The role of self-efficacy, perceived social support and the risk perception on entrepreneurial intent on nascent entrepreneurs.

Tracey Lee Mocke

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ABSTRACT

Entrepreneurship is important for new business creation and is a means to generating employment and increase the dynamism of any economy. This study was aimed at understanding how to unlock entrepreneurial capabilities to meet South Africa's growth and employment goals. This is particularly important in a country like South Africa, which has a high unemployment rate and low GDP growth rate. The primary goal of the study is to conceptualise a structural model that explains the psychological mechanism that underlies entrepreneurial intent. To this end, Azjen's (1991) theory of planned behaviour was used as foundation for the conceptual model. In addition, the role of perceived social support and general self-efficacy was incorporated into the model. The primary objective of the study was empirically tested by means of an *ex post facto* correlational research design. The target population was nascent entrepreneurs in the Western Cape who had the intention to start their own business. A sample of 85 individuals participated in this study. Results from this study indicated that attitude towards behaviour is a significant predictor of entrepreneurial intent, while perceived behavioural control is a significant predictor of attitude towards behaviour. However, no statistical support was found for the hypothesis that attitude towards behaviour mediates the relationship between perceived social support and entrepreneurial intent. In addition, no support was found for the hypothesis that general self-efficacy moderates the relationship between financial risk and perceived behavioural control.

ACRONYMS AND ABBREVIATIONS

CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
DOSPERT	Domain-specific Risk-taking (Scale)
DSBA	Department of Small Business Administration
EEM	Enterprise Event Model
EPC	Expected Parameter Change
GEM	Global Entrepreneurship Monitor
GDP	Gross Domestic Product
GSE	General Self-efficacy
ML	Maximum Likelihood
MSPSS	Multidimensional Scale of Perceived Social Support
NDP	National Development Plan
NSEMM	non-linear structural equation mixture model
OECD	Organisation for Economic Co-operation and Development
PSS	Perceived Social Support
QLFS	Quarterly Labour Force Survey
RML	Robust Maximum Likelihood
RMSEA	Standardised Root Mean Square Error of Approximation
SBI	Small Business Institute
SEDA	Small Enterprise Development Agency
SEM	Structural Equation Modelling
SMEA	Small and Medium Enterprise Administration
SMME	Small, Medium, and Micro-enterprises
SRMR	Standardised Root Mean-Squared
SSPS	Statistical Package for Social Sciences
StatsSA	Statistics South Africa
TLI	Tucker-Lewis index
USA	United States of America

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I, Tracey Lee Mocke, declare that this thesis is entirely my own work. I know that plagiarism is a serious offence. Plagiarism is using another person's work, words, and ideas as his/her own without the correct acknowledgement and reference.

This mini thesis is submitted in partial fulfilment for the Master's degree of Bachelor of Commerce in Industrial Psychology at the University of the Western Cape. It has not been submitted before for any other degree or examination in any other university.

Signed by: 09 November 2023

Tracey Lee Mocke

TO NOTE

- This mini thesis was prepared utilising APA 7th edition referencing guidelines.
- The Department of Industrial Psychology does not require APA style formatting of the headings, paragraphs, or tables. Students are encouraged to choose a style of their choice and to use that consistently.
- This thesis constitutes 50% of the structured Master's degree in Industrial Psychology. Therefore, the mini thesis is only one requirement of the coursework Master's degree.
- According to the University of the Western Cape thesis guide, a mini-thesis is normally between 7 000 to 20 000 words in length, and is thus limited in scope.

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CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION AND BACKGROUND TO THE STUDY

In 2018, South Africa was benefiting from political stability, and the economic conditions of the country had shown improvement. The rate of inflation was low, and the rand had strengthened. Investors displayed increased confidence, and there was a wave of optimism within and around South Africa (World Bank, 2018). However, in 2023, post-COVID-19, the country's unemployment rate was recorded at 32.9%. According to the Quarterly Labour Force Survey (QLFS) of Statistics South Africa (Stats SA), this is amongst the highest the world, showing an increase of 5.3% compared to the period 2016 to 2017, and a 0.2% increase from the fourth quarter of 2022 (Stats SA, 2023).

Time-related underemployment also saw an increase. Time-related underemployment refers to individuals who work less than 35 hours per week and are available to work extra hours. Time-related underemployment is important in analysing the conditions of the labour market, as it is an indication of the ability of the country to provide full-time employment to those who require it, as noted at the 19th International Conference of Labour Statisticians (2013).

According to Stats SA (2023), youth unemployment showed a 1.1% increase in the first quarter of 2023, bringing the rate to 46.5%. Thus, the total number of unemployed youths increased to 4.9 million. Youths are classified as individuals aged 15 to 34 years. Pre-COVID-19, the youth unemployment rate was 38.2%, which amounted to approximately 3.3 million individuals who were either not employed or not participating in any form of education or training programme (Stats SA, 2018).

South Africa is classified as having a dual economy, and as one of the most unequal countries in the world (World Bank, 2023). According to the World Bank (2018), one in four South Africans is of middle or elite class. This means that three in four South Africans are either poor or face the danger of falling into poverty. Almost half of South Africa's population lives in poverty. The OECD (2018) reported that wealth inequality far outweighs economic division (specifically referring to labour markets) and income equality. It is estimated that the top 10% of the country's inhabitants hold 71% of its

wealth. The bottom half, which accounts for 60% of the population, holds a mere 7% (World Bank, 2023).

Wage inequality is very high in South Africa. Part of the South African population does enjoy wage equivalence, but the lower end of wage earners can be compared to those in some of the poorest economies in the world. The proportion of employees who have high-end work is small compared to the large number of employees who have low-paying work. Workers who are employed in high-end jobs earn five times more than the average low-skill employee, while the latter make up a fifth of the working population (World Bank, 2018).

In other low-income countries such as Somalia, Rwanda, North Korea and Zambia to name a few, entrepreneurs who operate small, medium, and micro-enterprises (SMMEs) are responsible for 70% of employment. However, in South Africa, their contribution is only 56%. Typically, SMMEs in middle-income countries contribute 95% of employment. Thus, compared to other emerging economies, entrepreneurship activity in South Africa is low. Greater participation of SMMEs is critical for growth and employment in South Africa (OECD, 2017).

SMMEs are made up of a vast range of businesses, including formally registered firms, informal and non-VAT-registered small operations such as family-owned businesses who employ fewer than 100 employees, and informal micro-enterprises such as those of street vendors and individuals who provide backyard services (Small Enterprise Development Agency, 2016).

According to the Small Business Institute (SBI) (2023), there are only 250 000 formal SMMEs in South Africa. While research has shown that 98.5% of the economy is made up of SMMEs, they are only delivering 28% of all jobs across the country. The SBI (2023) puts the number of SMMEs at 5.6 million. Of these, 3.3 million are 'survivalist businesses', with 1.7 million being micro-enterprises and 554 000 being small enterprises (SBI, 2023).

A total of 56% of jobs in South Africa are created by 1 000 of the largest employers (including government). The National Development Plan 2030 (NDP 2030, 2012) states that, unless the entrepreneurship segment is properly understood and

supported, it will not reach the aim of creating 90% of all jobs by 2030. According to the Global Entrepreneurship Monitor (GEM), it is important that South African SMMEs are supported by both their communities and government policies and initiatives, because they are a major source of employment. It has been shown, especially in developing countries, that entrepreneurs contribute substantially to job creation and economic growth (Herrington, Kew, & Mwanga, 2017).

The South African government realises the critical importance of entrepreneurs to enhancing the growth and development of the country. Several initiatives have been launched to promote entrepreneurship and new firm development in South Africa, such as the provision of grants and loans, tax incentives for start-ups, training and development opportunities.

This study argues that these initiatives may be ineffective if policy makers do not understand what drives entrepreneurial intent, i.e., the main push and pull factors that encourage individuals to embark on the entrepreneurial route. The next section pays specific attention to entrepreneurship in the South African context.

1.2 DEFINING ENTREPRENEURSHIP

Economist Cantillon coined the term *entrepreneur* in the 18th century. He described it as an individual who is a 'go-between', i.e., an individual who acts a bridge between sources of capital and business opportunities (Jayeoba, 2015). Many researchers have provided different definitions of entrepreneurship, and there is no universally accepted definition of an entrepreneur or entrepreneurship. Definitions of entrepreneurs range from simple explanations, such as individuals who start their own business, to much broader definitions that include individuals' attitude and their ability to be self-reliant and innovative and to take risks (Olakitan & Ayobami, 2011). Zhao and Siebert (2006) define an entrepreneur as the founder of a small business. This individual is the owner as well as the manager of the enterprise. Entrepreneurs are dynamic, and are the initiators of enterprises and the driving force behind production. They identify opportunities and put new ideas into practice by developing new markets, thereby creating employment and an income (Mohr & Fourie, 2008). Olakitan and Ayobami (2011) define an entrepreneur as an individual who can create something

from nothing. Entrepreneurs can identify an opportunity to provide a novel product or service to consumers (Olakitan & Ayobami, 2011).

In South Africa, most entrepreneurs operate SMMEs. SMMEs comprise approximately 98.5% of all enterprises, and contribute 56% of South Africa's gross domestic product (GDP), and account for 28% of employment (Chimucheka, 2016; Erasmus, Strydom, & Rudansky-Kloppers, 2013). Although SMME entrepreneurs play a central role in the socio-economic development of South Africa, the majority of entrepreneurs fail within the first five years of operation (Bruwer, 2013; Cant & Wild, 2013). In spite of several government programmes and institutions that were established to support these businesses, the failure rate of SMMEs in South Africa remains high (Bruwer, 2013; Cant & Wild, 2013). There are a myriad reasons why new enterprises fail, including lack of operational control, limited access to markets, insufficient startup capital (Mamabolo, 2015), and a lack of physical infrastructure such as plants and machinery (SEDA,2006).

One of the most prevalent constraints entrepreneurs face is the shortage of electricity. South Africa has, for several years, experienced scheduled power cuts, referred to as 'load shedding', which started in 2007. In 2022, these power cuts intensified, lasting up to nine hours per day. The shortfall of electricity is a major disruptor of the economy, as businesses have had to resort to expensive alternative power sources, such as generators, which increased their operating expenses. The shortage of electricity also impacts other infrastructural aspects, such as water supply, service delivery, and Internet connectivity (World Bank, 2023).

These challenges, together with the COVID-19 pandemic, have intensified the country's economic challenges. Although South Africa has recovered to its pre-Covid-19 pandemic GDP, the level of employment has not grown. There were still 500 000 fewer jobs in 2022 compared to 2019, with women and youths impacted the most (World Bank, 2023). As a result, the GDP growth rate to slow (World Bank, 2023). South Africa's economic growth rate slowed down to 2% in 2022, compared to the 2021 growth rate of 4.9%. Knock-on effects of the pandemic, such as the rising cost of fuel and basic foodstuff, coupled with the power supply crisis, have made it even more difficult for individuals, especially the poor, to start their own businesses.

Inflation averaged 6.9% in 2022, but, for those in the bottom 20% income bracket, their rate averaged 8.2% (Word Bank, 2023).

SEDA (2016) notes that many entrepreneurs fail because they do not have the capacity to invest in research and development, which is a major factor in determining if ideas could be transformed into successful businesses. Dawson (2017) suggests that entrepreneurs earn less than their employed counterparts, and must also work considerably longer hours. Yet, despite all these constraints, many individuals choose to embark on entrepreneurial ventures (Dawson, 2017).

Measuring entrepreneurial success remains problematic, as there is no generally agreed-upon metric of success. Some authors advocate that tenure is a measure of entrepreneurial success, while others argue that growth in sales and employment is the most important metric (Alam, 2011; Lotz & Van der Merwe, 2013; Olakitan & Ayobami, 2011; Overall & Wise, 2016). This study does not aim to make any claims regarding entrepreneurial success. The aim of this study is to look at entrepreneurial intent, rather than success. The contextual and motivational factors will be measured at the perceptual level, and not the actual level. That is, the main objective of the study is to understand the role of self-efficacy, perceived social support and the risk perception on entrepreneurial intent on nascent entrepreneurs. This is discussed in the next section.

1.3 CONCEPTUALISING ENTREPRENEURIAL INTENTIONS

For a developing economy such as South Africa, entrepreneurial activity can be seen as a means to revitalise an economy that has become stagnant, as well as to address a high unemployment rate. Entrepreneurs create job opportunities, provide products, market innovations, and create value for employees and clients in the process (Dvoulety, Marko, 2019).

The creation of a new business takes planning and strategizing, which means that entrepreneurship has to be thoughtful and planned. However, measuring entrepreneurial activities can be difficult, because many nascent entrepreneurs may be in the conceptualisation phase. For this reason, behavioural intentions can be regarded as one of the best predictors of actual entrepreneurial behaviour (Herrington

et al., 2017). Entrepreneurial intentions are thus key to understanding entrepreneurship, as it is the start in the process of discovery, creation, and exploitation of business opportunities (Schlaegel & Koenig, 2014).

