age	Gender	Education lev	EL1s	EL2s	EL3s	EL4s	EL5s	EL6s	EL7s	EL8s
JP Morgan Sr	31 - 40 years	Female	University – Di	5	7	4	5	4	7	6	6
Circle for Glob	41 - 50 years	Female	University – Di	7	6	2	5	7	6	7	6
Ertaro Courte	31 - 40 years	Male	University – Ma	6	7	2	6	4	7	6	6
Walmart#Gro	41 - 50 years	Female	University – Di	7	6	2	2	3	7	7	5
Walmart#Gro	31 - 40 years	Male	University – Ho	5	4	1	3	1	7	7	4
Walmart#Gro	41 - 50 years	Male	University – Di	7	7	4	7	7	7	7	7
Walmart#Gro	41 - 50 years	Female	University – Di	7	5	1	6	6	7	7	2
Ertaro Courte	31 - 40 years	Male	University – Di	7	6	7	6	7	6	7	7
Ertaro Courte	31 - 40 years	Male	University – Ho	6	6	2	6	5	7	7	2
Ertaro Courte	31 - 40 years	Female	University – Ho	6	6	4	6	6	6	6	6
Ertaro Courte	31 - 40 years	Male	University – Ho	6	6	2	6	6	7	6	6
Ertaro Courte	31 - 40 years	Female	Higher educa	3	6	4	3	6	6	6	2
Ertaro Courte	41 - 50 years	Female	University – Ba	6	6	2	4	4	5	6	3
Ertaro Courte	31 - 40 years	Female	Higher educa	7	6	3	7	7	6	6	6
Ertaro Courte	21 -30 years	Male	University – Di	6	7	3	6	7	6	7	5
Ertaro Courte	21 -30 years	Male	Higher educa	7	6	1	7	6	7	7	7
Walmart#Gro	41 - 50 years	Female	Higher educa	7	7	7	7	7	7	7	7
JP Morgan Sr	41 - 50 years	Female	Higher educa	6	6	1	5	6	6	6	6
NHBRC Wom	41 - 50 years	Female	University – Ho	5	7	4	1	4	2	6	1
Walmart#Gro	41 - 50 years	Female	University – Ba	6	7	2	6	6	7	7	7
JP Morgan Sr	31 - 40 years	Female	University – Ba	6	6	6	6	6	6	6	6
Walmart#Gro	41 - 50 years	Female	Higher educa	7	7	1	7	7	7	7	7
Unspecified p	21 -30 years	Male	University – Di	2	2	2	3	1	2	2	1
Corteva Wom	21 -30 years	Female	University – Ho	6	7	3	3	2	4	5	3
Corteva Wom	31 - 40 years	Female	University – Ba	6	7	2	6	2	7	7	2
Corteva Wom	31 - 40 years	Female	University – Di	6	6	5	6	5	6	6	4
Corteva Wom	31 - 40 years	Female	Higher educa	7	6	6	6	6	6	6	6
Corteva Wom	41 - 50 years	Female	University – Ba	7	7	2	6	6	5	6	5
Corteva Wom	31 - 40 years	Female	Postgrad dipl	6	6	6	6	6	6	7	6
Corteva Wom	41 - 50 years	Female	University – Ba	7	7	2	6	7	7	7	7
Corteva Wom	31 - 40 years	Female	University – Di	1	2	2	1	1	1	1	2
NHBRC Wom	31 - 40 years	Female	S4	7	7	1	2	7	7	7	7
NHBRC Wom	31 - 40 years	Female	2 bachelor's de	6	7	1	3	7	6	7	6
JP Morgan Sr	31 - 40 years	Male	University – Di	7	7	2	7	6	6	7	6
NHBRC Wom	31 - 40 years	Female	University – Di	7	6	3	7	4	7	7	7
Ertaro Courte	31 - 40 years	Female	University – Di	6	6	5	7	6	6	7	6
Ertaro Courte	31 - 40 years	Male	University – Di	6	6	3	6	6	6	6	3
Ertaro Courte	31 - 40 years	Female	University – Di	6	6	2	7	6	7	7	7
Ertaro Courte	31 - 40 years	Male	University – Ba	7	7	2	7	6	7	7	2
Ertaro Courte	31 - 40 years	Female	University – Ho	6	6	2	6	6	6	7	6
Ertaro Courte	31 - 40 years	Male	Higher educa	6	6	2	6	6	6	7	2
Ertaro Courte	41 - 50 years	Female	Labour Relati	7	7	3	7	7	7	7	7
Ertaro Courte	31 - 40 years	Female	Higher educa	1	2	2	1	1	1	1	1
Ertaro Courte	51 - 60 years	Female	University – Ba	6	5	2	1	2	7	6	3
Ertaro Courte	41 - 50 years	Female	Doctorate	7	7	1	7	1	3	4	4
NHBRC Wom	31 - 40 years	Female	University – Ho	6	7	1	7	5	7	7	7
UNDP educat	31 - 40 years	Female	Higher educa	6	6	2	2	6	6	6	6
NHBRC Wom	31 - 40 years	Female	University – Di	7	7	5	7	7	7	7	7
NHBRC Wom	60 years and	Female	Higher educa	3	2	1	2	3	3	3	3
NHBRC Wom	41 - 50 years	Female	Higher educa	1	1	2	1	1	1	1	1
Social Entrep	31 - 40 years	Female	PHD	4	5	4	7	2	5	6	5
Corteva Wom	21 -30 years	Female	University – Ba	6	6	2	6	6	7	7	2
Ertaro Courte	31 - 40 years	Male	University – Ho	7	7	7	7	7	7	7	7
JP Morgan Sr	31 - 40 years	Male	University – Ho	6	6	1	3	3	3	7	6
Circle for Glob	21 -30 years	Female	University – Ho	4	4	3	3	4	4	4	3
Circle for Glob	41 - 50 years	Female	University – Ba	2	6	2	6	6	6	6	4
Corteva Wom	31 - 40 years	Female	University – Di	7	6	3	6	4	7	7	1
Walmart#Gro	21 -30 years	Female	Higher educa	7	7	6	7	5	6	6	5
Walmart#Gro	21 -30 years	Female	University – Di	6	6	2	2	6	6	6	6
Walmart#Gro	21 -30 years	Male	University – Ba	7	6	1	7	5	7	7	6
Walmart#Gro	41 - 50 years	Female	Higher educa	7	6	1	7	7	7	7	7
Circle for Glob	41 - 50 years	Female	Higher educa	7	6	4	1	2	6	4	4
Walmart#Gro	60 years and	Female	University – Ba	7	5	4	4	7	7	4	3
NHBRC Wom	31 - 40 years	Female	University – Ba	6	5	5	7	6	6	7	7
JP Morgan Sr	31 - 40 years	Male	University – Di	2	7	7	7	1	7	7	1
Walmart#Gro	31 - 40 years	Female	Higher educa	6	7	1	7	6	7	7	1
Social Entrep	51 - 60 years	Female	University – Di	6	4	3	4	5	6	6	6
JP Morgan Sr	41 - 50 years	Female	University – Ba	6	5	4	6	5	7	5	6
Walmart#Gro	21 -30 years	Male	CompTIA A+;	7	2	1	4	7	7	7	7
Walmart#Gro	31 - 40 years	Female	NQF level 4 P	5	7	3	1	6	7	7	7
Corteva Wom	51 - 60 years	Female	University – Ba	5	7	2	6	2	7	7	6
Walmart#Gro	51 - 60 years	Female	University – Di	6	7	1	7	4	7	7	4
Walmart#Gro	Younger than	Male	University – Ba	6	5	2	6	7	7	6	4
JP Morgan Sr	60 years and	Female	University – Ba	6	7	4	7	2	7	7	7
NHBRC Wom	41 - 50 years	Female	University – Ba	6	7	2	5	6	7	7	6
Walmart#Gro	31 - 40 years	Female	University – Ba	7	7	1	4	7	7	7	5
Walmart#Gro	31 - 40 years	Female	College certifi	7	7	1	6	6	7	7	7
Walmart#Gro	21 -30 years	Female	University – Ba	6	7	3	2	2	6	7	7
Walmart#Gro	21 -30 years	Female	University – Ba	6	5	4	3	3	6	6	6
NHBRC Wom	31 - 40 years	Female	University – Ba	6	7	2	5	6	7	7	1
Walmart#Gro	51 - 60 years	Female	University – Ho	7	6	1	2	2	6	4	6
French Embas	21 -30 years	Female	University – Ba	7	7	2	6	6	7	7	2
French Embas	31 - 40 years	Female	University – Ma	6	7	1	6	6	7	6	6
Embassy of F	31 - 40 years	Female	University – Ho	6	7	2	1	7	7	7	5
French Embas	31 - 40 years	Female	University – Ma	6	7	1	5	3	7	7	7
Embassy of F	31 - 40 years	Female	University – Ba	7	6	2	6	6	7	7	3
French Embas	31 - 40 years	Female	University – Ho	7	6	2	3	7	6	4	2
Embassy of F	21 -30 years	Female	University – Ho	7	2	1	7	7	7	7	7
Embassy of F	31 - 40 years	Female	University – Ho	7	4	1	7	7	7	7	7
Embassy of F	51 - 60 years	Female	University – Ba	7	7	1	7	1	7	7	2
Embassy of F	31 - 40 years	Female	University – Di	7	7	1	6	7	7	7	1
Ertaro Courte	31 - 40 years	Male	Higher educa	1	1	3	1	3	1	1	1
Ertaro Courte	31 - 40 years	Female	Higher educa	6	5	3	2	5	5	5	3
French Embas	21 -30 years	Female	University – Ba	6	6	2	3	7	7	7	6
Embassy of F	21 -30 years	Female	Higher educa	6	7	2	6	7	6	7	7
French Embas	21 -30 years	Female	TVET Diploma	3	2	3	1	3	3	3	2
Embassy of F	21 -30 years	Female	University – Di	5	6	2	4	7	7	7	6
Embassy of F	31 - 40 years	Female	University – Di	6	5	7	5	6	7	7	5
Embassy of F	31 - 40 years	Female	University – Ba	5	6	3	4	5	6	5	3
Embassy of F	21 -30 years	Female	University – Ba	6	7	3	5	6	6	6	5
Walmart#Gro	21 -30 years	Male	N6 CERTIFIC	7	7	4	5	4	7	7	6
Circle for Glob	31 - 40 years	Female	University – Ma	6	7	4	6	6	7	6	5
Circle for Glob	41 - 50 years	Female	University – Ba	7	7	1	7	7	7	7	5
Circle for Glob	41 - 50 years	Female	University – Ho	6	7	5	7	7	7	7	7
Grownyourfut	21 -30 years	Male	University – Ho	7	7	2	7	1	7	7	6
Entrepreneur	31 - 40 years	Female	University – Ma	7	7	1	1	6	7	7	4
NHBRC Wom	31 - 40 years	Female	University – Di	6	5	1	4	5	6	6	3
Ertaro Courte	21 -30 years	Female	Higher educa	5	6	2	6	3	6	6	6
Ertaro Courte	21 -30 years	Male	University – Di	5	6	3	3	6	6	7	6
Embassy of F	41 - 50 years	Female	University – Ma	6	5	2	5	2	6	6	6
SEP	21 -30 years	Female	University – Ho	5	5	1	3	4	4	4	4
Socialentrepi	41 - 50 years	Male	postgraduate	5	7	2	7	2	7	7	4
Socialentrepi	31 - 40 years	Female	University – Di	7	6	2	7	7	7	7	7
Walmart#Gro	21 -30 years	Female	University – Ba	6	6	2	7	7	7	7	4
NHBRC Wom	41 - 50 years	Female	University – Ho	5	6	3	3	5	6	7	6
Social Entrep	31 - 40 years	Female	Higher educa	7	7	3	5	3	7	7	6
Walmart#Gro	31 - 40 years	Female	Higher educa	1	1	3	1	1	1	1	3
UNDP	31 - 40 years	Female	University – Ho	6	6	4	6	7	6	7	6
United Natio	31 - 40 years	Male	University – Ba	7	7	7	7	7	7	7	7
UNDP EDUCA	21 -30 years	Male	Higher educa	6	6	2	6	1	7	6	5
UNDP entrepi	31 - 40 years	Female	University – Ho	6	6	2	7	7	7	7	7
Walmart#Gro	21 -30 years	Male	Higher educa	6	7	1	7	5	7	6	7
Walmart#Gro	41 - 50 years	Female	Higher educa	2	2	3	2	3	2	2	2

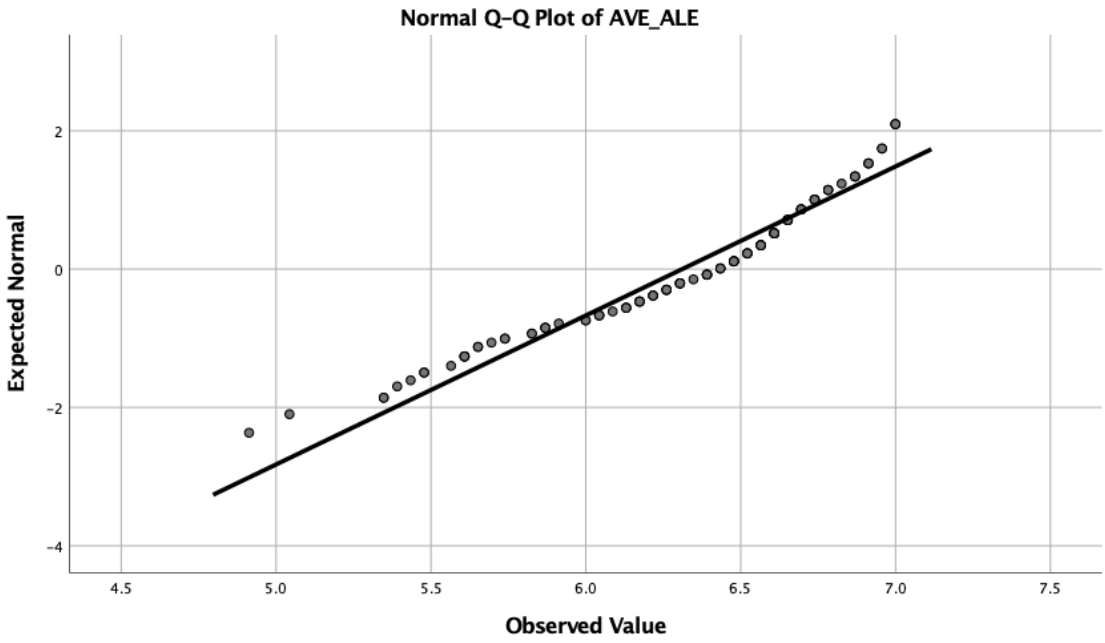
Appendix 4 – Little's MCAR test results

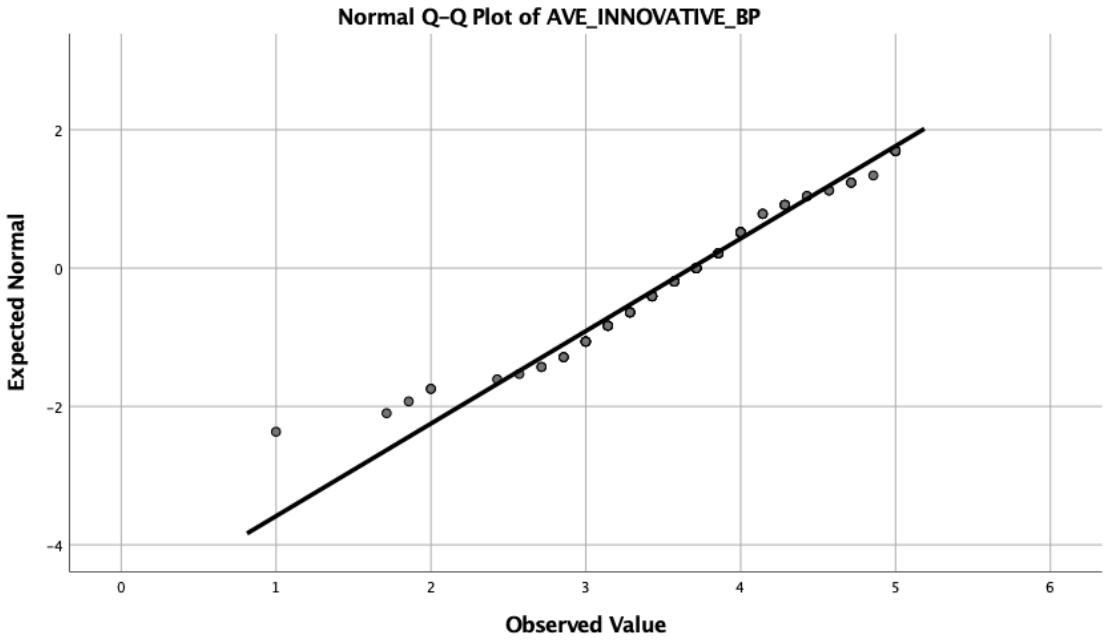
Univariate Statistics

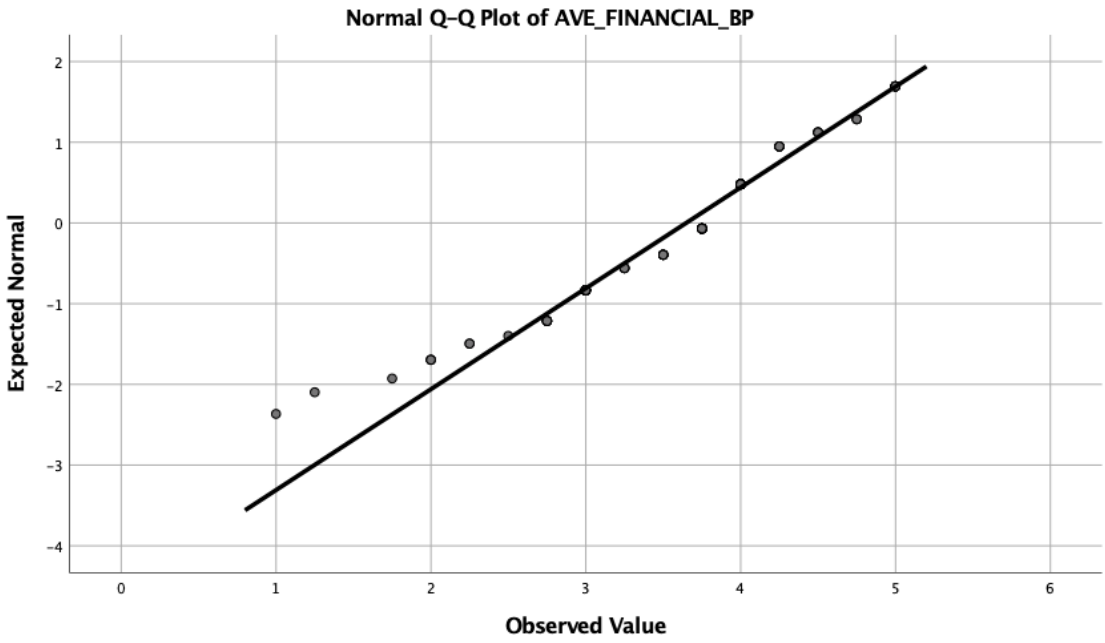
	N	Mean	Std. Deviation	Missing Count	Missing Percent	No. of Extremes[a] Low	No. of Extremes[a] High
EL1s	123	5.82	1.504	0	.0	14	0
EL2s	123	5.86	1.517	0	.0	15	0
EL3s	123	2.65	1.604	0	.0	0	15
EL4s	123	4.98	2.046	0	.0	0	0
EL5s	123	4.96	2.010	0	.0	0	0
EL6s	123	6.07	1.546	0	.0	15	0
EL7s	123	6.12	1.507	0	.0	16	0
EL8s	123	4.85	2.000	0	.0	0	0
EL9s	123	1.79	1.295	0	.0	0	12
EL10s	123	5.73	1.694	0	.0	9	0
EL11s	123	5.94	1.575	0	.0	17	0
EL12s	123	5.80	1.649	0	.0	18	0
EL13s	123	6.19	1.517	0	.0	13	0
EL14s	123	6.03	1.583	0	.0	14	0
EL15s	123	1.65	1.306	0	.0	0	9
EL16s	123	6.02	1.591	0	.0	15	0
EL17s	123	5.97	1.563	0	.0	13	0
EL18s	123	6.14	1.585	0	.0	14	0
EL19s	123	5.98	1.609	0	.0	15	0
EL20s	123	6.07	1.628	0	.0	14	0
EL21s	123	6.07	1.519	0	.0	13	0
EL22s	123	6.14	1.543	0	.0	13	0
EL23s	123	1.97	1.778	0	.0	0	17
EL24s	123	6.07	1.719	0	.0	17	0
EL25s	123	6.14	1.626	0	.0	15	0
EL26s	123	6.08	1.653	0	.0	16	0
EL27s	123	1.59	1.267	0	.0	0	9
EL28s	123	6.24	1.584	0	.0	13	0
BP1s	123	3.67	1.030	0	.0	6	0
BP2s	123	3.59	1.008	0	.0	6	0
BP3s	123	3.72	.978	0	.0	4	0
BP4s	123	3.74	.886	0	.0	2	0
BP5s	123	3.74	.931	0	.0	2	0
BP6s	123	3.11	1.070	0	.0	11	0
BP7s	123	3.76	.970	0	.0	3	0
BP8s	123	3.63	.872	0	.0	1	0
BP9s	123	3.54	.861	0	.0	2	0
BP10s	123	3.63	.953	0	.0	5	0
BP11s	123	3.53	1.003	0	.0	4	0
EC1s	123	4.44	1.160	0	.0	7	0
EC2s	123	4.10	1.264	0	.0	0	0
EC3s	123	4.42	1.174	0	.0	0	0
EC4s	123	4.06	1.314	0	.0	0	0
EC5s	123	4.35	1.235	0	.0	0	0
EC6s	123	4.56	1.072	0	.0	2	0
EC7s	123	4.85	1.079	0	.0	0	0
EC8s	123	4.35	1.201	0	.0	0	0
EC9s	123	4.15	1.322	0	.0	0	0
EC10s	123	4.40	1.323	0	.0	0	0
EC11s	123	4.72	1.340	0	.0	2	0
EC12s	123	4.79	1.168	0	.0	0	0
EC13s	123	4.61	1.135	0	.0	0	0
EC14s	123	4.21	1.575	0	.0	0	0
EC15s	123	5.17	1.107	0	.0	9	0
EC16s	123	4.43	1.235	0	.0	0	0
EC17s	123	4.52	1.217	0	.0	1	0
EC18s	123	4.86	1.148	0	.0	1	0
EC19s	123	4.93	1.129	0	.0	1	0
EC20s	123	4.36	1.202	0	.0	0	0
EC21s	123	4.59	1.137	0	.0	4	0
EC22s	123	4.91	.932	0	.0	0	0
EC23s	123	4.43	1.131	0	.0	7	0
EC24s	123	4.43	1.235	0	.0	0	0
EC25s	123	3.44	1.532	0	.0	0	0
EC26s	123	4.59	1.194	0	.0	2	0
EC27s	123	4.13	1.460	0	.0	0	0
EC28s	123	4.72	1.205	0	.0	0	0