When an individual intends to start up a new business venture and has made plans to do so, the individual is said to harbour entrepreneurial intentions (Bonesso, Gerli, Pizzi, & Cortellazzo, 2018). Entrepreneurial intention represents a mental focus, desire, or hope that influences an individual's choice to become an entrepreneur (Rajh, Budak, Ateljevic, Davcev, Jovanov, & Ognjenovic, 2016).

Research suggests that antecedents of entrepreneurial intentions can take the form of demographics, personality traits, and previous entrepreneurial experience (personal or that of friends or family (Rajh et al.,2016). Other scholars include contextual factors such as the cultural tradition of a country, capital structures such as access to finance, and general ease of doing business (Rajh et al., 2016). The next sections discuss these factors in greater detail.

1.3.1 Contextual Factors

Whereas personal factors that attract individuals to entrepreneurship have been well researched, much less is known about the contextual factors that may promote or inhibit entrepreneurial activities. Previous research suggests that an enabling environment can drive entrepreneurial activity (GEM SA, 2023). Contextual factors include economic factors, such as access to finance and information; technological factors, such as inventions; political factors, such as laws and regulations; and cultural factors, such as the values and customs of a society.

The Department of Small Business Administration (DSBA) report in the United States of America is a good example of how the regulatory environment can spur on entrepreneurship. According to the DBSA report, small businesses have been responsible for two out of every three new jobs created. Former president Obama, during his precedency, implemented initiatives to further reduce barriers for small businesses, such cutting taxes to assist new startups and writing off certain costs related to starting up a new business enterprise. The DSBA, since its inception in 2009, has also provided US$80 billion in loans to 150 000 small businesses, and also

provides free counselling and technical support services to nascent entrepreneurs (Sperling & Mills, 2012).

Taiwan fosters entrepreneurship through an SME incubator in Southern Taiwan, with the aid of government, and private funding. Taiwan's efforts to foster an entrepreneurship culture include the Small and Medium Enterprise Administration (SMEA) offering online courses incorporating many subjects, including finance, e-commerce, accounting, and marketing. The SMEA has also founded schemes to empower women entrepreneurs, such as the Start-Up Taiwan Project and the Flying Geese Model. These schemes provide consulting services and training to help entrepreneurs develop their new businesses (Her, 2014).

Singapore can be regarded as a highly entrepreneurial country that is geared towards providing an enabling environment for startup businesses. It boasts the highest levels of Internet penetration, and a new company can be set up online in a matter of hours, rather than days, weeks, or even months, as is the case in other countries. It offers an award, the Phoenix Award, that recognises entrepreneurs who have not quite made it but have persevered for a number of years. Singapore's National Research Foundation conference was created to support these entrepreneurs, and to provide them with a platform to share their experiences and what they have learned from failures (Yeoh, 2017).

Notwithstanding the importance of an enabling business environment, personal attributes also play an important role in the decision to start one's own business venture (Miller, 2020). Miller (2020) went further to state that across various industries and geographic regions, entrepreneurial success has been consistently linked to personal attributes such as risk tolerance, openness to experience, and internal locus of control. The next section focuses on some of the most important personal factors that drive entrepreneurial intention and success.

1.3.2 Motivational Factors

Motivation theories can be used to understand the forces that influence an individual's decision to pursue the entrepreneurial route (Herdjiono Puspa, & Maulany, 2017). Minola, Criaco, and Obschonka (2016) describe self-employment motivation as the

reason individuals are likely to behave differently to non-entrepreneurs when presented with the same stimuli. In the context of entrepreneurship, this type of motivation is shaped by two broad beliefs. Minola et al. (2016) describes these beliefs as (1) desirability beliefs (attitudes), i.e., the attractiveness of becoming an entrepreneur, and (2) feasibility beliefs (control and self-efficacy), i.e., how successfully an individual can perform entrepreneurial actions. This motivation then becomes entrepreneurial intention. If individuals are presented with the opportunity to pursue an entrepreneurial venture, they will probably assess the likelihood of success based on the feasibility and desirability of the opportunity. If the feasibility and desirability of the opportunity is low, it is unlikely that they will pursue a career in entrepreneurship (Minola et al., 2016).

1.4 PROBLEM STATEMENT

Personal factors that drive individuals to start their own business has been researched extensively. The most prominent factors that shape entrepreneurial intent were found to be McClelland's (1985) Need for Achievement theory; and Locus of Control derived from Rotter's (1966) Social Learning Theory and Autonomy. Additional factors will be further discussed in the fore going sections.

The main push and pull factors that drive entrepreneurial intent may be ineffective if there is no clear understanding of how these factors can lead to individuals starting their own business. Entrepreneurial activity as discussed in the preceding section is of vital importance to revitalise an economy in order to reduce the high rate of unemployment. According to Herrington et al., (2017), the best predictors of entrepreneurial behaviour are behavioural intentions.

1.5 RESEARCH QUESTIONS

Based on the foregoing sections, the following research questions (RQs) were formulated:

RQ1: What is the role of self-efficacy on entrepreneurial intent on nascent entrepreneurs?

RQ2: What is the role of perceived social support on entrepreneurial intent on nascent entrepreneurs?

RQ3: What is the role of risk perception on entrepreneurial intent on nascent entrepreneurs?

RQ4: What psychological, motivational, and contextual factors influences entrepreneurial intentions of nascent entrepreneurs.

1.6 RESEARCH AIMS AND OBJECTIVES

Entrepreneurship is important for new business creation, as it is a means to generating employment and to increasing the dynamism of an economy.. The current study is aimed at determining how to unlock entrepreneurial capabilities in order to meet the global challenges of the 21st century and to add to the body of knowledge pertaining to entrepreneurial intentions. The primary objective of the study will focus on the motivational and contextual processes that lead to entrepreneurial intent on nascent entrepreneurs. More precisely, the study will determine the role of self-efficacy, perceived social support, and risk perception on the entrepreneurial intent of nascent entrepreneurs. A secondary objective of the study is to develop a theoretical model of the motivational and contextual factors that illustrates the variables that shape entrepreneurial intent of nascent entrepreneurs.

1.7 SIGNIFICANCE OF THE STUDY

Due to the large-scale discrepancy in access to opportunities, entrepreneurs who manage SMMEs will play an increasingly important role in job creation, specifically in the informal sector of the economy (Herrington et al., 2017). The South African government has identified SMMEs as a key catalyst of economic growth and the creation of jobs. Numerous laws have been passed to promote entrepreneurship, and a dedicated ministry has been created to promote the interests of small businesses (SEDA,2016).

Entrepreneurs could play an important role in addressing South Africa's economic challenges, as they create new businesses and job opportunities (World Bank, 2018). Entrepreneurial enterprises are often at the forefront of innovations in product

development and services. Entrepreneurship may be more important than ever as the global and local economy recovers from the aftermath of the COVID-19 pandemic (Musara & Gwaindepi, 2014). This study is aimed at determining how to unlocks entrepreneurial capabilities in order to meet the global challenges of the 21st century. gaining an understanding of the variables that influence entrepreneurial intent and, more importantly, the manner in which these variables combine to form a complex nomological network of variables. The results of the study could add to the body of knowledge by providing key insights into determining the role of self-efficacy, perceived social support, and risk perception on the entrepreneurial intent of nascent entrepreneurs. The results could also inform educational programmes, government policies, and private investments into entrepreneurship.

1.8 DELIMITATIONS OF THE RESEARCH

This study will focus on the Western Cape province of South Africa and nascent entrepreneurs who meet two criteria: a) over the age of 18 years of age b) with an ambition to start their own business. The study will follow a quantitative correlational approach and an *ex post facto* research design.

1.9 DEFINITION OF KEY CONCEPTS

Nascent entrepreneurs: Nascent entrepreneurs are defined as individuals who are considering starting their own business and have not previously owned one (Nieuwenhuizen, 2016).

Entrepreneurial intent: When an individual intends to start up a new business venture and has consciously made plans to do so, the individual is considered to harbour entrepreneurial intent (Bonesso et al., 2018). This intent represents a mental focus in the form of a desire, wish, or hope to become an entrepreneur (Rajh et al., 2016).

General self-efficacy: General self-efficacy is individuals' choice of activities, their effort, and persistence through processes and actions that are required when faced with obstacles (Kickul, Gundry, Barbosa, & Whitcanack, 2009). It can be described as an individual's belief that they are capable of effectively carrying out an action, and

persevering in overcoming any obstacles they may face. It is therefore a reflection of self-confidence, where an individual will perform the necessary behaviours to be successful in launching a new business (Schenkel, D'Souza, & Braun, 2014).

Perceived social support: Social support is defined as the degree to which individuals' fundamental needs are met through interaction with their environment. These needs consist of affection, esteem, security, identity, and belonging. Social networks consist of family, friends, neighbours, and colleagues (Klyver, Honig, & Steffens, 2018).

Financial risk: Financial risk perception refers to the possibility that a business will not be able to meet its financial obligations. The level of risk is therefore not dependent on the operations of the business, but the financial risk the entrepreneur would need to incur to finance the new venture (Guzman, 2015).

Theory of planned behaviour: The theory of planned behaviour (Ajzen, 1991) is widely used to predict or explain behavioural intentions by looking at the interaction between (a) attitude towards a particular behaviour, (b) perceived behavioural control and (c) subjective norms.

1.10 OVERVIEW OF THE STUDY

This paper consists of five chapters, summarised below.

Chapter 1 introduced the research study and provided an overview of and background to the research problem. It defined and conceptualised key factors that will be investigated, together with the relevant research questions. The aims and objectives of the study were outlined, together with its delimitations and significance.

Chapter 2 comprises the literature review, and highlights the constructs of interest to the study. Chapter 2 presents a theoretical framework and the study hypotheses.

Chapter 3 discusses the research methodology followed in conducting the study, including the approach, design, sampling, the measurement instrument, data collection, and method of analysis.

Chapter 4 presents an overview of the data analysis and reports the results.

Chapter 5 discusses the results and offers recommendations with reference to existing literature. The chapter concludes with the limitations of the study and suggestions for future research.

1.11 CONCLUSION

This chapter discussed the importance of entrepreneurship in South Africa's socio-economic development, together with the primary personal and environmental correlates of entrepreneurial intent. The chapter also provided background to the study in order to inform the problem statement. Based on research questions formulated, research aims and objectives, together with the significance of the study were discussed. The primary objective of the study was to determine the role of self-efficacy, perceived social support, and risk perception on the entrepreneurial intent of nascent entrepreneurs. A secondary objective of the study was to develop a theoretical model of the motivational and contextual factors that illustrates the variables that shape entrepreneurial intent of nascent entrepreneurs. The chapter discussed delimitations of the research and provided definitions of the most important concepts used in this research study. This chapter concluded with how the structure of the paper will be mapped out. The next chapter provides a review of extant literature in this domain.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

Entrepreneurial activity plays an important role in the creation of jobs, products, service innovation, and, ultimately, economic growth (GEM, 2017). South Africa's economy however is currently not generating sufficient jobs, and the industries in which jobs are created are mainly seeking skilled, rather than unskilled, labour. The persistent high levels of unemployment and stagnant wage growth have resulted in greater levels of poverty and income inequality (World Bank, 2018). SMME's in South Africa only contributes to 56% of its GDP and a mere 28% of employment (Chimucheka, 2016; Erasmus, Strydom, & Rudansky-Kloppers, 2013; World Bank, 2023). Typically, in middle-income countries, SMME's contribute to 95% of employment. Therefore, when compared to fellow emerging economies, entrepreneurship in South Africa is low. Greater participation of SMMEs is critical for growth and employment in South Africa (OECD, 2017). In order for South Africa to meet its NDP 2030 goal of new jobs being created by SMME's, the economy is in dire need of kick-starting the anaemic local economy (World Bank, 2018).

One of the most promising areas of research is the motivational and contextual factors that drive individuals to start their own business. Individuals create new business ventures for many reasons. From a personality trait perspective, individuals could pursue entrepreneurship based on the need for independence, the ability to identify and exploit opportunities in the environment, a need for achievement and autonomy, self-efficacy, a need for power and status, innovativeness, and a high stress tolerance (Diaz & Rodriguez, 2003; Khan, Rowe, Quaddus, & Nurazzaman, 2013; Luca & Robu, 2016; Rauch & Frese, 2007). Based on the Big Five Model of Personality Traits, openness to experience and conscientiousness have been identified as drivers of entrepreneurial intent (Zhao, Seibert, & Lumpkin, 2010). Other factors are a need for power and status, a high-risk tolerance, and an internal locus of control (Caliendo, Fossen, & Kritikos, 2014). The next section briefly examines some of the most prominent factors that shape entrepreneurial intent.

2.1.1 Need for Achievement

McClelland's (1985) need theory posits that individuals are motivated by three needs: 1) the need for power, 2) the need for affiliation, and 3) the need for achievement. McClelland's (1985) need for theory therefore refers to both internal and external motivation. Internal motivation refers to the needs of the individual, whereas external motivation refers to the rewards received once the need is satisfied (Rybnicek, Bergner, & Gutschelhofer, 2019).

McClelland's (1985) need for achievement theory describes an individuals' preference to achieve excellence through their efforts in accomplishing tasks. These individuals aspire to perform better than their peers. They believe that success does not occur by chance and prefer being personally responsible for the success they achieve. Such individuals are regarded as effective leaders and find satisfaction in positions that challenge them and require a high level of skill (Rybnicek et al., 2019).