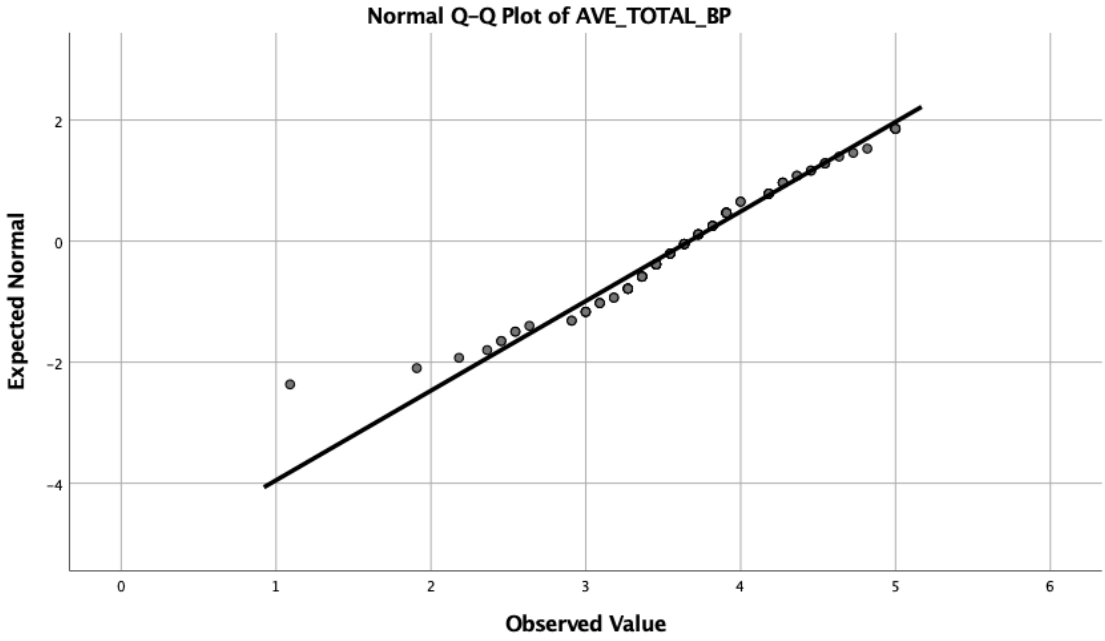
a. Number of cases outside the range (Q1 − 1.5*IQR, Q3 + 1.5*IQR).

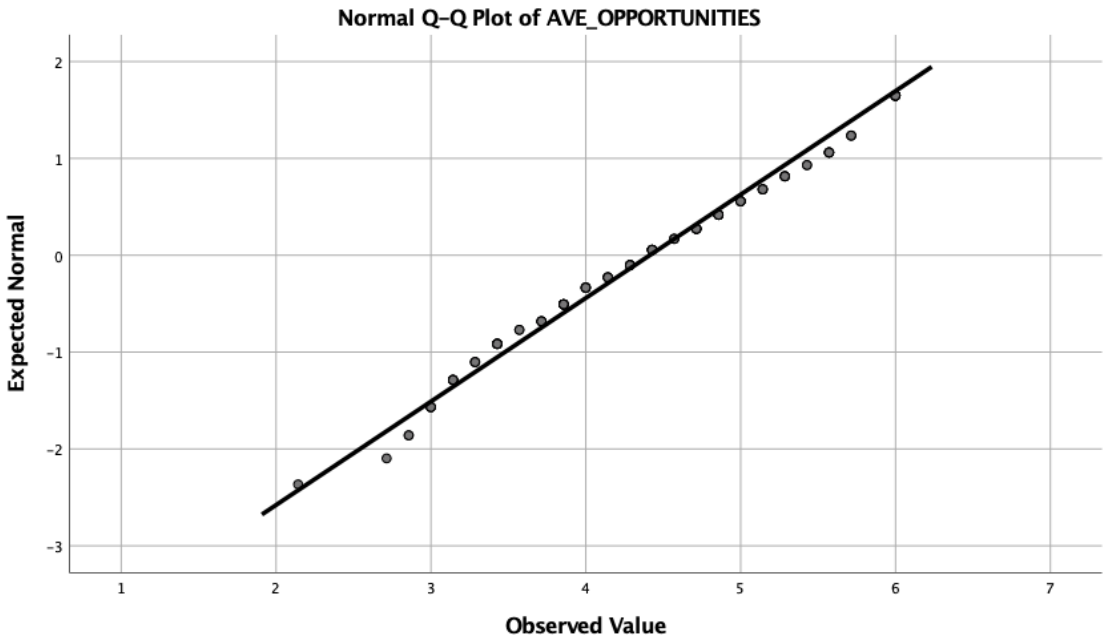
Appendix 5 - - Results of Normal Q-Q plots and Histograms