The need for achievement, one of the traits contained in McClelland's (1985) theory, is strongly associated with entrepreneurial intent. Entrepreneurs have the need to shape their own future through hard work and innovation (Khan, Breitenecker, & Schwartz, 2014). According to Ziegler, Schmukle, Egloff, and Buhner (2010), need for achievement can be described as a trait-like characteristic that influences the behaviour of an individual when faced with different situations.

Individuals with a high need for achievement can overcome obstacles while providing products and services to clients. McClelland (1985) saw the need for achievement as the desire of an individual to out-perform their own performance needs (Ziegler et al., 2010).

McClelland (1985) breaks down achievement motivation further into implicit and explicit motivation. The most important difference between the two is their predictive power (Ziegler et al., 2010).

The need for achievement is a particularly strong motivation for most entrepreneurs (Kerr, Kerr, & Zu, 2017). Such individuals are risk-takers, even when the environment is uncertain (Chen, Su, & Wu, 2012).

According to Dehghanzadeh, Khlasehzadeh, Birjandi, Antikchi, Sobhan, and Neamatzadeh (2016), individuals who have a high need for achievement set themselves challenging goals. It is a trait prevalent amongst entrepreneurs, as they have a strong desire to be successful, which makes them seek out opportunities to achieve difficult goals. According to Zovko, Dulcic, and Bilic (2020) individuals taking responsibility for their own performance by seeking new and better ways of doing things is indicative of a high need for achievement.

2.1.2 Locus of Control

Locus of control is a concept derived from Rotter's (1966) social learning theory, (Dehghanzadeh et al., 2016). Locus of control can be described as individuals' belief regarding the control they have over their destiny (Chatterjee & Das, 2015). Individuals with an external locus of control believe that luck, fate, and other people control their life experiences and outcomes. Those with an internal locus of control believe they control their environment and destiny, and they therefore take responsibility for the consequences of their decisions. Typically, individuals who have a strong internal locus of control search for new opportunities and have an innovative attitude, which enables them to deal with external events constructively (O'Bryan, 2021). They have great faith in their own abilities, skill, and efforts in achieving favourable outcomes (Asante & Affum-Osei, 2019).

Both internal and external locus of control is an important antecedent of entrepreneurial intent and entrepreneurial success (Rauch & Frese, 2007). Entrepreneurs are seen as individuals who are initiators and who take responsibility for achieving their goals. An internal locus of control is an important characteristic for an entrepreneur, as it relates to proactiveness. Such individuals monitor their environment and act according to the information at hand to make optimal decisions (Dehghanzadeh et al., 2016).

Entrepreneurs who have an internal locus of control feel that they have the ability to influence their outcomes, and this makes them more motivated to pursue promising ventures. In contrast, individuals with an external locus of control do not have this belief, and their ability to identify opportunities is hindered by the belief that success is based on luck (Asante & Affum-Osei, 2019).

2.1.3 Need for Autonomy

Autonomy is defined as freedom, independence, and discretion in the completion of responsibilities relating to work (Noe, Tews, Michel, 2016). Historically, autonomy has been linked to the relationship between employers and employees, i.e., the freedom that employees enjoy in their workspace. It was originally researched as a unitary concept, and only later in varied forms of autonomy. Autonomy then became defined as independence and the freedom in starting a new business. The need for autonomy is regarded as one of the key drivers of individuals embarking on entrepreneurial ventures (van Gelderen, 2016).

Autonomy is also associated with control, flexibility, having influence, and taking responsibility. Van Gelderen and Jansen (2006) found that entrepreneurs seek autonomy for two main reasons; first, because of the enjoyment that self-employment offers and, second, having the freedom to execute business decisions. The need for autonomy is associated with individuals who avoid restrictive environments and want to be in control. These individuals set their own goals, develop their own action plans, and prefer working independently of direct supervision and oversight (Legault, 2016). Autonomy is explicitly recognised in Herzberg's two-factor theory and McClelland's (1961) human motivation theory.

Autonomy is also listed as a key motivator in trait activation theory, which suggest that individuals who are responsible for their own job outcomes are more active than those who share responsibility for achieving a goal or completing a task. Trait activation theory describes the relationship between personality traits and behaviour. The theory holds that the relationship between the two constructs is moderated by the strength of the situation (Teff, Simonet, Walser, Brown, 2013).

Autonomy is a key motivator for entrepreneurs. According to Chatterjee and Das (2015), entrepreneurs depend on their own judgement and take responsibility for their actions when approaching tasks. Therefore, the desire to be self-dependent is one of the prime reasons why entrepreneurs want to start their own business.

There may be trade-offs associated with autonomy for entrepreneurs. For example, decision-making freedom may come with severe consequences. Entrepreneurs tend

to work longer hours than those who are employed, even though they have the freedom to take time off work. Furthermore, even though entrepreneurs have control over their business, they are still largely dependent on the economic climate and the goodwill of key suppliers and customers (Van Gelderen, Shirokova, Shchegolev, & Beliaeva, 2020).

2.1.4 Optimism

Optimism can be defined as individuals' confidence that positive things will take place in the future (Poblete, Sena, & Fernandez de Arroyabe, 2019). Individuals who display high levels of optimism show confidence in overcoming problems and challenges. Due to their positive outlook in life, they typically experience high levels of physical and psychological wellbeing. They therefore focus on opportunities and are confident that these opportunities will be beneficial to them in the future. However, optimism may vary over a time, referred to as 'situational optimism'.

Seligman (1990) argues that cognitive processes can prime individuals to harbour positive expectations about future events. Learned optimism in the context of entrepreneurship is closely linked to general self-efficacy. Bandura's (1977) General self-efficacy theory emphasises the importance of individuals' perceptions of their personal capabilities as a key determinant of successful outcomes. However, general self-efficacy theory does not suggest that positive self-efficacy beliefs are the only reason for successful outcomes. Rather, general self-efficacy theory is rooted in triadic reciprocal determinism, in which there is a constant interplay between personal factors (i.e., self-efficacy beliefs), behaviour, and environmental factors.

General self-efficacy theory emphasises the importance of personal factors but acknowledges that behavioural and environmental factors have profound effects on outcomes. The theory of triadic reciprocal determinism therefore further reinforces the idea that, if the effects of the environment are consistent (i.e., an even playing field for all), then self-efficacy beliefs will play a greater role in determining human behaviour, and ultimately shape outcomes (Gallagher, 2012).

Dawson (2017) notes that individuals who are more optimistic are more likely to become entrepreneurs. Optimists are likely to overestimate positive future events,

which may be the reason why they are attracted to a career in entrepreneurship. Optimists also tend overvalue their abilities and skills as entrepreneurs. They believe they can achieve and overcome anything (Dawson, 2017).

Research suggests that optimism increases with entrepreneurial experience (Poblete et al., 2019). According to Bandura's (1977) social learning theory, entrepreneurs experience general self-efficacy when they succeed at difficult task. Heightened general self-efficacy leads to greater levels of optimism, which incentivise entrepreneurs to take on more ambitious goals, creating a virtuous cycle (Poblete et al., 2019).

2.1.5 Identifying Opportunities

Researchers posit that opportunity is embedded within an individual — being able to identify an opportunity is based on an individual's perceptions. It is critical that entrepreneurs are able to identify opportunities, as well as the resources required to realise the opportunity. According to Asante and Affum-Osei (2019, p. 228), "without entrepreneurial opportunities, there cannot be any entrepreneurship".

A pivotal factor in the ability to identify an opportunity is self-image. Low self-image is characterised by a fear of failing, a lack of capability or general self-efficacy, and feelings of vulnerability, which affect an individual who is faced with opportunity-related choices (Lewis, Harris, Morrison, 2016).

The ability to identify opportunities has been linked to the Big Five personality trait openness to experience. Such individuals are characterised as imaginative, curious, perceptive, and creative. They seek new experiences and explore new ideas. These entrepreneurs make use of their intelligence and creativeness to gain and apply new knowledge in order to provide solutions to day-to-day challenges (Presenza, Abbate, Meleddu, & Sheehan, 2019). Individuals who score high on this personality trait are more likely to become self-employed (Caliendo et al., 2013).

2.2 SYNOPSIS

The foregoing sections discussed a few of the most important attributes of entrepreneurial intent. Important drivers of entrepreneurial intent include a need for

achievement, optimism, an external locus of control, and the ability to identify opportunities. In addition, some individuals become entrepreneurs for reasons related to personal growth and wealth creation (Mersha & Sriram, 2018). Entrepreneurs may also have a high need for independence and are able to take risks. As the primary objective is this study is to focus on the motivational and contextual processes, the next section examines some of the most prevalent theories related to entrepreneurial intent.

2.3 THEORETICAL FRAMEWORK

This section examines three theoretical models to explain entrepreneurial tendencies and behaviour. The first is the Social Factors Model (Dubey & Sahu, 2022), which explains the impact of family influence, career stages, and life experiences on entrepreneurial intentions. The second is the Environmental Factors Model (Gomezelj & Kušce, 2013), which explains the value of wealth, tax implications, benefits, market conditions, and timing of opportunities for new business ventures on entrepreneurial intentions. These contextual factors include economic culture and social upheaval. The third is the Individual Factors Model (Loosemore & McCallum, 2021). This model focuses on personality characteristics of entrepreneurs. This current study focused mainly on the motivational and contextual factors that drive individuals to pursue an entrepreneurial career.

Research has shown that individuals who believe in their own skills and ability are more confident to start new business ventures (Edelman, Brushm, Manolova, & Green, 2010). These individuals are able to evaluate the trade-off between expected benefits and the amount of work that would be required, what the risks are, and appraise the business environment (Edelman et al., 2010). Azjen's (1980) theory of planned behaviour is often used in research on entrepreneurship (Aloulou, 2016). The theory is explained briefly in the subsequent section, together with the hypotheses of the current study.

2.3.1 Azjen's Theory of Planned Behaviour

Few models and theories aimed at explaining entrepreneurial intent have been more influential than Azjen's (1991) theory of planned behaviour (Aloulou, 2016). This is

because the theory includes both personal and contextual factors in explaining behavioural intent (Aloulou, 2016). Aloulou (2016) found empirical support for the effectiveness of the theory in predicting intentions. According to Mirjana, Ana, and Marjana (2018, p. 1456), "intentions can be seen as the single best predictor of planned behaviour". The theory of planned behaviour (Azjen, 1980) suggests that a set of beliefs can predict intentions, which, in turn, lead to behaviours. When people believe in a certain desired outcome, they will engage in directed behaviours to achieve the outcome. Therefore, beliefs are instrumental in shaping intentions (Mirjana, Ana, & Marjana, 2018).

According to Ajzen's (1991) theory of planned behaviour, three antecedents interact to shape subsequent behaviour, namely attitude towards the behaviour, perceived behavioural control, and subjective norms. According to Kautonen, Van Gelderen, and Fink (2015), the theory can be used to explain the psychological mechanism that leads to entrepreneurial intentions. The subsequent sections look at each of these antecedents.

2.3.1.1 Attitude towards the behaviour

Attitude towards the behaviour is the attractiveness of the idea of becoming an entrepreneur (Schaegal & Koening, 2014). Moore and Burrus (2019) define attitude towards the behaviour as 'evaluation', and divide it into two dimensions, namely experiential attitude, and instrumental attitude. Experiential attitude is what an individual deems enjoyable, and instrumental attitude refers to whether the individual would find useful or worthwhile to engage in the behaviour (Moore & Burrus, 2019).

Another variable within the attitude towards the behaviour construct is an individual's *achievement motivation*, which is the need to become an entrepreneur and the value placed on becoming an entrepreneur (Engle et al., 2008). Achievement motivation is obtained through an entrepreneur setting goals and achieving said goals. Attitude towards the behaviour is thus a subjective assessment of entrepreneurial activities that an individual perceives as worthwhile and possibly rewarding. If individuals expect the outcome of entrepreneurial activities to be positive, they are more likely to partake in that activity (Nowinski & Haddoud, 2018). Based on the above, the following hypothesis was formulated:

H1: Attitude towards the behaviour have a positive relationship with entrepreneurial intentions.

2.3.1.2 Subjective norms

Subjective norms are based on the opinions of important groups with which the individual associates (Schaegal & Koening, 2014). According to Liñán et al. (2011), these groups include family and friends who influence an individual's decision to pursue entrepreneurial activities. According to Liñán et al. (2011), subjective norms have less impact on entrepreneurial intentions than perceived behavioural control and attitude towards the behaviour in individuals who have a strong internal locus of control. Entrepreneurship research has not established a significant direct relationship between subjective norms and entrepreneurial intent (Liñán et al., 2011), but evidence suggests that subjective norms have a significant effect on attitude towards the behaviour and perceived behavioural control (Liñán et al., 2011).

The research evidence pertaining to the relationship between subjective norms and entrepreneurial intent is, however, mixed. In a study of American students, the link between subjective norms and entrepreneurial intent was found to be weak (Shook & Bratianu, 2010). Similarly, in a study conducted by Shook and Bratianu (2010) of Scandinavian students, no relationship was found between subjective norms and entrepreneurial intent. Shook and Bratianu (2010) propose that the weak relationships between the constructs may indicate that there may be a lack of support of entrepreneurship in this region. However, in countries such as Romania, where entrepreneurship is not as readily accepted as in Northern Europe and America, it is believed that support is more important (GEM, 2021).

According to the OECD, individuals whose parents are entrepreneurs show a higher level of entrepreneurial intent than those whose parents are not entrepreneurs. The same can be said for individuals who have school friends or peers who have at least one parent who operates his or her own business OECD). Studies in Saudi Arabia and India have found that positive subjective norms lead to higher levels of entrepreneurial intent (Mwiya, Wang, Shikaputo, Kaulungombe, & Kayekesi, 2017). Based on the above, the following hypothesis was formulated:

H2: Subjective norms have a positive relationship with entrepreneurial intentions.

2.3.1.3 Perceived behavioural control

Perceived behavioural control refers to the perceived ease or difficulty of performing a certain behaviour and the perceived control that the individual has over the outcome. It is, therefore, reflective of the individual's action (Schaegal & Koening, 2014). Perceived behavioural control is shaped by life events such as judgement, social influences, and skills. Liñán and Chen (2009) posit that perceived behavioural control as a concept is similar to Bandura's (1997) general self-efficacy and Shapero and Sokol's (1982) perceived feasibility.

Anjum, Sharifi, Nazar, and Farrukh (2018) argue that general self-efficacy and perceived behavioural control are theoretically different constructs. They describe general self-efficacy as an individual being self-sufficient based on a specific skill set, whereas perceived behavioural control is described as the barriers to entrepreneurial behaviour that are perceived by the individual. According to Engle et al. (2008), the behaviour of individuals is influenced greatly by their belief in their ability to successfully complete an assignment or achieve an objective.

According to Mwiya et al. (2017), perceived behavioural control reflects both past experiences and perceptions of potential future obstacles. Thus, individuals are likely to pursue entrepreneurial activities when they believe they have the necessary skills to successfully exploit the opportunity and that the outcome will be positive and valuable. Studies conducted in Spain, Ukraine, the USA, Turkey, China, and Malaysia have found that the higher the perceived behavioural control, the higher entrepreneurial intent will be (Otchengco & Akiate, 2021). Individuals who are of the opinion that they have the relevant knowledge, suitable networks, and skills will probably experience a high level of perceived behavioural control. The opposite can therefore be said of individuals who have lower levels of perceived behavioural control, as they may believe they lack the resources, ability, and opportunities required to start a new business venture. Based on the above, the following hypotheses were formulated:

H3: Perceived behavioural control have a positive relationship with entrepreneurial intention.

H4: Perceived behavioural control have a positive relationship with attitude towards the behaviour.

The theory of planned behaviour can be used to explain why individuals may be attracted to entrepreneurship as a career by looking at the links between intentions, attitudes, and behaviours (Azjen, 1991). The next section discusses the linkages between perceived behavioural control, attitude towards the behaviour, and social norms in relation to entrepreneurial intent.

2.3.2 Shapero and Sokol's Entrepreneurial Event Model

Minola et al. (2016) describe self-employment motivation as individuals preferring to work on their own and control their own work activities and behaviour. The Shapero and Sokol's (1992) Entrepreneurial Event Model links entrepreneurial behaviour to values outcomes of self-employment. Minola et al. (2016) describe these values as (a) desirability beliefs (similar to attitude towards the behaviour), i.e., the attractiveness of becoming an entrepreneur; and (b) feasibility beliefs (similar to perceived behavioural control), i.e., how successfully an individual can perform entrepreneurial behaviour. The third value is the propensity to act, referred to as 'subjective norms'. These values or factor prominently in the Entrepreneurial Event Model (EEM) of Shapero and Sokol (1982). Based on the foregoing section, the EEM (Shapero & Sokol, 1982) has theoretical foundations in common with the theory of planned action (Minola et al., 2016).

According to Barba-Sanchez and Atienza-Sahuquillo (2017), individuals are fundamentally motivated to engage in behaviour that is instrumental in achieving the highest potential success in terms of outcomes that they value. However, subjective norms play an important role in the type of behaviour they are likely to pursue. Due to these subjective norms, individuals are not motivated to engage in behaviour that violates societal norms, even if this behaviour maximises their own utility. Barba-Sanchez and Atienza-Sahuquillo (2017) further to state that individuals are motivated to put in the required effort when starting a business if they assume that, through that

effort, they are likely to reach their goals, and that these goals are congruent with societal norms. For this reason, it is expected that subjective norms will have a positive influence on their attitude towards behaviour and their perceived behavioural control (Barba-Sanchez and Atienza-Sahuquillo, 2017).

The more positive the attitude is, the stronger the effect will be on subjective norms, and the behavioural intention will therefore also become stronger. An individual's perception are dependent on their psychological and social interaction and influence. Their attitude is therefore affected (Song, Chen, Zeng, & Kim, 2022).

According to Kashif, Zarkada, and Ramayah (2018), a certain level of social pressure will result in the establishment of certain intentions and behaviours. Individuals' positive or negative experience of a behaviour plays a role in their direct action. Individuals will choose the behaviour to which they have a positive attitude. Individual will therefore perform an action, i.e., behaviour, if they believe that their behaviour will be accepted by those they deem important in their life (Rahadjeng & Fiandari, 2020). Individuals observe and attempt to emulate social behaviours. Subjective norms are influenced by family and friends who will either approve or disapprove the behaviour (Kashif et al., 2018).

Perceived behavioural control is a subjective experience. Individuals performs acts that are socially acceptable and desirable. Attitude towards the behaviour can thus be described as the judgement of the outcomes of a behaviour (Kashif et al., 2018). Based on the above, the following hypotheses were formulated.

H5: Subjective norms have a positive relationship with attitude towards the behaviour.

H6: Subjective norms have a positive relationship with perceived behavioural control.

2.3.3 General Self-efficacy

Schlaegel and Koenig (2014, p. 300) define general self-efficacy as "the extent to which individual's believe in their ability to execute a behaviour". Kickul et al. (2009) added to this definition that general self-efficacy is individuals' choice of activities, their

effort and persistence, their thought processes, and the reactions required when faced with obstacles.

Schenkel et al., (2014) state that general self-efficacy as a significant antecedent of entrepreneurial intentions. It can be described as individuals' belief whether they are capable of carrying out an action effectively and would be able to persevere and overcome any obstacles they may face. General self-efficacy thus plays role in individuals' confidence when they have the option of starting a new business venture. General self-efficacy therefore reflects self-confidence, based on which an individual will perform the necessary behaviours to successfully launch a new business (Schenkel et al., 2014).

According to Liguori, Winkler, Vanevenhoven, Winkel, and James (2020), general self-efficacy beliefs strongly predict entrepreneurial intentions, as these beliefs form part of a set of beliefs about an individual's capability to perform a set of actions within a set domain. The predisposition of individuals and environmental factors all have an influence on an individual's general self-efficacy beliefs, which, in turn, impact the intentions of an entrepreneur.

Personal attributes interact with features of the environment to shape general self-efficacy. General self-efficacy is also relatively stable over longer periods but is flexible over the short term. This implies is that individuals' sense of general self-efficacy fluctuates across time as they interact with their environment (Schenkel et al., 2014). Whether general self-efficacy is improved or diminished will depend on the cues the entrepreneur gets from the environment. If the environment is accommodative and enabling, the entrepreneur may experience an increase in general self-efficacy. However, the inverse is also true. A hostile business environment may lead to diminished general self-efficacy (Newman, Obschinka, Shwarz, Cohen & Nielsen,2019).

General self-efficacy is the belief held by individuals that they have the necessary skills and knowledge to create a new business venture. General self-efficacy is grounded in social cognitive theory (Bandura, 1977), which explains that individuals' beliefs play a role in their ability to implement control within and over their environment. In order to complete a range of challenging tasks, individuals need a strong belief in their

general self-efficacy, which can therefore be regarded as a prerequisite for success in entrepreneurial activities (Liguori et al., 2020).

Research has shown that general self-efficacy determines entrepreneurial results such as the creation, growth, and performance of a business (Schmitt, Rosing, Zhang, & Leatherbee, 2017). Schenkel et al. (2014) state that general self-efficacy is a reflection of individuals' belief system regarding their ability to recognise opportunities, and to persevere through these obstacles. According to Schenkel et al. (2014), individuals who have a high belief in their own abilities are likely to hold the perception that the probability of their failure is low, and they will gravitate towards challenging situations. Their focus is reward, recognition, profit, and fulfilment. On the other hand, individuals who have a low level of general self-efficacy will view challenges as too risky or unlikely to be overcome. They have a fear of failure, with the result that they are unlikely to view entrepreneurship as an enticing career (Schenkel et al., 2014).

Based on the above, the following hypothesis was formulated.

H7: General self-efficacy is positively related to entrepreneurial intent.

In the context of starting a new business, general self-efficacy refers to an individual evaluation of their own ability to succeed and start a new venture. Therefore, individuals with a higher degree of general self-efficacy are expected to have a higher degree of perceived feasibility related to the behaviours required for entrepreneurship (Schlaegel & Koenig, 2014). In Ajzen's (1991) Theory of Planned Behaviour, general self-efficacy is strongly related to perceived behavioural control.

According to Mouselli and Khalifa (2017), general self-efficacy is at the centre of both Azjen's (1991) theory of planned behaviour and Shapero's (1992) Entrepreneurial Event Model (EEM), as both are based on the feasibility of specific behaviours. Mouselli and Khalifa (2017) state that general self-efficacy is a mediator between entrepreneurial intent and the likelihood of it leading to action.

Ajzen (1991) posits that perceived behavioural control is closely related general self-efficacy, as it concerns individuals judging how well they would be able to execute an action, much like perceived behavioural control, which concerns perceiving an activity as easy or difficult, and anticipating obstacles. In terms of establishing a business, if

individuals believe they can complete the necessary tasks (general self-efficacy), they may feel more in control of the behaviours required to start the business (Shook & Bratianu, 2010). In short, general self-efficacy gives nascent entrepreneurs the confidence to engage in behaviours that are essential to start and manage a successful business.

According to Parkinson, David, and Rundle-Thiele (2017), perceived behavioural control concerns individuals' perception of their ability to perform a certain behaviour based on an individual's environment. General self-efficacy, on the other hand, concerns an individual's perception of being able to perform the desired behaviour. Parkinson et al. (2017) further differentiate the two constructs by arguing that general self-efficacy is primarily a reflection of internal factors, whereas perceived behavioural control is related to both internal and external factors. Perceived behavioural control can be explained as the magnitude of the performance being dependent on the individual. General self-efficacy is related to the ease or difficulty of performing a behaviour (Parkison et al.,2017). Perceived behavioural control can be further broken down into two parts: the expectancy of the outcome whether the individual is able to perform the behaviours required to achieve the desired outcome (Parkinson et al., 2017).

Based on the above, the following hypotheses were formulated.

H8: General self-efficacy is positively related to perceived behavioural control.

H9: The relationship between general self-efficacy and entrepreneurial intent is mediated by perceived behavioural control.

According to Anjum et al. (2018), research conducted by Isiwu and Onwuka (2017) found a positive relationship between general self-efficacy and attitude towards the behaviour, which, in turn, is a predictor of entrepreneurial intent.

Thus, if an individual has a positive attitude towards the behaviour of becoming an entrepreneur, general self-efficacy will increase the intent of that individual to become an entrepreneur (Nowinski & Haddoud, 2018). In a study by mentioned by Nowinski and Haddoud (2018), it was found that, if students perceived personal or financial obstacles, it negatively impacted their willingness to take part in entrepreneurial

activities. The inverse would also be true. If individuals have a positive attitude towards entrepreneurship, it may lead to general self-efficacy. The positive general self-efficacy, in turn, leads to a positive attitude towards entrepreneurship.

Based on the above, the following hypothesis was formulated.

H10: A positive reciprocal relationship exists between general self-efficacy and attitude towards the behaviour.

2.3.4 Perceived Social Support

Klyver et al. (2018) state that nascent entrepreneurs are surrounded by social structures that either enhance or restrict their entrepreneurial intentions. Hasan, Afzal, and Parveen (2011) define perceived social support as the perception that individuals have of the support they received from family, friends, significant others, and the broader society. According to Klyver et al. (2018), the actual materialisation of social support is not what is important; the value lies in the perception of social support.

Social support theory explains how social support impacts "health, happiness, and longevity of life" (Klyver et al., 2018, p. 711). Social network theory focuses on explaining behaviours and outcomes within a social environment, including how social support is obtained from social networks (Klyver et al., 2018). It is more likely that an individual would receive social support when the social norms of the society in which the entrepreneur operates or of which the entrepreneur is a member of, are not violated by their entrepreneurial actions (Will, York, & Pacheco, 2018). Social support is, therefore, the degree to which the entrepreneur's *need for affection, esteem, security, identity, and belonging* is met through interactions with the social environment and networks, which can consist of family, friends, neighbours, colleagues, and peers (Klyver et al., 2018).

Social support is important, as it is an indication of the value of an individual within a society. This determines if the individual is accepted, valued, and cared for, and that they form part of the social network. Entrepreneurs typically receive more support for their ventures in cultures where entrepreneurship is valued. Perceived social support

also creates a feeling of security that allows individuals to make sound decisions (Younis et al., 2019).