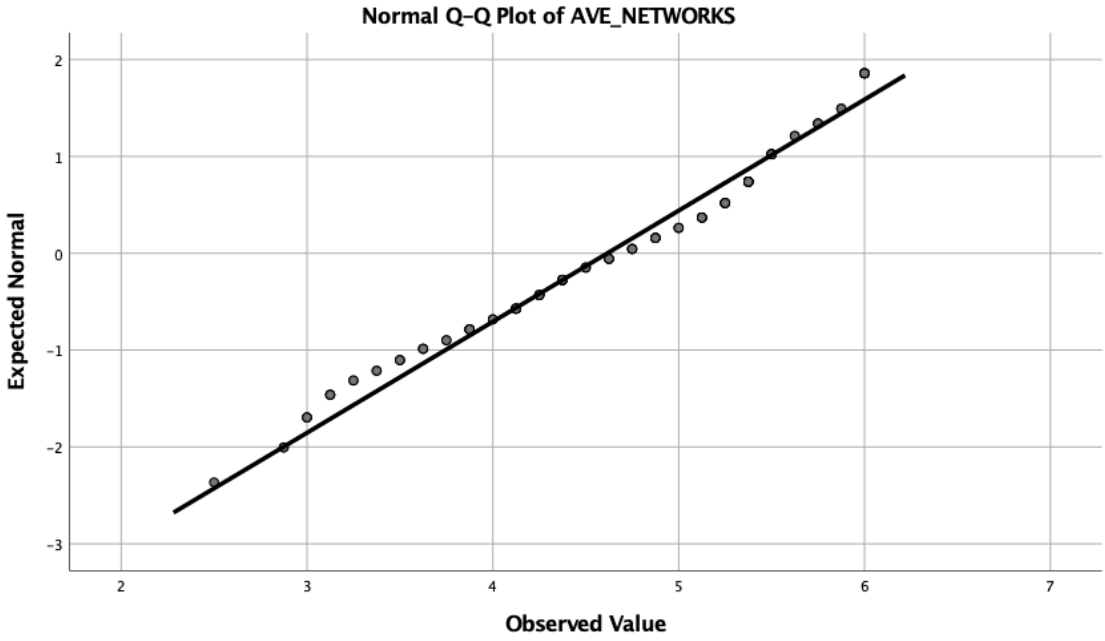


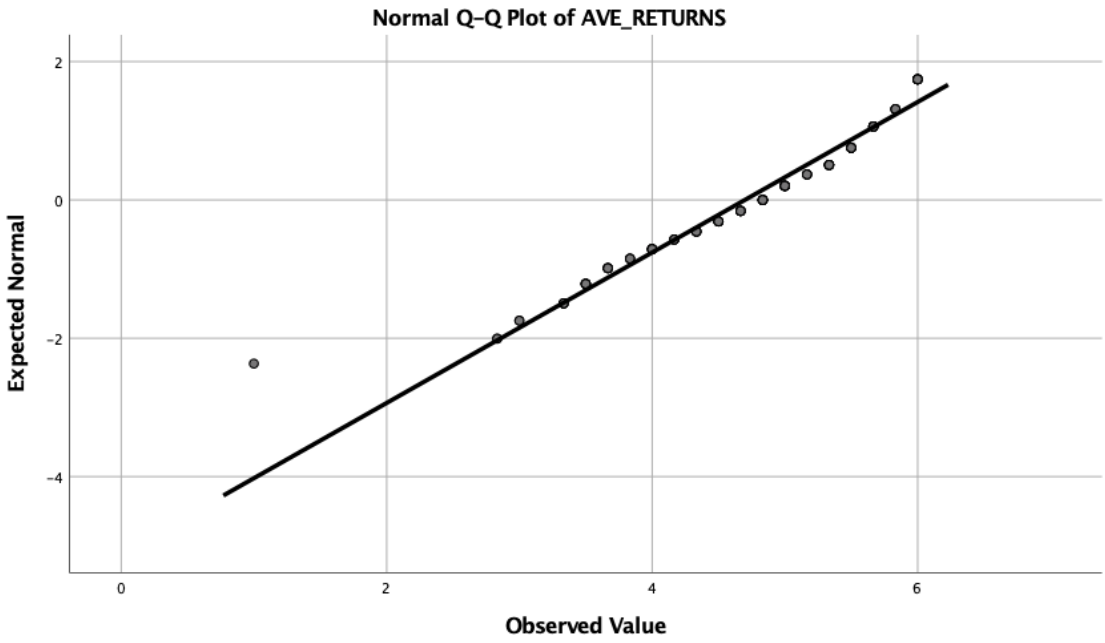


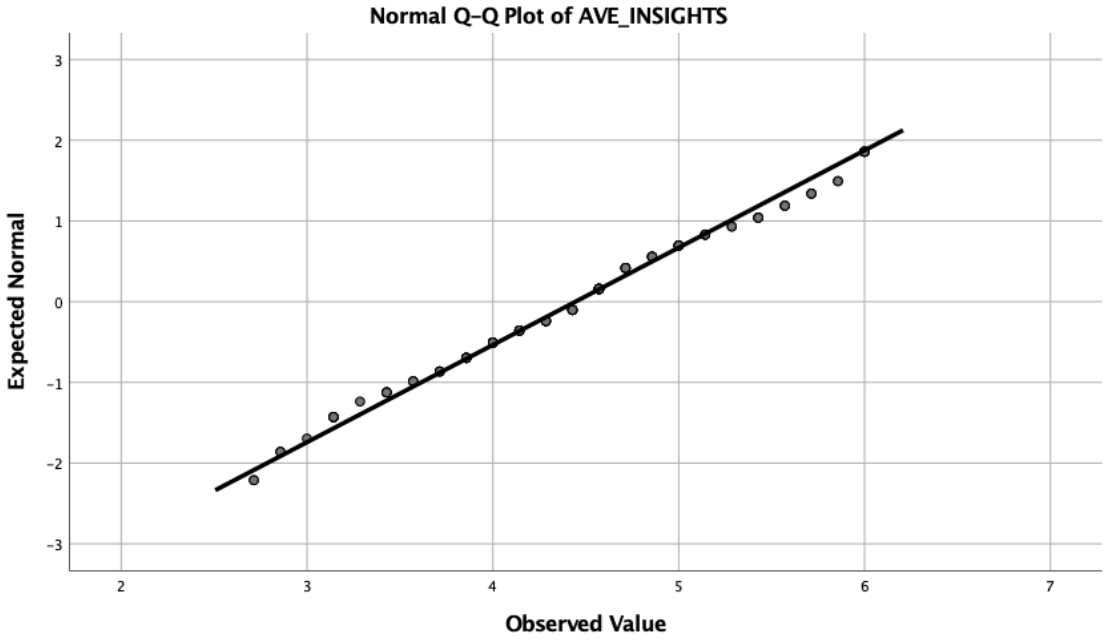

Normal Q–Q Plot of AVE_FINANCIAL_BP
Expected Normal
Observed Value
2
1
0
−1
−2
−3
−4
0
1
2
3
4
5
6

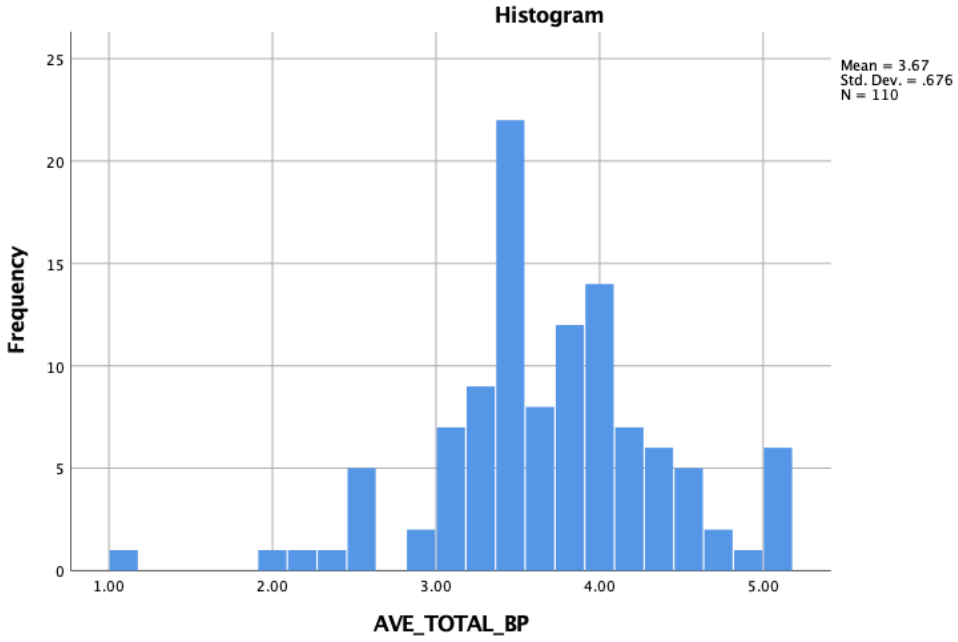

Normal Q–Q Plot of AVE_TOTAL_BP
Expected Normal
Observed Value
2
0
−2
−4
0
1
2
3
4
5
6

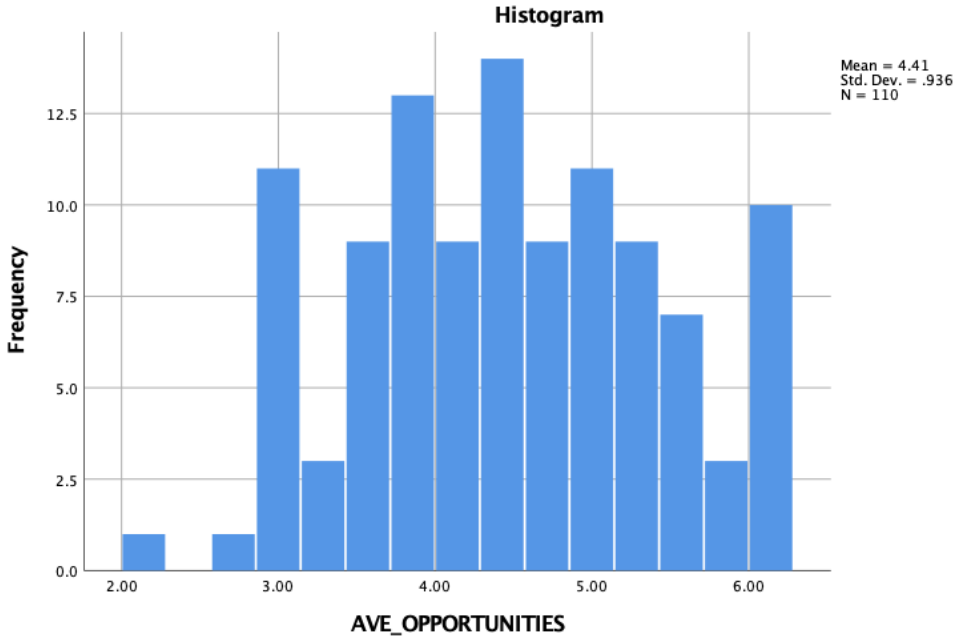

Normal Q–Q Plot of AVE_OPPORTUNITIES
Expected Normal
Observed Value
2
1
0
−1
−2
−3
1
2
3
4
5
6
7

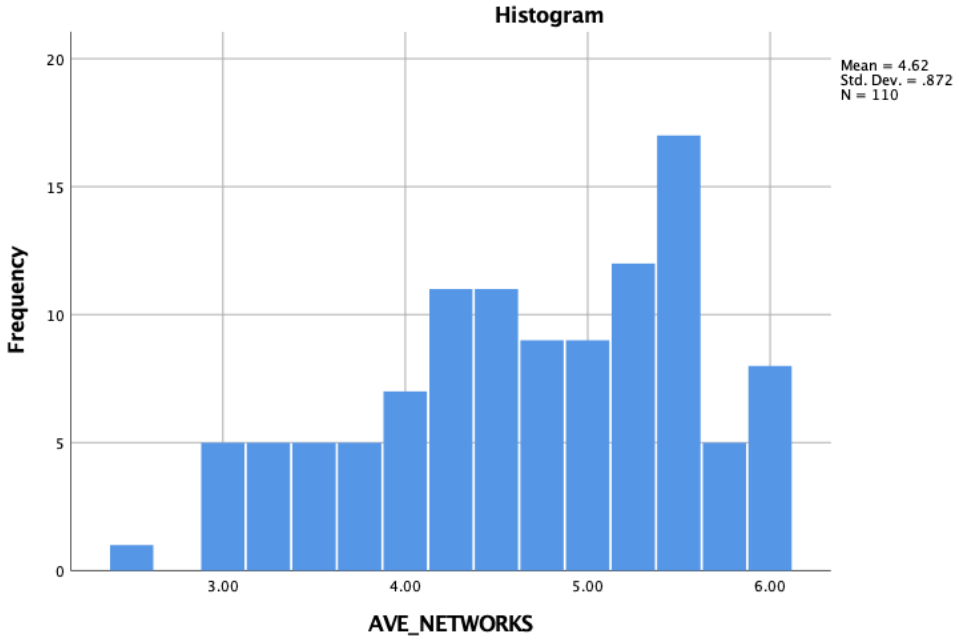

Normal Q–Q Plot of AVE_NETWORKS
Expected Normal
Observed Value
2
1
0
−1
−2
−3
2
3
4
5
6
7