According to Schumtzler, Andonova, and Diaz-Serrano (2018, p. 2), entrepreneurship "is understood as a social phenomenon." This means that the founding of a new business venture can be supported by social interactions, social networks, social capital, and family and household interactions, as well as employers, mentors, peers, and role models in an individual's life. Entrepreneurs benefit from their social environment through information sharing, advice, knowledge, and resources (Schumtzler et al., 2018). Schumtzler et al. (2018) posit that a potential entrepreneur will view fellow entrepreneurs as role models. They therefore become key influencers to that individual. Nascent entrepreneurs attach great value to relationships with other entrepreneurs and the resultant social value and prestige.

According to Wills (1985, 1991) social support includes whether the entrepreneurs perceive that that the social support is ongoing and that they will be assisted by their network if the need arises. Social support can take the form of emotional support; tangible support, such as financial support; the sharing of information; and relationships with friends, family, neighbours, and the community. When the society around the entrepreneur holds negative attitudes towards entrepreneurship, the individual may not engage in entrepreneurial actions regardless of any ambitions to become an entrepreneur (Farooq, 2018). When entrepreneurs experience high levels of social support, they typically report increased confidence levels, which has a direct positive impact on entrepreneurial intention (Farooq, 2018). Given the numerous challenges associated with entrepreneurship, social support plays an important role in buffering negative effects and building the resilience of entrepreneurs (Farooq, 2018).

A study conducted by Pruett in 2009 on a sample of American, Spanish, and Chinese university students found a strong relationship between the support of family and friends and entrepreneurial intentions, as family and friends are mostly likely, based on close bonds, to assist the entrepreneur in overcoming failures or mistakes (Molino, Dolce, Cortese, & Ghislieri, 2018). Aragon-Sanchez, Baixauli-Soler, and Carrasco-Hernande (2017) term the social value of relationships 'cultural capital' and posit that it is based on this capital that children of entrepreneurs are likely to also become

entrepreneurs. Typically, children are exposed to the entrepreneurial environment, and when their parents retire, they take over the business and try to expand it, leading to further exposure (Aragon-Sanchez et al., 2017).

Role models also exert social influence on individuals' intentions to take part in entrepreneurial activities. This influence can be explained by Bandura's (1977) social learning theory, which holds that learning takes place in a social setting, either in the form of direct experience, or by simply observing and interacting with family members, friends, and peers.

Based on the above, the following hypothesis was formulated.

H11: Perceived social support have a positive relationship with entrepreneurial intent.

Aragon-Sanchez et al. (2017) found that children who have close relations with family members who are successful entrepreneurs or business owners, have higher levels of perceived control and a positive attitude towards the behaviours related to entrepreneurial activities. According to Nowinski and Haddoud (2018), role models have a positive effect on attitude towards the behaviour, as they arouse positive emotions in individuals who identify with them. The more individuals believe they will receive support, the more they will feel a sense of obligation to converting attitudes into behaviour. Thus, support encourages entrepreneurial activities (Nowinski & Haddoud, 2018).

Carr and Sequeria (2007) posit that individuals' beliefs about their future and possible career are influenced by their past experiences and the attitudes of their parents, friends, peers, and teachers, thereby supporting the view of the importance of the social environment. Early socialisation plays an important role in the formation of these beliefs and attitude towards entrepreneurship (Carr & Sequeria, 2007). Learning through observation has an influence on the personality of the young individual, as well as the attitudes formed. This in turn influences entrepreneurial intention (Zapkau, Schwens, Steinmetz, & Kabst, 2015).

Zapkau et al. (2015) explain that individuals are exposed to their parents' behaviours from a young age. These behaviours play an important role in the formation of

children's attitudes. The more relevant and credible the role model is, the stronger the effect of that role model on the child will be. Children internalise what they learn from their parents, which, in turn, influences the decisions they make later in life, including their career decisions. Thus, the combination of social support for entrepreneurial activities and positive role models has a positive impact on children's attitude towards such activities (Zapkau et al., 2015).

In the current study, in addition to the above, attitude towards the behaviour was expected to mediate the relationship between perceived social support and entrepreneurial intention. The following hypotheses were therefore formulated.

H12: Perceived social support have a positive relationship with attitude towards the behaviour.

H13: The relationship between perceived social support and entrepreneurial intention is mediated by attitude towards the behaviour.

2.3.5 Subjective Norms

According to Rhodes et al. (2002), perceived social support is a stronger motivating influence than subjective norms. The difference between the two constructs is conceptual in nature (Rhodes, Jones, & Courneya, 2002).

Parents who are entrepreneurs may value the continuity of their business ventures. They may therefore pressure their children to become entrepreneurs. In addition, it is very likely that the entrepreneurial drive of entrepreneurs who associate and form social bonds with other entrepreneurs will be strengthened through social pressures and social norms. This strong influence through social pressures is likely to lead to strong feelings of entrepreneurial intent because the act of pursuing your own venture is clearly supported by your family (Zapkau et al., 2015). This may in turn lead to a stronger feeling of *perceived social support* This relationship is probably mutually reinforcing, but the direction of causality is probably from subjective norms to perceived social support.

Rhodes et al. (2002) posit that subjective norms influence the behaviours of individuals. For behaviours to occur, individuals need to know that the behaviours will

be approved by those they deem important in their lives. Regarding perceived social support, individuals have to be convinced that they will receive support for their behaviours (Rhodes et al., 2002).

Based on the above, the following hypothesis was formulated.

H14: Subjective norms have a positive relationship with perceived social support.

2.3.6 Financial Risk

Entrepreneurship requires taking calculated risks, which consists of three aspects, namely risk preparedness, risk perception, and propensity to take risks. Perceptions relate to how sensory information is received, then structured, classified, and understood in order to comprehend its immediate environmental and wider societal impact (Ojiako, Chipulu, Marshall, & Baboolall, 2014).

Entrepreneurial risk perception is the assessment by individuals of the expected outcome if they engage in entrepreneurial activities. Individuals evaluate the probability and controllability of the risks associated with a new business venture and whether they have the confidence to overcome obstacles. The perceived risk therefore influences the intention to become an entrepreneur (Nefzi, 2018).

Nabi and Linan (2013) categorise risk perception into two elements: risk as opportunity and risk as threat. Risk being viewed as an opportunity occurs when individuals do not want to miss out on an opportunity or forfeit the potential utility of an opportunity. Thus, a direct relationship exists between risk opportunity and entrepreneurial intent and, ultimately, behavioural intent (Nabi & Linan, 2013).

According to Nabi & Linan (2013), The second element of risk perception is risk as threat. This informs the possible downside of entrepreneurial activities. There is a direct link between risk as a threat and entrepreneurial intent. When risk as a threat increases, entrepreneurial intent decreases. This is due to the uncertainty it creates (Nabi & Linan, 2013).

Financial risk refers to the possibility that a business will not be able to satisfy its financial obligations. This risk is what an entrepreneur would need to take to finance a new venture, rather than risk associated with the operations of the business (Guzman, 2015). In Europe, the greatest financial risks are currency risk and liquidity risk. Any business risk is intensified by financial risk (Belás, Dvorský, Kubálek, & Smrčka, 2018).

Individuals associate risk with loss and uncertainty. This influences their decision to become an entrepreneur. If individuals believe that the chance of success is low or that substantial losses are likely in the creation of a new venture, they will not pursue the opportunity. Conversely, when an individual believes there might probably be gains, their risk perception is low, and they consider the probability of loss manageable (Robinson & Marino, 2015).

Lack of capital, lack of access to funding, lack of the ability to take risks, and lack of experience and technical knowledge have been found to be the most significant barriers to entrepreneurship (Kozubíková, Belás, Bilan, & Bartoš, 2015). External financial sources of funding such as banks are hesitant to fund entrepreneurs (Freel, Carter, Tagg, & Mason, 2012).

Based on the above, the following hypothesis was formulated.

H15: Financial risk have a negative relationship with entrepreneurial intent.

Robinson and Marino (2015) define risk perception as a means in which individuals make sense of a situation when faced with uncertainty regarding the likely outcomes. Therefore, perceived risk has an influence on perceived behavioural control.

Based on the above, the following hypothesis was formulated.

H16: Financial risk have a negative relationship with perceived behavioural control.

Nabi and Linan (2013) suggest that individuals who perceive risk as an opportunity, have a greater sense of control over their actions. Those who perceive risk as a threat, experience anxiety due to a lower sense of perceived behavioural control. This in turn lowers their entrepreneurial intent.

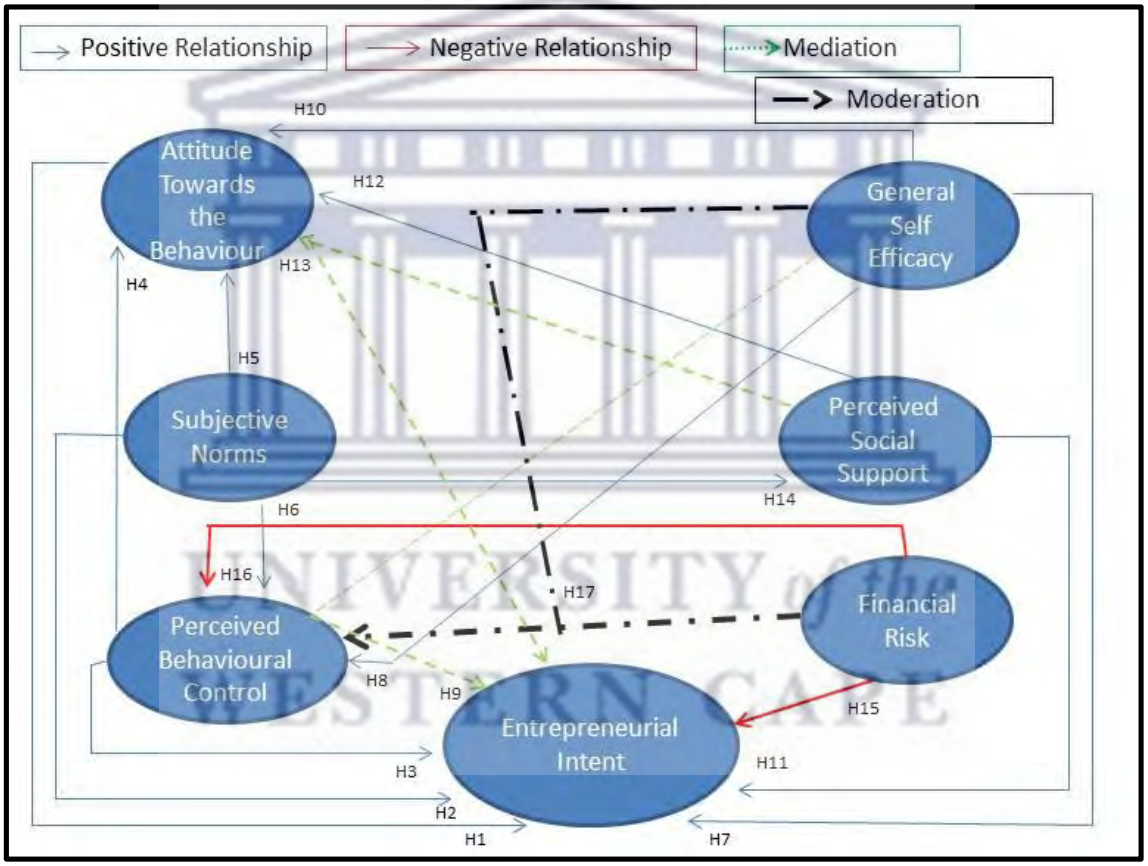
Based on the above, the following hypothesis was formulated.

H17: The relationship between financial risk and perceived behavioural control is moderated by general self-efficacy.

A summary of the hypotheses is presented the conceptual theoretical model in Figure 1.

Figure 1

Conceptual Theoretical Model



2.4 SUMMARY

This chapter discussed the research aim and objectives and the problem statement, related extant literature, and the research questions. Hypotheses were formulated based on related literature discussed. The discussion of the literature included the motivational and contextual factors that influence the entrepreneurial intention of nascent entrepreneurs. It was followed by a theoretical model that was developed.

The model showcased the variables that shape entrepreneurial intent of nascent entrepreneurs as well as the relationships proposed in the hypotheses. It illustrated direct, indirect, moderating, and mediating relationships between general self-efficacy, perceived social support, perception of risk, and entrepreneurial intent. The next chapter discusses the methodology followed in conducting this study.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 INTRODUCTION

The current chapter describes how the problem statement will be addressed, and the hypotheses tested More importantly the methodology utilised in the study, including the approach and design, the population, sampling, the realised sample, the methods of data gathering and analysis, and the ethical considerations, will be discussed in greater detail.

3.2. PROBLEM STATEMENT

The problem statement is the dilemma or phenomenon that needs to be addressed and answered once the research study is complete (Blumberg, Cooper, & Schindler, 2011).

Personal factors that drive individuals to start their own business has been researched extensively. The most prominent factors that shape entrepreneurial intent are McClelland's (1985) Need for Achievement theory; and Locus of Control derived from Rotter's (1966) Social Learning Theory and Autonomy.