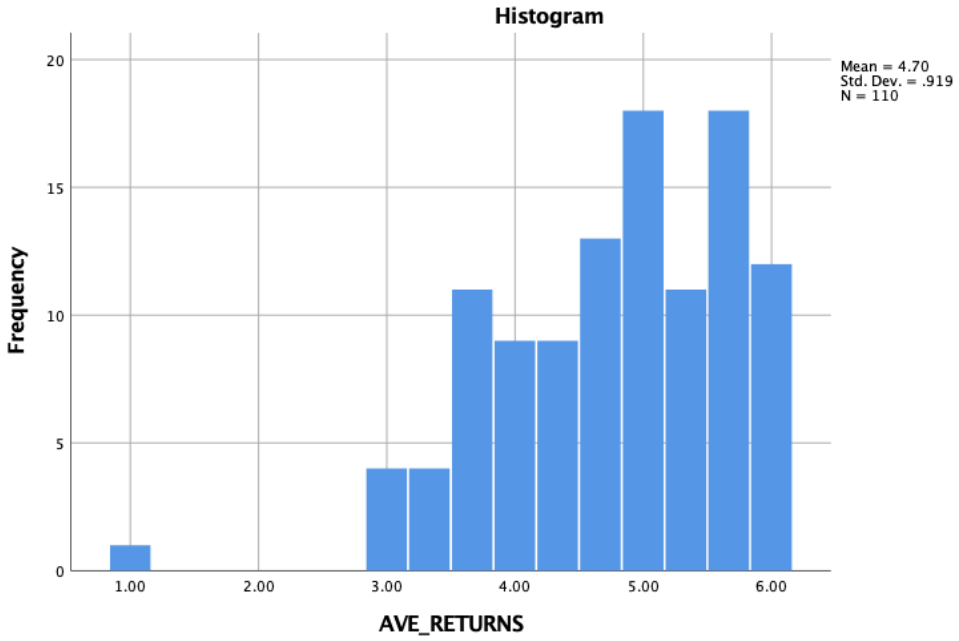

Normal Q–Q Plot of AVE_RETURNS
Expected Normal
Observed Value
2
0
−2
−4
0
2
4
6

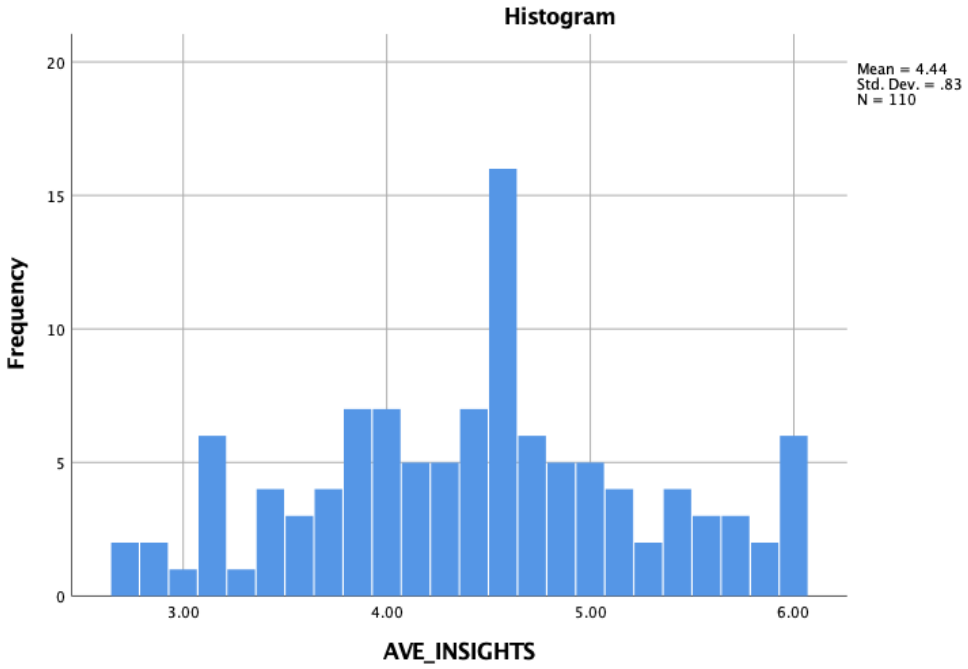

Normal Q–Q Plot of AVE_INSIGHTS
Expected Normal
Observed Value
3
2
1
0
−1
−2
−3
2
3
4
5
6
7


Histogram
Mean = 3.67
Std. Dev. = .676
N = 110
Frequency
25
20
15
10
5
0
1.00
2.00
3.00
4.00
5.00
AVE_TOTAL_BP


Histogram
Mean = 4.41
Std. Dev. = .936
N = 110
Frequency
12.5
10.0
7.5
5.0
2.5
0.0
2.00
3.00
4.00
5.00
6.00
AVE_OPPORTUNITIES


Histogram
Mean = 4.62
Std. Dev. = .872
N = 110
Frequency
20
15
10
5
0
3.00
4.00
5.00
6.00
AVE_NETWORKS


Histogram
Mean = 4.70
Std. Dev. = .919
N = 110
Frequency
20
15
10
5
0
1.00
2.00
3.00
4.00
5.00
6.00
AVE_RETURNS

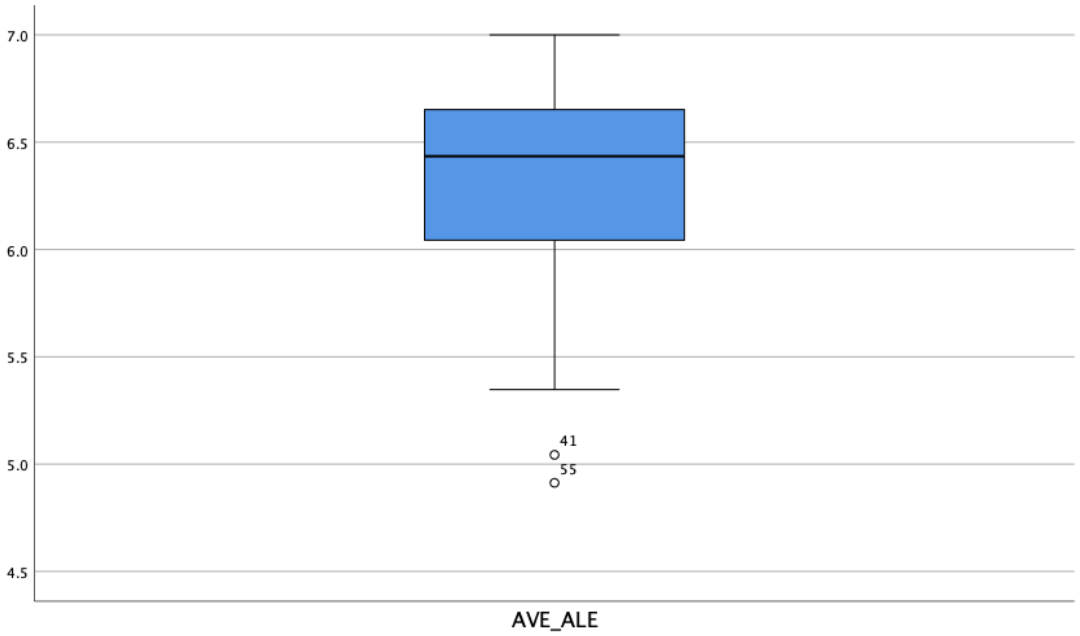

Histogram
Mean = 4.44
Std. Dev. = .83
N = 110
Frequency
20
15
10
5
0
3.00
4.00
5.00
6.00
AVE_INSIGHTS

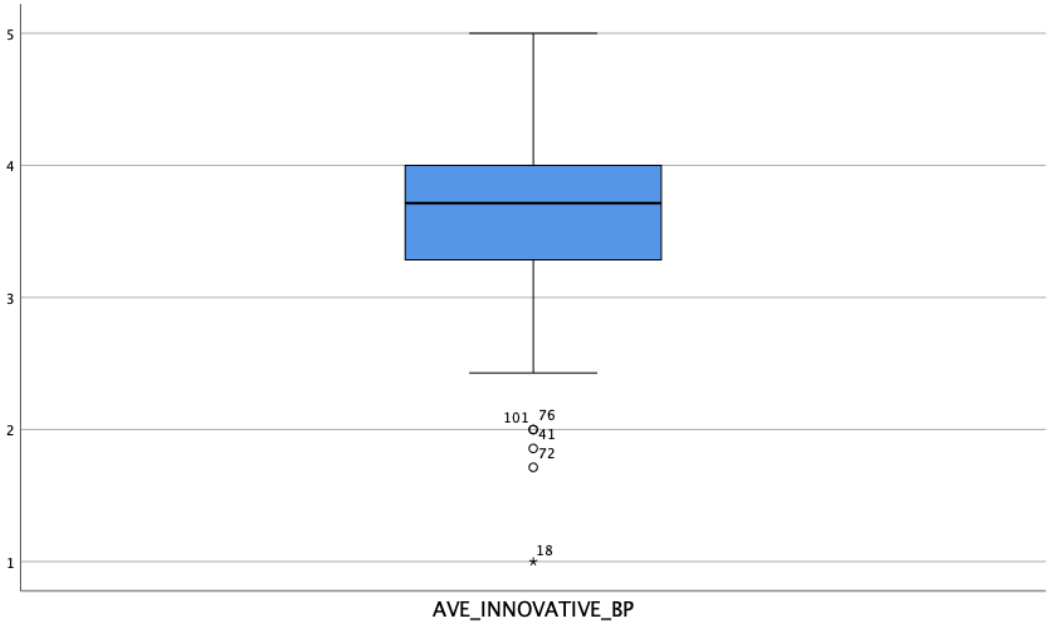
Appendix 6 – Outlier Results of Box plot test