The main push and pull factors that drive entrepreneurial intent may be ineffective if there is no clear understanding of how these factors can lead to individuals starting their own business. Entrepreneurial activity as discussed in the preceding sections is of vital importance to revitalise an economy in order to reduce the high rate of unemployment.

This study aims to answer the problem statement through the following research questions:

- What is the role of self-efficacy on entrepreneurial intent on nascent entrepreneurs?
- What is the role of perceived social support on entrepreneurial intent on nascent entrepreneurs?

- What is the role of risk perception on entrepreneurial intent on nascent entrepreneurs?

- What motivational, and contextual factors influence entrepreneurial intentions of nascent entrepreneurs.

3.3 RESEARCH AIMS AND OBJECTIVES

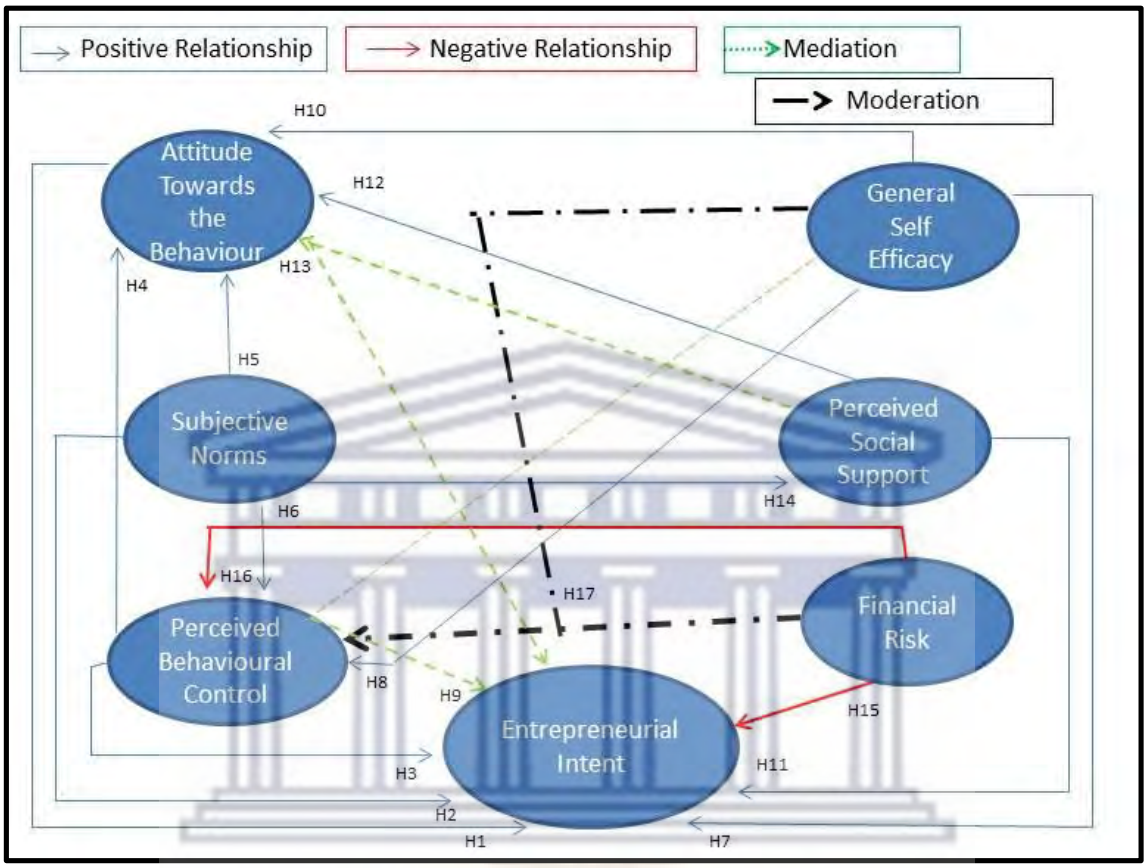
Research aim and objectives indicate what the reason for the research study is. It is a layout of what is planned for the proposed research (Blumberg et al., 2011).

This study is aimed at determining how to unlock entrepreneurial capabilities in order to meet the global challenges of the 21st century. The primary objective of this study will focus on the motivational and contextual processes that lead to entrepreneurial intent on nascent entrepreneurs. More precisely, this study will determine the role of self-efficacy, perceived social support, and risk perception on the entrepreneurial intent of nascent entrepreneurs. A secondary objective of this study is to develop a theoretical model of the motivational and contextual factors that illustrates the variables that shape entrepreneurial intent of nascent entrepreneurs. In this regard the theoretical model can be empirically envisaged on two levels. Firstly, the global level in terms of the model fit. Secondly on the more granular level of specific hypotheses.

Various hypotheses were formulated and are depicted in the graphical model presented in Figure 2. Each of the relationships presented in the model can be regarded as a separate substantive hypothesis.

Figure 2

Conceptual Theoretical Model



- H1: Attitude towards behaviour have a positive relationship with entrepreneurial intentions.
- H2: Subjective norms have a positive relationship with entrepreneurial intention.
- H3: Perceived behavioural control have a positive relationship with entrepreneurial intention.
- H4: Perceived behavioural control have a positive relationship with attitude towards the behaviour.
- H5: Subjective norms have a positive relationship with attitude towards the behaviour.

- H6: Subjective norms have a positive relationship with perceived behavioural control.
- H7: General self-efficacy is positively related to entrepreneurial intent.
- H8: General self-efficacy is positively related to perceived behavioural control.
- H9: The relationship between general self-efficacy and entrepreneurial intent is mediated by perceived behavioural control.
- H10: A positive reciprocal relationship exists between general self-efficacy and attitude towards the behaviour.
- H11: Perceived social support have a positive relationship with entrepreneurial intent.
- H12: Perceived social support has a positive relationship with attitude towards the behaviour.
- H13: The relationship between perceived social support and entrepreneurial intention is mediated by attitude towards the behaviour.
- H14: Subjective norms have a positive relationship with perceived social support.
- H15: Financial risk have a negative relationship with entrepreneurial intent.
- H16: Financial risk have a negative relationship with perceived behavioural control.
- H17: The relationship between financial risk and perceived behavioural control is moderated by general self-efficacy.

3.4 RESEARCH PHILOSOPHY

This study was based in positivism, which is widely used in quantitative research. This philosophy is concerned with understanding events through measurements of, as in this study, relationships between the independent variable and dependent variables

through causal inferences (Maksimović & Evtimov, 2023). Positivism allows the researcher to understand the topic under study through empirical testing of data gathered using questionnaires or discussions. In following a positivist philosophy, scientific protocol is employed, in which only the behaviours that are linked to the hypotheses are examined (Hudson & Ozanne, 1988).

3.5 RESEARCH APPROACH AND DESIGN

The research design can be regarded as the plan followed by the researcher to operationalise and empirically test the proposed substantive research hypotheses. A appropriate research design enhances confidence in the results of a study and allow other researchers to replicate the study in other settings (Blumberg et al., 2011). The design includes selecting appropriate approach, sampling respondents from the population, the method to gather high-quality data, and the method of analysis, all in alignment with the underlying research philosophy, to ultimately answer the research questions (Maree, 2016).

To achieve the research objectives, this study followed a quantitative approach and correlational *ex-post facto* research design, in which the researcher is not able to manipulate the independent latent variables, thereby preventing bias (Blumberg, et al., 2011). Quantitative research is a systematic and objective process of analysing numerical data from a sample to generate results that are generalisable to the population being researched (Maree, 2016). The use of *ex-post facto* design is suitable for testing hypotheses of correlational relationships between variables, as it "begins with groups that are already different in some respect and searches in retrospect for factors that brought about those differences" (Simon & Goes, 2013, p. 1). The main limitation of the design is that the sample cannot be classified as random, which may limit generalisation of the results (Simon & Goes, 2013).

3.6 POPULATION AND SAMPLING

3.6.1 Population

A population Is the total group of units of analysis about which the research wishes to draw inferences (Blumberg et al., 2011). In this study, the population was nascent

entrepreneurs, i.e., individuals who have the intention to become an entrepreneur or who had recently started a new business venture, who were located in the Western Cape province of South Africa. According to Ranatunga, Priyanath, and Megama (2020), a minimum sample size between 100 and 400 is suggested. As a rule of thumb, in order to perform Structural Equation Model analysis, a sample size of 100 to 150 is acceptable (Ranatunga et al., 2020). The researcher therefore made the decision to collect a sample of at least 200 nascent entrepreneurs due to the absence of published data making it difficult to estimate the population size of nascent entrepreneurs.

3.6.2 Sampling and sample size

A sample is a sub-set of the population under study (Blumberg et al., 2011). The larger the sample, the better the population will be represented and the more accurate the results will be. In turn a sample that is too small will be unable to provide statistical power in answering research questions (Andrad, 2020). In this study, non-probability convenience sample was used to select respondents for participation. Non-probability sampling means not every member of the sample has an equal chance of being selected for participation; thus, the results of the study cannot be generalised to the larger population (Blumberg et al., 2011). In using convenience sampling, the researcher selected respondents who were easily accessible. Two inclusion criteria were employed: Respondents had to: a) be over the age of 18 years and b) have started or have ambitions to start their own business.

The questionnaire was formatted into an online survey namely Google Forms that was sent to individuals via email and messaging services. Hard copies were printed and dispersed to various companies and individuals. It is therefore not known how many individuals were reached. A total of 71 respondents completed the online survey. The researcher personally contacted 13 additional respondents who met the inclusion criteria. The researcher collected the completed hard copies of the survey. The final sample size was thus 84 respondents.

Characteristics of the sample.

Most of the respondents were women (63.1%); only 31% were men. The age of the respondents ranged from 18 years to 91 years. All respondents resides in South Africa. Most of the respondents were born in South Africa (90.5%), followed by Zimbabwe (6%), and Nigeria and Tanzania (1.2% each), with one missing item. Most of the respondents indicated their race as Coloured (73.8%), followed by black African (13.1%), white (9.5%), and Indian (2.4%). Approximately, 1.2% of the respondents did not indicate their race class. A total of 57.8% of the respondents were married, and 31.3% were single, while approximately 4.8% were divorced and 3.6% were widowed. In total, 79.5% of the respondents indicated that English was their home language, followed by Afrikaans (9.6%).

In terms of employment, 82.1% of the respondents had family members who were entrepreneurs, while 17.9% did not. With regard to formal qualifications, most of the respondents held a bachelor's degree (24.4%), 14.5% had completed Grade 12, 13.3% held a certificate, 12% held a diploma, 10.8% held an honours degree, 16.9% held a Master's degree, and 4.8% held a doctorate; 3.6% indicated "Other".

The contents of the survey are discussed in the next section.

3.7 MEASURING INSTRUMENTS

3.7.1 Entrepreneurial Intent Questionnaire

Linan and Chen (2009) developed a questionnaire based on Schwartz's (1992) Model of Values Questionnaire (PVQ) (Schwartz, Cieciuch, Vecchione, Davidov, Fischer, Beierlein, Ramos, Verkasalo, Lönnqvist, Demirutku, Dirilen-Gumus & Konty (2012). It pertained to a research project titled the VIE project. The project was based on theoretical concepts with its main focus on psychological and sociological elements. Socialisation processes includes beliefs of a person, their attitudes as well as their intentions. These are influenced by their environment.. Constructs from the Theory of Planned Behaviour were incorporated into the VIE project. Only core items from the PVQ pertaining to *attitude towards the behaviour, subjective norms, and perceived behavioural control* were included in the VIE project (2009). The VIE project

questionnaire developed included values, motivations and intentions of potential entrepreneurs. For the purpose of this study, items pertaining to values were excluded as it did not form part of the theorical model that was conceptualised and tested in the current study.

Entrepreneurial intent was measured using the following sub-scales based on the VIE questionnaire:

Attitude towards behaviour: The items were measured on a seven-point Likert scale ranging from *0* to *6*. The Attitude Towards Behaviour Scale comprised two sets of six items, with a high score indicating a positive attitude. For example, Section A contained the item: "For you, starting a new business (becoming an entrepreneur) would involve…", with response options ranging from "Totally unlikely" (*0*) to "Totally agree" (*6*). Section B focused on desirability, e.g., "Please state to what extent these are desirable for you generally in your life", with response options ranging from "Not at all desirable (*0*) to "Totally desirable" (*6*). The first items of Section A and Section B were then averaged to calculate the total score for *Attitude towards behaviour* (entrepreneurial behaviour).

Subjective norms were measured using the following sub-scales based on the VIE questionnaire. The sub-scale comprised two sets of three items, namely social norms and social valuations. The items in social norms and social valuations were averaged to calculate the score for *Subjective norms.*

Social norms: contained the Social Norms Scale and all three items were included. An example of an item is: "Think now about your family and closer friends. To what extend would they agree if you decide to become an entrepreneur and start your own business?", with the response options ranging from "Totally disagree" (*0*) to "Totally agree" (*6*).

Social valuations contained the Social Valuations Scale, and all three items were included. An example of an item is: "Thinking about your family and closer friends, how do you value the opinion of these people in this regard?", with response options ranging from "Not at all important" (*0*) to "Very important" (*6*).