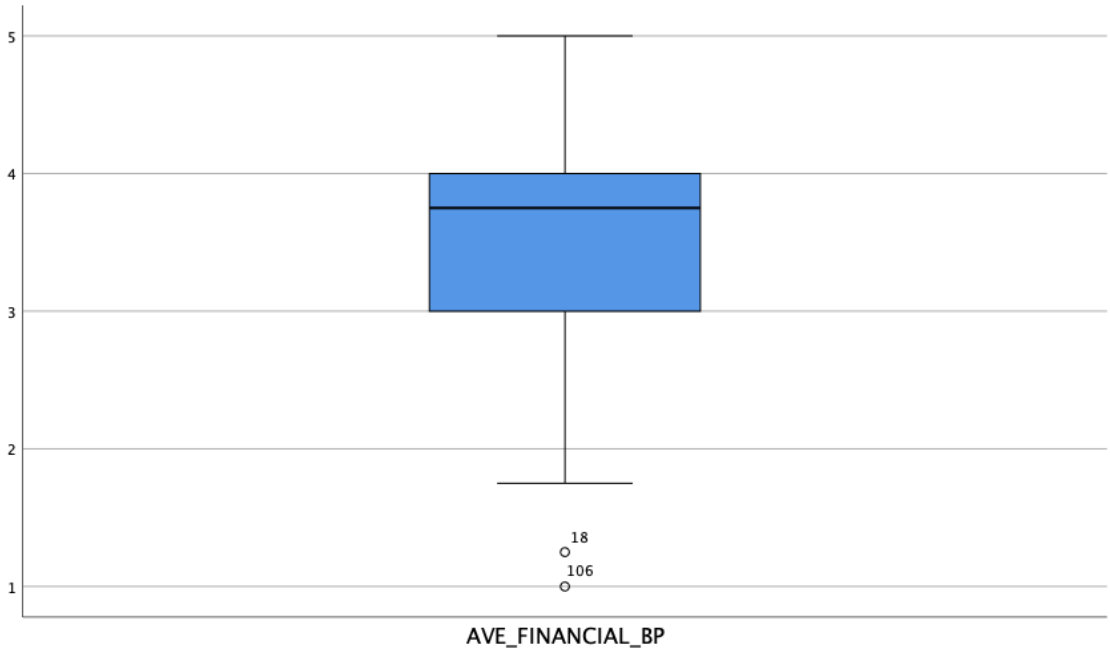
Extreme Values

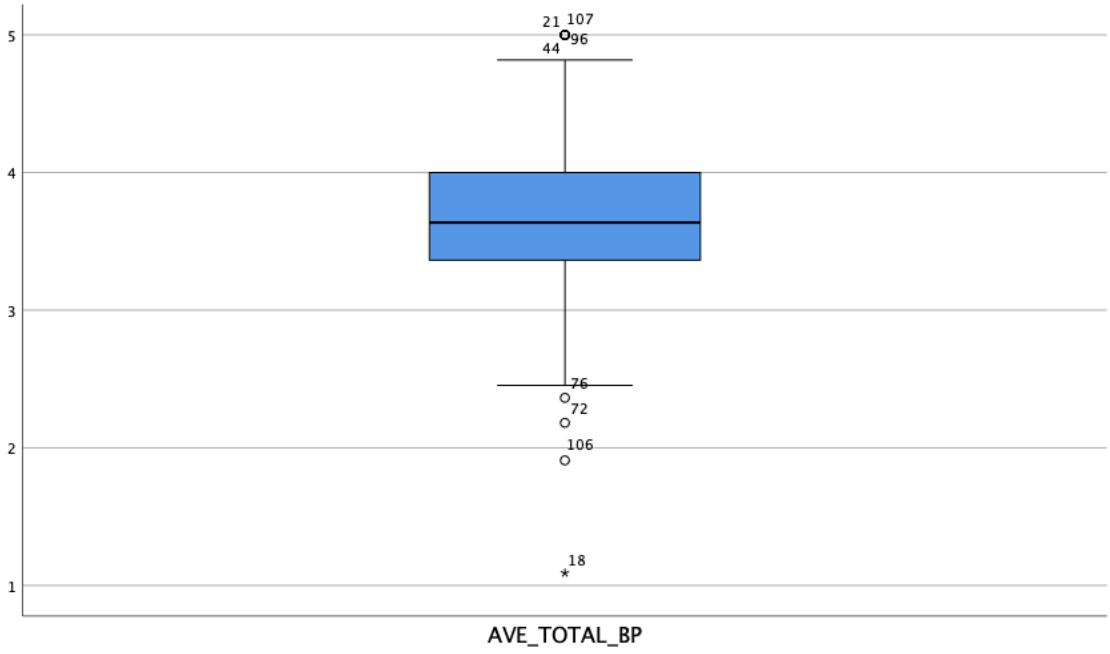
			Case Number	Value
AVE_LE	Highest	1	48	7.00
		2	53	7.00
		3	119	7.00
		4	6	6.96
		5	61	6.96
	Lowest	1	50	1.00
		2	43	1.04
		3	117	1.09
		4	92	1.09
		5	31	1.09

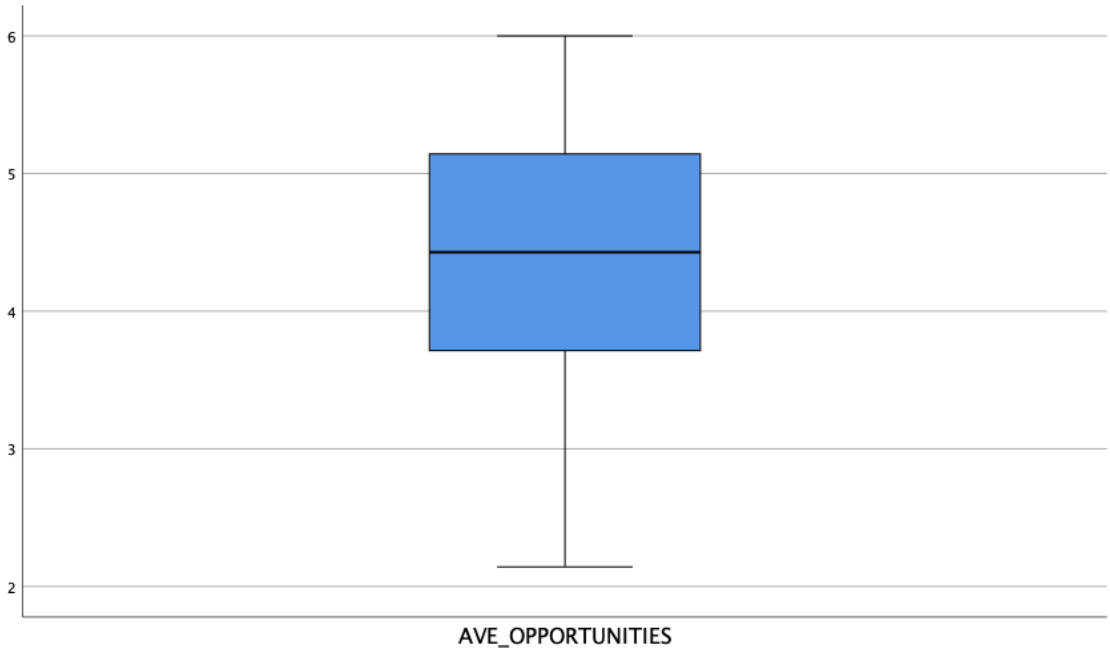
Box Plots

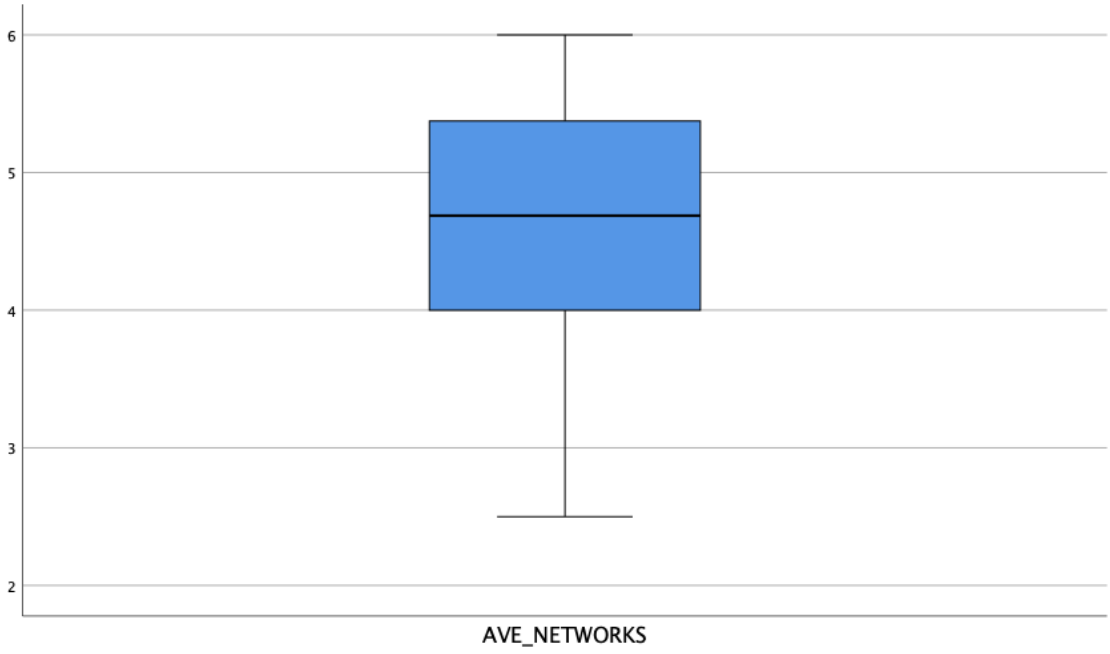

7.0
6.5
6.0
5.5
5.0
4.5
41
55
AVE_ALE

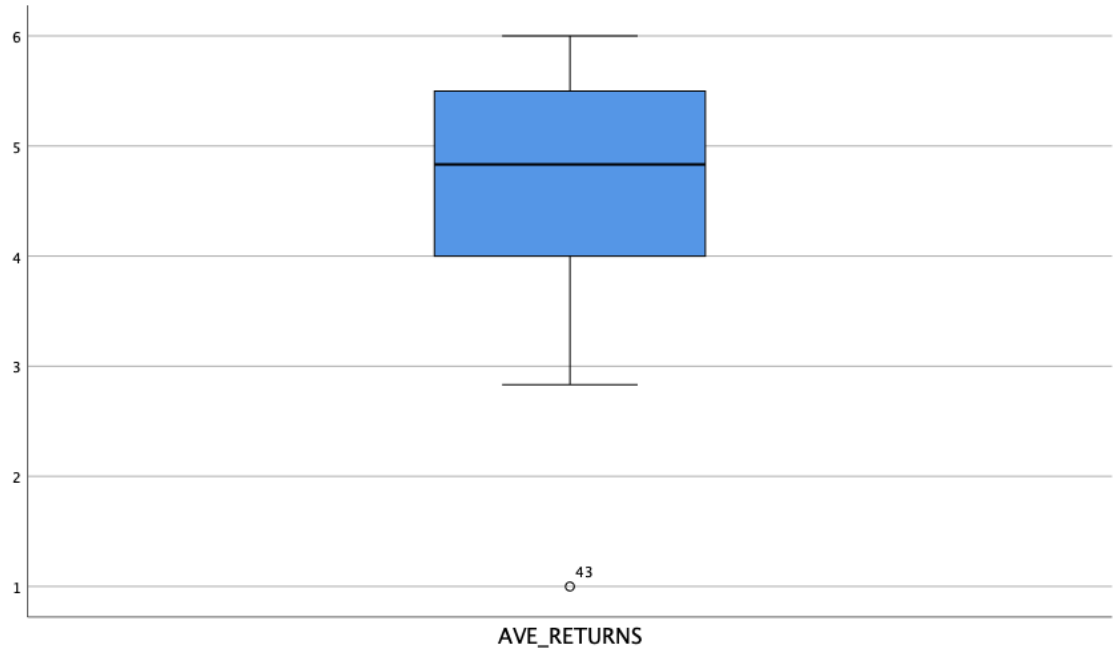

5
4
3
2
1
101
76
41
72
18
AVE_INNOVATIVE_BP

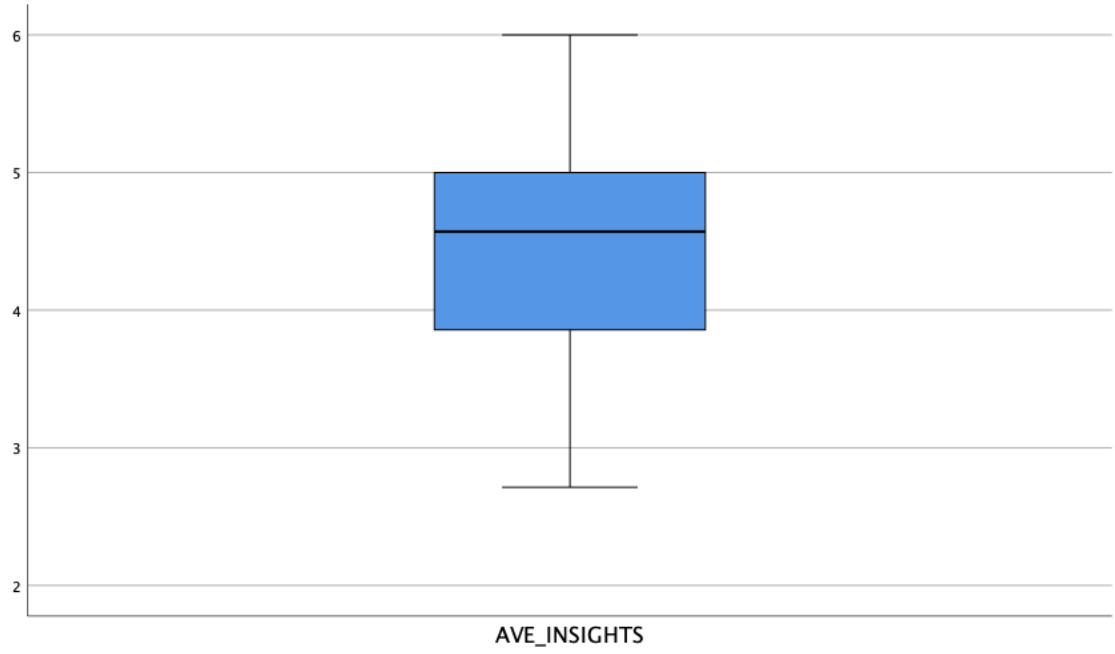

5
4
3
2
1
18
106
AVE_FINANCIAL_BP


5
4
3
2
1
21
107
96
44
76
72
106
18
AVE_TOTAL_BP


6
5
4
3
2
AVE_OPPORTUNITIES


6
5
4
3
2
AVE_NETWORKS


6
5
4
3
2
1
43
AVE_RETURNS


6
5
4
3
2
AVE_INSIGHTS

Appendix 7 – Regression results

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin–Watson
1	.542[a]	.293	.280	.57324	1.985

a. Predictors: (Constant), AVE_ALE, AVE_TOTALEC

b. Dependent Variable: AVE_TOTAL_BP

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14.602	2	7.301	22.218	.000[b]
	Residual	35.160	107	.329		
	Total	49.762	109			

a. Dependent Variable: AVE_TOTAL_BP

b. Predictors: (Constant), AVE_ALE, AVE_TOTALEC

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	-.013	.763		-.017	.987	-1.525	1.500
	AVE_TOTALEC	.440	.081	.460	5.434	.000	.279	.600
	AVE_ALE	.267	.123	.183	2.166	.033	.023	.512

a. Dependent Variable: AVE_TOTAL_BP

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin–Watson
1	.314[a]	.098	.090	.64451	
2	.542[b]	.293	.280	.57324	1.985

a. Predictors: (Constant), AVE_ALE

b. Predictors: (Constant), AVE_ALE, AVE_TOTALEC

c. Dependent Variable: AVE_TOTAL_BP

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.899	1	4.899	11.795	.001[b]
	Residual	44.862	108	.415		
	Total	49.762	109			
2	Regression	14.602	2	7.301	22.218	.000[c]
	Residual	35.160	107	.329		
	Total	49.762	109			

a. Dependent Variable: AVE_TOTAL_BP

b. Predictors: (Constant), AVE_ALE

c. Predictors: (Constant), AVE_ALE, AVE_TOTALEC

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	.786	.842		.934	.352	-.882	2.454
	AVE_ALE	.457	.133	.314	3.434	.001	.193	.720
2	(Constant)	-.013	.763		-.017	.987	-1.525	1.500
	AVE_ALE	.267	.123	.183	2.166	.033	.023	.512
	AVE_TOTALEC	.440	.081	.460	5.434	.000	.279	.600

a. Dependent Variable: AVE_TOTAL_BP

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.314[a]	.098	.090	.64451	
2	.523[b]	.274	.260	.58125	2.118

a. Predictors: (Constant), AVE_ALE

b. Predictors: (Constant), AVE_ALE, AVE_OPPORTUNITIES

c. Dependent Variable: AVE_TOTAL_BP

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.899	1	4.899	11.795	.001[b]
	Residual	44.862	108	.415		
	Total	49.762	109			
2	Regression	13.612	2	6.806	20.144	.000[c]
	Residual	36.150	107	.338		
	Total	49.762	109			

a. Dependent Variable: AVE_TOTAL_BP

b. Predictors: (Constant), AVE_ALE

c. Predictors: (Constant), AVE_ALE, AVE_OPPORTUNITIES

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	.786	.842		.934	.352	-.882	2.454
	AVE_ALE	.457	.133	.314	3.434	.001	.193	.720
2	(Constant)	.381	.763		.499	.619	-1.132	1.894
	AVE_ALE	.303	.124	.208	2.450	.016	.058	.548
	AVE_OPPORTUNITIES	.312	.061	.432	5.078	.000	.190	.433

a. Dependent Variable: AVE_TOTAL_BP

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.314[a]	.098	.090	.64451	
2	.523[b]	.274	.260	.58125	2.118

a. Predictors: (Constant), AVE_ALE

b. Predictors: (Constant), AVE_ALE, AVE_OPPORTUNITIES

c. Dependent Variable: AVE_TOTAL_BP

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.899	1	4.899	11.795	.001[b]
	Residual	44.862	108	.415		
	Total	49.762	109			
2	Regression	13.612	2	6.806	20.144	.000[c]
	Residual	36.150	107	.338		
	Total	49.762	109			

a. Dependent Variable: AVE_TOTAL_BP

b. Predictors: (Constant), AVE_ALE

c. Predictors: (Constant), AVE_ALE, AVE_OPPORTUNITIES

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	.786	.842		.934	.352	-.882	2.454
	AVE_ALE	.457	.133	.314	3.434	.001	.193	.720
2	(Constant)	.381	.763		.499	.619	-1.132	1.894
	AVE_ALE	.303	.124	.208	2.450	.016	.058	.548
	AVE_OPPORTUNITIES	.312	.061	.432	5.078	.000	.190	.433

a. Dependent Variable: AVE_TOTAL_BP

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.326[a]	.106	.098	.71009	
2	.535[b]	.286	.273	.63764	2.152

a. Predictors: (Constant), AVE_ALE

b. Predictors: (Constant), AVE_ALE, AVE_OPPORTUNITIES

c. Dependent Variable: AVE_INNOVATIVE_BP

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.479	1	6.479	12.849	.001[b]
	Residual	54.457	108	.504		
	Total	60.936	109			
2	Regression	17.431	2	8.715	21.435	.000[c]
	Residual	43.505	107	.407		
	Total	60.936	109			

a. Dependent Variable: AVE_INNOVATIVE_BP

b. Predictors: (Constant), AVE_ALE

c. Predictors: (Constant), AVE_ALE, AVE_OPPORTUNITIES

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	.366	.927		.395	.694	-1.472	2.204
	AVE_ALE	.525	.147	.326	3.585	.001	.235	.816
2	(Constant)	-.089	.837		-.106	.916	-1.748	1.571
	AVE_ALE	.353	.136	.219	2.601	.011	.084	.622
	AVE_OPPORTUNITIES	.349	.067	.437	5.190	.000	.216	.483

a. Dependent Variable: AVE_INNOVATIVE_BP

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin–Watson
1	.195[a]	.038	.029	.78835	
2	.340[b]	.116	.099	.75944	1.993

a. Predictors: (Constant), AVE_ALE

b. Predictors: (Constant), AVE_ALE, AVE_OPPORTUNITIES

c. Dependent Variable: AVE_FINANCIAL_BP

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.666	1	2.666	4.289	.041[b]
	Residual	67.121	108	.621		
	Total	69.787	109			
2	Regression	8.074	2	4.037	7.000	.001[c]
	Residual	61.713	107	.577		
	Total	69.787	109			

a. Dependent Variable: AVE_FINANCIAL_BP

b. Predictors: (Constant), AVE_ALE

c. Predictors: (Constant), AVE_ALE, AVE_OPPORTUNITIES

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	1.522	1.029		1.478	.142	-.519	3.562
	AVE_ALE	.337	.163	.195	2.071	.041	.014	.659
2	(Constant)	1.202	.997		1.206	.231	-.774	3.179
	AVE_ALE	.216	.162	.125	1.335	.185	-.105	.536
	AVE_OPPORTUNITIES	.246	.080	.287	3.062	.003	.087	.404