Perceived behavioural control contained six items of the General Self-efficacy (GSE) Scale. Many researchers use perceived behavioural control and general self-efficacy interchangeably (Krueger, Reilly, & Carsrud, 2000; Moriano, 2005; Van Gelderen et al., 2008). However, as noted earlier, the constructs were distinguished for the purpose of this study. High scores thereby indicated high levels of perceived behavioural control. Examples of items are: "Defining my business idea and a new business strategy" and "Creating and putting into operation a new venture", regarding which respondents had respond on a scale ranging from "Totally ineffective" (*0*) to "Fully effective" (*6*), with a high score indicating high perceived behavioural control.

Entrepreneurial intent contained five items (in Section F). Examples of items are: "It is very likely that I will start a venture someday" and "My professional goal is to be an entrepreneur", with response options ranging from "Nothing" (*0*) to "Very important" (*6*). A high score indicated strong entrepreneurial intention (Linan & Chen, 2009).

Confirmatory factor analysis was performed to assess the reliability and validity of the scales. Composite reliability (*Pc*) of the scale was used in order to determine the reliability and the validity of the scale. This is shown in Table 3.1. Internal consistency is a similar way to Cronbach's alpha in testing for reliability. However, Cronbach's alpha adopts the assumption that all indicators in the measure are equal, whereas *Pc* ranks these indicators according to how reliable they are, which, in turn, creates a more reliable combination (Henseler, Ringle, & Sinkovics, 2009). The cut-off value for *Pc* is 0.70, and a value below 0.60 is indicative of a lack of reliability (Nunnally, 1978). The authors reported that the *Pc* scores of the Attitude Towards Behaviour Scale, the Subjective Norms Scale, the Perceived Behavioural Control Scale, and the Entrepreneurial Intent Scale were all above 0.70 (0.82-0.96), thus indicating high reliability (Linan & Chen, 2009).

Table 3.1

Summary of Reliability Coefficients per Scale/Sub-scale

Individual loadings (λ), Composite Reliabilities (pc) and AVE

Construct	*Indicators*	*λ*	*AVE*	*ρ_c*
Attitude	A1	.79	.50	.82
	A2	.58		
	A3	.68		
	*A4**	*.50*		
	A5	.68		
	A6	.68		
Subjective Norm	SN1	.85	.70	.87
	SN2	.88		
	SN3	.76		
Entrepreneurial Self-Efficacy	ESE1	.82	.66	.92
	ESE2	.82		
	ESE3	.80		
	ESE4	.80		
	ESE5	.77		
	ESE6	.86		
Entrepreneurial Intention	I1	.92	.70	.96
	I2	.93		
	I3	.94		
	I4	.91		

3.7.2 General Self-efficacy

General self-efficacy was measured using the 10-item Generalized Self-efficacy Scale (GSE) of Bandura (1977), as adapted by Jerusalem and Schwarzer (1995). All 10 items of the scale was used. Examples of items are: "I can always manage to solve difficult problems if I try hard enough", "It is easy for me to stick to my aims and accomplish my goals", and "Thanks to my resourcefulness, I know how to handle unforeseen situations". Respondents rated the items on a four-point rating scale ranging from "Not at all true" (*1*), "Hardly true" (*2*), "Moderately true" (*3*) to "Exactly true" (*4*). The score ranged from 10 to 40, with a higher score indicating higher levels of general self-efficacy (Schwarzer & Jerusalem, 1995).

Previous studies conducted by Schwarzer, Mueller, and Greenglass (1999) confirmed the GSE scale's having high reliability and construct validity. Internal reliability was

reported at between .76 and .90 (Luszcynska, Scholz, & Schwarzer 2005; Schwarzer & Jerusalem, 1995). The validity of the GSE Scale confirmed that the scale correlated with emotion and optimism, as well negative coefficients for depression, burnout, and anxiety (Schwarzer & Jerusalem, 1995).

3.7.3 Perceived Social Support

Perceived social support was measured using the 12-item Multidimensional Scale of Perceived Social Support (MSPSS) developed by Dahlem, Walker and Zimet (1991). The scale was broken down into three subscales namely, Family, Friends, and Significant Other. Each subscale contained four items. All 12 items of the scale was used. Respondents scored the items on a seven-point rating scale ranging from "Very strongly disagree" (*1*) to "Very strongly agree" (*7*). Examples of items are: "I can talk about my problems with my family", "I can talk about my problems with my friends", "There is a special person in my life who cares about my feelings", and "My family really tries to help me" (Dahlem et al., 1991). A high sum of the 12 items indicates high levels of *Perceived social support*.

Previous studies have shown that the MSPSS has strong internal reliability, with a Cronbach alpha score ranging between .93 and .98. The stability of the test was also tested, using the test-retest procedure, and strong correlations between the two tests occasions were stable over time, with scores ranging between .72 and .85 (Hardan-Khalil & Mayo, 2015). According to Hardan-Khalil and Mayo (2015), the MSPSS was examined in diverse settings. The developers of the measure, Dahlemt et al. (1991), reported the scale's moderate divergent validity in a study of 275 undergraduates. According to Basol (2008) and Dahlem et al. (1991), the validity of the scale was established across many different samples, such as older adults, service workers, doctors, and pregnant women. Validation studies also included cultural studies of Turkish university students, psychiatric patients, and Chinese adolescents.

3.7.4 Financial Risk

Perception of risk is measured using the 30-item Domain-specific Risk-taking (DOSPERT) Scale developed by Blais and Weber (2006). The scale measures risk through five sub-scales, namely Ethical Risk, Financial Risk, Health/Safety Risk,

Social Risk, and Recreational Risk. For the purpose of this study, the subscale Financial Risk was employed, as research determined that this is the greatest risk that entrepreneurs have to consider (Belás, Dvorský, Kubálek, & Smrčka, 2018). Six items from the financial risk-taking subscale was used. Respondents were asked how they perceived risk per item. An example of an item is: "Betting a day's income at a high-stake poker game", with response options ranging from "Not at all" (*1*) to "Extremely risky" (*7*). High scores indicate the perception that the risk is great (Blais & Weber, 2006).

The DOSPERT Scale's internal consistency reliability (Cronbach alphas) were reported to range from 0.74 to .83 for Perception of Risk (Blais & Weber, 2006).

3.8 DATA ANALYSIS

3.8.1 Missing Values and Data Screening

Preliminary data analysis was conducted using the IBM Statistical Package for Social Sciences (SPSS) Version 27.

Prior to the data analysis commencing, the data were screened for outliers, that is, "values that are well below or well above the other scores", typos, and missing values (Pallant, 2011, p. 43). Outliers that may have a spurious impact on the results were deleted from the dataset (Pallant, 2011).

In addition, the missing value analyses tool in SPSS was used to detect the number and pattern of missing data. Various reasons for missing data exist, such as respondent error, design of the study, and respondents missing an item by either ignoring it or forgetting to answer it (Long, Engelbrecht, Scherman, & Dunne, 2016). Since there were relatively few missing values (< 5%), it was decided to deal with the missing values by way of pairwise deletion. Pairwise deletion refers to where cases are excluded from the study when there is missing data that is required when certain analyses need to be conducted (Kline, 2011).

3.8.2 Inferential Statistics

This study made use of item analysis and confirmatory factor analysis. Confirmatory factor analysis was conducted means of structural equation modelling, using Mplus Version 8.6, base year 2017. The goal of confirmatory factor analysis is to confirm the measurement quality of a scale prior to including it in the structural model (Kahn, 2006). Item analyses were conducted by means of Cronbach's coefficient alpha.

3.8.2.1 Item analysis

Item analysis is used to identify which items in a scale fit or do not fit. According to Maree (2016), this type of analysis's main objective is to increase the reliability of the scale by determining if any items need to be deleted.

Internal consistency is another measure used to determine the reliability of a scale (Mirzakhani, Rezaee, Zarei, Mahmoudi, Rayegani, Shahbazi, & Haddadiniya, 2021). According to Mirzakhani et al. (2021). Internal consistency estimates the reliability by providing information that is consistent with those who responded, to determine how homogenous the responses are. Internal consistency is measured through Cronbach's alpha coefficient.

Reliability of the scales and subscales used in this study was determined using SPSS (Version 28). Cronbach's alpha coefficient was used to determine the reliability of the measures. It allowed the researcher to control which items increased or decreased the reliability of the items in the scale, to ensure that all items measured what they were supposed to measure. According to Nunnally (1967), a Cronbach's alpha of 0.70 means the scale is adequately reliable. Nunnally (1967) argues that good reliability estimates range between 0.89 and 0.80, and that excellent reliability ranges from 0.90 to 1.00. However, if there are smaller number of items in the scale (i.e., less than 10), the reliability of the estimates will be smaller than the 0.70 normative values. In additional to the overall reliability score, item–total correlations provide a good estimate of item quality, and these values should range between 0.20 and 0.40 (Nunnally, 1967).

3.8.2.2 Confirmatory factor analysis

Confirmatory factor analysis (CFA) is a useful tool when the factorial validity of a questionnaire needs to be tested. It allows for the modelling of error variance, item uniqueness testing, and determining acceptable fit of the factor structure to be tested (Veale, 2014). Given that most of the measures included in this study were well-known and validated, it was decided to use CFA rather than exploratory factor analysis to confirm the measurement quality of the scales (Kline, 2011).

CFA confirms whether a hypothesised factor structure offers a good fit to the data. The hypothesis may be theory-based, postulating relationships amongst constructs and variables (Kline, 2011).

CFA is used to perform goodness-of-fit tests between the theory and the data (Kahn, 2006). In the current study, CFA was used to determine whether the number of factors hypothesised was supported by the underlying data, which of the pattern coefficients were zero and nonzero, and the correlations between factors. CFA was also used to determine correlations amongst unique variances of the variables measured.

- Sample size

The unit of analysis amongst variables used in conducting CFA is the observed variance–covariance matrix. For the estimation in CFA to be suitable, a large sample is required. The reason for this is that the assumption for the sample covariance matrix is equivalent to the population values. The sample size required is generally more than 100 cases. The number of parameters is not as important as the size of the sample. If the estimate of the pattern coefficient is high enough, a smaller sample of 100 cases may be utilised. It is, however, best to use a bigger sample size, and it is advisable to conduct a power analysis to determine whether an adequately large sample is used (Kahn, 2006).

- Identification

Identification of the model is essential before proceeding with estimating a factor model. A lack of identification can become problematic, as several diverse estimates are probable per parameter. Model identification does not automatically occur when

using software programs that perform CFA. It is therefore important that the user of the program confirms the identification of the model because an unidentified model can result in the software not converging, or a false solution converging (Kahn, 2006).

- Model estimation

The main goal of CFA estimation is to reproduce the covariance matrix from the observed matrix with the least amount of error. Parameter estimation is mostly done using maximum likelihood (ML). The goal of ML is finding parameter estimates that would maximise the likelihood that the observed covariance matrix is indeed extracted from the population. Enhancements to the final solution are based on tentative estimates, making the ML estimation an iterative process. The ML method tests hypotheses regarding statistical significance of parameters. The results offer unstandardised estimates of parameters, together with standard errors. Satisfactory standardised factor loadings can vary between 0.4 and 0.9 in empirical research (Cheng-Hsien, 2015).

However, ML assumes multivariate normal distribution of data. Due to the non-normality of the data of the current study, it was decided to make use of robust ML (RML). RML is used when the observed variables moderately differ from the norm. RML depends less on the multivariate normal distribution assumption and chi-square tests, and standard errors are amended to boost the robustness of ML (Cheng-Hsien, 2015).

- Model parameters

According to Kline (2011), *priori* specifications are when the researcher is required to provide a lot of information regarding variables and the directions of these variables, as these reflect the hypotheses. This, in turn, makes up the model to be analysed. The main question is then, is the model proven by the data? To define the parameters of the model, a model diagram needs to be drawn or described by a set of equations. These drawings or equations then become the basis for determining the relations between observed or latent variables. Defining the model parameters is of extreme importance, as it is with these specifications that SEM would estimate the data. SEM needs to be able to develop a unique approximation of each of the parameters. If it is

unable to do so, the model is not identified. In theory, identifying is seen as a property of the model, and not of the data, that makes continuing with data analysis ineffective (Kline, 2011).

In CFA models, the standardised factor loadings and associated error terms are of interest. Typically, standardised loadings higher than 0.40 are acceptable (Phakiti, 2018), but higher values are preferable (Jöreskog & Sörbom, 1996).

- Evaluating model fit

Considerable research has been dedicated to the topic of SEM model fit (Hu & Bentler, 1995, 1998, 1999; Kline, 2005, 2011). Goodness-of-fit indices answer the question: 'How valid is the proposed model?' Assessing the fit of SEM models is complicated, since there is no single test statistic that best describes the goodness-of-fit of the proposed model relative to the reproduced model (Marsh, Hau, & Wen, 2004a). Best practice convention dictates using a combination of fit indices in order to gain an overall idea of how well the proposed model fits the data (Hair, Black, Babin, Anderson, & Tatham, 2006; Marsh et al., 2004b). Model fit should be evaluated on three levels: overall fit, comparative fit to a base model, and model parsimony (Hair et al., 2021). Muthén and Muthén (2010) suggest that at least one index from each of these three categories be reported in SEM results.