a. Dependent Variable: AVE_FINANCIAL_BP

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin–Watson
1	.314[a]	.098	.090	.64451	
2	.389[b]	.151	.136	.62819	1.883

a. Predictors: (Constant), AVE_ALE

b. Predictors: (Constant), AVE_ALE, AVE_NETWORKS

c. Dependent Variable: AVE_TOTAL_BP

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.899	1	4.899	11.795	.001[b]
	Residual	44.862	108	.415		
	Total	49.762	109			
2	Regression	7.537	2	3.769	9.550	.000[c]
	Residual	42.224	107	.395		
	Total	49.762	109			

a. Dependent Variable: AVE_TOTAL_BP

b. Predictors: (Constant), AVE_ALE

c. Predictors: (Constant), AVE_ALE, AVE_NETWORKS

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	.786	.842		.934	.352	-.882	2.454
	AVE_ALE	.457	.133	.314	3.434	.001	.193	.720
2	(Constant)	.457	.830		.551	.583	-1.189	2.102
	AVE_ALE	.374	.133	.257	2.806	.006	.110	.639
	AVE_NETWORKS	.184	.071	.237	2.585	.011	.043	.325

a. Dependent Variable: AVE_TOTAL_BP

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.326[a]	.106	.098	.71009	
2	.384[b]	.147	.132	.69678	1.853

a. Predictors: (Constant), AVE_ALE

b. Predictors: (Constant), AVE_ALE, AVE_NETWORKS

c. Dependent Variable: AVE_INNOVATIVE_BP

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.479	1	6.479	12.849	.001[b]
	Residual	54.457	108	.504		
	Total	60.936	109			
2	Regression	8.987	2	4.493	9.255	.000[c]
	Residual	51.949	107	.486		
	Total	60.936	109			

a. Dependent Variable: AVE_INNOVATIVE_BP

b. Predictors: (Constant), AVE_ALE

c. Predictors: (Constant), AVE_ALE, AVE_NETWORKS

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	.366	.927		.395	.694	-1.472	2.204
	AVE_ALE	.525	.147	.326	3.585	.001	.235	.816
2	(Constant)	.045	.921		.049	.961	-1.780	1.870
	AVE_ALE	.445	.148	.276	3.006	.003	.152	.738
	AVE_NETWORKS	.179	.079	.209	2.273	.025	.023	.335

a. Dependent Variable: AVE_INNOVATIVE_BP

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.314[a]	.098	.090	.64451	
2	.389[b]	.151	.136	.62819	1.883

a. Predictors: (Constant), AVE_ALE

b. Predictors: (Constant), AVE_ALE, AVE_NETWORKS

c. Dependent Variable: AVE_TOTAL_BP

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.899	1	4.899	11.795	.001[b]
	Residual	44.862	108	.415		
	Total	49.762	109			
2	Regression	7.537	2	3.769	9.550	.000[c]
	Residual	42.224	107	.395		
	Total	49.762	109			

a. Dependent Variable: AVE_TOTAL_BP

b. Predictors: (Constant), AVE_ALE

c. Predictors: (Constant), AVE_ALE, AVE_NETWORKS

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.786	.842		.934	.352	-.882	2.454
	AVE_ALE	.457	.133	.314	3.434	.001	.193	.720
2	(Constant)	.457	.830		.551	.583	-1.189	2.102
	AVE_ALE	.374	.133	.257	2.806	.006	.110	.639
	AVE_NETWORKS	.184	.071	.237	2.585	.011	.043	.325

a. Dependent Variable: AVE_TOTAL_BP

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.326[a]	.106	.098	.71009	
2	.384[b]	.147	.132	.69678	1.853

a. Predictors: (Constant), AVE_ALE

b. Predictors: (Constant), AVE_ALE, AVE_NETWORKS

c. Dependent Variable: AVE_INNOVATIVE_BP

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.899	1	4.899	11.795	.001[b]
	Residual	44.862	108	.415		
	Total	49.762	109			
2	Regression	7.537	2	3.769	9.550	.000[c]
	Residual	42.224	107	.395		
	Total	49.762	109			

a. Dependent Variable: AVE_TOTAL_BP

b. Predictors: (Constant), AVE_ALE

c. Predictors: (Constant), AVE_ALE, AVE_NETWORKS

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.786	.842		.934	.352	-.882	2.454
	AVE_ALE	.457	.133	.314	3.434	.001	.193	.720
2	(Constant)	.457	.830		.551	.583	-1.189	2.102
	AVE_ALE	.374	.133	.257	2.806	.006	.110	.639
	AVE_NETWORKS	.184	.071	.237	2.585	.011	.043	.325

a. Dependent Variable: AVE_TOTAL_BP

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin–Watson
1	.326[a]	.106	.098	.71009	
2	.422[b]	.178	.163	.68414	1.907

a. Predictors: (Constant), AVE_ALE

b. Predictors: (Constant), AVE_ALE, AVE_RETURNS

c. Dependent Variable: AVE_INNOVATIVE_BP

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.479	1	6.479	12.849	.001[b]
	Residual	54.457	108	.504		
	Total	60.936	109			
2	Regression	10.855	2	5.428	11.596	.000[c]
	Residual	50.081	107	.468		
	Total	60.936	109			

a. Dependent Variable: AVE_INNOVATIVE_BP

b. Predictors: (Constant), AVE_ALE

c. Predictors: (Constant), AVE_ALE, AVE_RETURNS

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	.366	.927		.395	.694	−1.472	2.204
	AVE_ALE	.525	.147	.326	3.585	.001	.235	.816
2	(Constant)	−.042	.903		−.046	.963	−1.832	1.748
	AVE_ALE	.423	.145	.263	2.917	.004	.136	.711
	AVE_RETURNS	.224	.073	.275	3.058	.003	.079	.369

a. Dependent Variable: AVE_INNOVATIVE_BP

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin–Watson
1	.195[a]	.038	.029	.78835	
2	.439[b]	.193	.178	.72546	1.994

a. Predictors: (Constant), AVE_ALE

b. Predictors: (Constant), AVE_ALE, AVE_RETURNS

c. Dependent Variable: AVE_FINANCIAL_BP

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.666	1	2.666	4.289	.041[b]
	Residual	67.121	108	.621		
	Total	69.787	109			
2	Regression	13.473	2	6.737	12.800	.000[c]
	Residual	56.314	107	.526		
	Total	69.787	109			

a. Dependent Variable: AVE_FINANCIAL_BP

b. Predictors: (Constant), AVE_ALE

c. Predictors: (Constant), AVE_ALE, AVE_RETURNS

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	1.522	1.029		1.478	.142	-.519	3.562
	AVE_ALE	.337	.163	.195	2.071	.041	.014	.659
2	(Constant)	.881	.958		.919	.360	-1.018	2.779
	AVE_ALE	.176	.154	.102	1.147	.254	-.129	.481
	AVE_RETURNS	.352	.078	.404	4.532	.000	.198	.506

a. Dependent Variable: AVE_FINANCIAL_BP

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.314[a]	.098	.090	.64451	
2	.504[b]	.254	.240	.58900	1.736

a. Predictors: (Constant), AVE_ALE

b. Predictors: (Constant), AVE_ALE, AVE_INSIGHTS

c. Dependent Variable: AVE_TOTAL_BP

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.899	1	4.899	11.795	.001[b]
	Residual	44.862	108	.415		
	Total	49.762	109			
2	Regression	12.641	2	6.321	18.219	.000[c]
	Residual	37.120	107	.347		
	Total	49.762	109			

a. Dependent Variable: AVE_TOTAL_BP

b. Predictors: (Constant), AVE_ALE

c. Predictors: (Constant), AVE_ALE, AVE_INSIGHTS

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	.786	.842		.934	.352	-.882	2.454
	AVE_ALE	.457	.133	.314	3.434	.001	.193	.720
2	(Constant)	.015	.786		.019	.985	-1.544	1.574
	AVE_ALE	.349	.124	.240	2.820	.006	.104	.594
	AVE_INSIGHTS	.327	.069	.401	4.724	.000	.190	.464

a. Dependent Variable: AVE_TOTAL_BP

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.326[a]	.106	.098	.71009	
2	.500[b]	.250	.235	.65376	1.771

a. Predictors: (Constant), AVE_ALE

b. Predictors: (Constant), AVE_ALE, AVE_INSIGHTS

c. Dependent Variable: AVE_INNOVATIVE_BP

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.479	1	6.479	12.849	.001[b]
	Residual	54.457	108	.504		
	Total	60.936	109			
2	Regression	15.204	2	7.602	17.787	.000[c]
	Residual	45.732	107	.427		
	Total	60.936	109			

a. Dependent Variable: AVE_INNOVATIVE_BP

b. Predictors: (Constant), AVE_ALE

c. Predictors: (Constant), AVE_ALE, AVE_INSIGHTS

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	.366	.927		.395	.694	-1.472	2.204
	AVE_ALE	.525	.147	.326	3.585	.001	.235	.816
2	(Constant)	-.453	.873		-.519	.605	-2.183	1.277
	AVE_ALE	.411	.137	.255	2.991	.003	.138	.683
	AVE_INSIGHTS	.347	.077	.385	4.518	.000	.195	.499

a. Dependent Variable: AVE_INNOVATIVE_BP

Model Summary[c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.195[a]	.038	.029	.78835	
2	.356[b]	.127	.110	.75479	1.834

a. Predictors: (Constant), AVE_ALE

b. Predictors: (Constant), AVE_ALE, AVE_INSIGHTS

c. Dependent Variable: AVE_FINANCIAL_BP

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.666	1	2.666	4.289	.041[b]
	Residual	67.121	108	.621		
	Total	69.787	109			
2	Regression	8.828	2	4.414	7.748	.001[c]
	Residual	60.959	107	.570		
	Total	69.787	109			

a. Dependent Variable: AVE_FINANCIAL_BP

b. Predictors: (Constant), AVE_ALE

c. Predictors: (Constant), AVE_ALE, AVE_INSIGHTS

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	1.522	1.029		1.478	.142	-.519	3.562
	AVE_ALE	.337	.163	.195	2.071	.041	.014	.659
2	(Constant)	.834	1.008		.827	.410	-1.164	2.831
	AVE_ALE	.241	.158	.140	1.518	.132	-.074	.555
	AVE_INSIGHTS	.292	.089	.302	3.289	.001	.116	.467

a. Dependent Variable: AVE_FINANCIAL_BP