Absolute goodness-of-fit indices are the basic estimation of how well the model proposed can reproduce the observed data. These measures do not make comparisons to other models; instead, each model is analysed independently (Hair et al., 2006). In this study, the following absolute goodness-of-fit measures were considered: the Tucker-Lewis index (TLI), the comparative fit index (CFI), and the standardised root mean-squared (SRMR).

The TLI (also referred to as the 'non-normed fit index') and CFI are not impacted by the size of the sample. For both these indices, the improvement in fit can be estimated in a null model when all variables are uncorrelated. These models provide an exceptional fit to the data in comparison to a null model. Conceptually, these two indices are similar. They do, however, make different kinds of corrections in terms of sample size and the complexity of the model. The statistics of these models range

between 0 and 1, and research suggests that a good model fit is indicated by a value of 0.95 (Kahn, 2006).

The SRMR index makes use of the average of standardised residuals amongst the elements of the observed and model-implied covariance matrix. Values that indicate a good fit range between 0 and 0.08. Therefore, values greater than 0.10 may be indicative of a poor fit (Kline, 2011). The root mean square error of approximation (RMSEA) measures the fit amongst the actual and the model-implied covariance matrix, and also adjusts for model complexity. Values that indicate a good fit range between 0 and 0.06. RMSEA values of 0 indicates perfect model fit (Kline, 2011). An additional advantage of the RMSEA is that it provides confidence intervals, ensuring that a test of not close fit and a significant result would indicate a model with good fitting. An advantage of using the TLI, CFI, SRMR, and RMSEA is that they result in lower rates of Type II errors (Kahn, 2006).

- Residual analysis

Residuals are the differences between observed and predicted covariances (Hildreth, 2013). Residual analysis allows the researcher to estimate the error variance for the entire model, as well as the data, which is not easily discernible in the raw data. Residual analysis provides important diagnostic information about the fit of the structural model to the data. Highly correlated residuals may indicate sources of misfit on the misfit on the measurement and structural component of a SEM model. The percentage of non-relevant item variance is reflected by the standardised residual variance (θδii) (Kaplan, 2000). This means that the standardised error variance contains both the systematic variance and random error variance. It can then be confirmed that the scores of the squared multiple correlations (λ2y) can be clarified as variable validity coefficients ($\rho[Y_i,\eta_j]$) that show how the indicators represent the latent variable variance, and how well it does so (Jöreskog & Sörbom, 1996).

- Modification indices

A modification index is called a 'univariate Lagrange multiplier' (LM), named after mathematician and astronomer J. L. Lagrange. It is represented by the symbol $x^2(1)$, which is a chi-square statistic with a single degree of freedom. It estimates the amount

that X_M^2 would decrease by if a certain fixed-to-zero parameter were to be freely estimated. This means that the chi-square difference statistic, denoted by $X_D^2\,(1)$, is estimated for adding an additional path. Therefore, if the modification value is greater, the model fit has been improved (Kline, 2011).

It is recommended that the expected parameter change (EPC) be used together with the modification indices. The modification indices determine which fixed parameters would improve the model significantly. If it is freely estimated, it is shown by a decrease in χ^2. However, EPC determines how much model parameters will increase if the suggested modifications are made. If set free, modification index values that are greater than 6.64 indicate that the parameters improved the fit of the model significantly ($p < 0.01$) (Diamantopoulos & Siguaw, 2000).

3.8.2.3 Structural equation modelling

After the integrity of the measurement models has been established, the regression path between latent variables, informed by the statistical hypotheses, is tested using SEM. SEM is a sophisticated technique that allows the researcher to test various models where there are interrelationships amongst the variables. It allows the researcher to assess the significance of the independent variables and to assess if the overall model fits the data. Different models can be compared using SEM (Pallant, 2011).

SEM is a hypothesis-driven model that is made up of two sub-models: the measurement model (by CFA) and the structural model (by path analysis). The measurement model indicates the relationships between observed variables and latent variables (Stein, Morris, & Nock, 2012). Latent variables are those variables that are not measured or observed directly but indirectly, and inferences can be drawn based on the observed variables. The next step is testing the regression path between the latent variables, informed by the statistical hypotheses, using SEM. SEM is a strong statistical technique that is able to model both measurement and structural components of a theoretical model on a single platform. An added advantage is that the modelling takes place on the latent rather than the observed level. Finally, in SEM, the residual components can be separated from the common variance component in

factor scores (Tarka, 2018). Thus, the regression paths between latent variables are more realistic.

In the structural model, the correlations between independent variables are of interest, as well as the gamma and beta path coefficients. Typically, the path coefficients are used as a basis to confirm the directional hypotheses. In order for a hypothesis not to be rejected, the direction of the relationship should be (a) congruent with *a priori* theorising, (b) statistically significant, and (c) practically significant (substantial effect size) (Hair et al., 2006).

- Mediation and moderation variables

A moderator variable has an impact on the strength of the relationship between two variables (Bhandari, 2022). Kline (2016) describes the effects of moderation as conditional and symmetrical. It requires the measures of two variables in order to determine the interaction effect between the two. In the current study, moderation was tested using Mplus. A nonlinear structural equation mixture model (NSEMM) approach is used by Mplus as estimator. The advantage of modelling interactions in Mplus is that latent interaction effects can separate measurement error from common factor variance. Thus, the interaction is on the latent and not the observed level. The modelling interactions on the latent rather than the observed level lead to greater effect sizes and statistical significance (Jeon, 2015; Stein et al., 2012).

Similar to conventional notation used by Cohen et al. (2003), the predictor variable is denoted by X, the criterion variable by Y, and the moderator by Z. The interaction terms is the product of X and Z, denoted by X*Z. The moderator has a significant interactive effect on the relationship between X and Y when the product terms explain additional variance in a model that already contains the main effects (i.e., X and Y). The main effect model is depicted by Equation 1, and the interaction model in Equation 2.

Equation 1

$$Y=b_0+b_1 X+b_2 Z+e$$

Equation 2

$$Y=b_0+b_1 X+b_2 Z+b_3 XZ+e$$

A mediator or mediating variable describes the relationship between two variables. In layman's terms, it can be described as the 'go-between' of two variables. A mediator is produced by the independent variable while it has an impact on the dependent variable. There can be no relationship between the two variables without the mediator (Bhandari, 2022). Typically, mediation is tested with multiple regression; however, SEM models are able to test mediation in the latent structural model (Cheung, Cooper-Thomas, Lau, Wang, 2021). In the current study, mediation effects were specified in the broader structural model. The rationale for this was to indicate the presence (or not) of mediation effects when all other variables in the structural model were included. Testing a mediation effect on its own can lead to misleading results because the other latent variables in the broader SEM model may have an impact on the mediation effect (Hair et al., 2021)

According to Woody (2011), for mediation to exist, the following conditions need to be met:

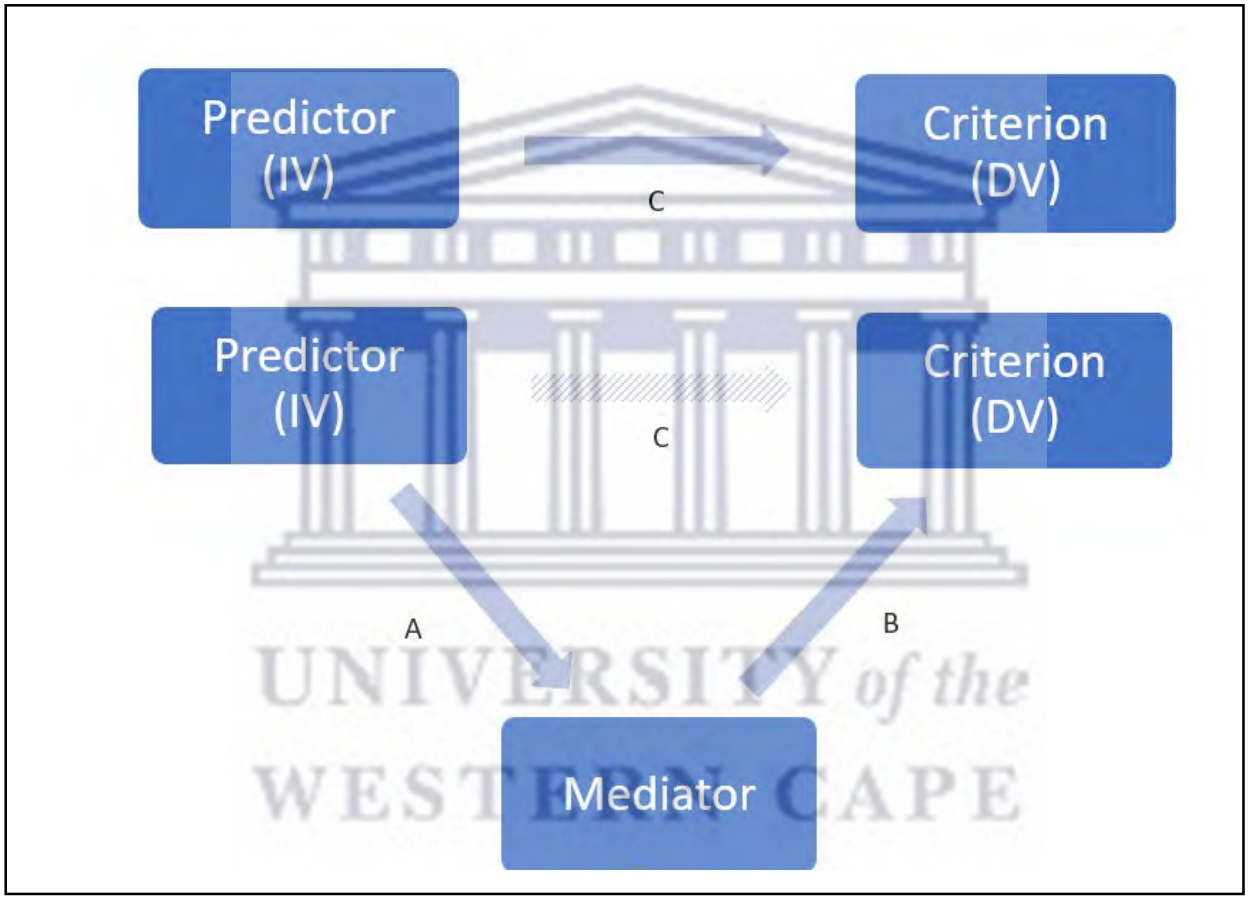
1. Path a: Variation in the hypothesised mediator needs to be explained by the predictor;
2. Path b: Variation of the criterion needs to be accounted for by the mediator; and
3. Path c: When the above two conditions have been met, a relationship between the predictor and the criterion that was previously significant will result in complete mediation (non-significance) or partial mediation (reduced significance).

Path c in the model must first be established through the use of bivariate regression analysis. This is to forecast the dependent variable (criterion) based on the independent variable. The steps following involves determining Path a by employing variable regression to predict the mediator based on the independent variable (predictor). Multiple regression analysis is then conducted to anticipate the dependent variable (criterion) using both the mediate and the independent variable (predictor).

Thus, yielding coefficients for Path b and Path c. The coefficients that were established in the steps before must be multiplied. This computation provides the coefficient that signifies the mediating effect between the dependent (criterion) and the independent variables (predictors) (Streiner, 2005). The mediation model is depicted in Figure 3.

Figure 3

Generic Mediation Model



Note: A) Direct pathway. B) Indirect pathway or mediated pathway. C) Direct pathway. Adapted from Baron and Kenny (1986)

The next section details the ethical considerations pertinent to the current study.

3.9 ETHICAL CONSIDERATIONS

Once approval to conduct the study had been received from the relevant ethics bodies of the University of the Western Cape (HS19/10/14), the survey was disseminated amongst a range of individuals who fit the criteria. The questionnaire was

accompanied by a cover letter detailing the purpose of this study, instructions for completing the questionnaire, and the rights of the respondents. All responses however were coded anonymously. The data collection procedure was guided by the following ethical considerations.

3.9.1 Informed Consent

The purpose of this study was explained to the respondents in sufficient detail by means of an information letter. Respondents had to provide written consent before proceeding to the questionnaire. Participation in this study was completely voluntary, and they were allowed to withdraw from the study at any point during data collection, without any negative consequences.

3.9.2 Right to Privacy, Confidentiality, and Anonymity

No names or personal information was collected from the respondents. Data are stored in encrypted format on a secure database, accessible only by the research and study supervisor. The results are presented in aggregate form, to further ensure anonymity.

3.9.3 Maleficence and Trauma

According to Polonsky and Waller (2010), participants can experience harm in different forms, i.e., psychological, emotional, and social. However, based on the topic under study, the risk of harm was considered low in the current study. Nevertheless, respondents were given the contact details of a registered industrial psychologist whom they could contact if they experienced discomfort.

3.10 SUMMARY

This chapter discussed the research methodology used in the study. It discussed the research philosophy, approach, and design. It included the description of the population and described the sample and how it was obtained. The chapter discussed how the data were analysed using item analysis, confirmatory factor analysis and structural equation modelling. It concluded with a section about ethical considerations.

This concludes the discussion of the methodology followed in conducting this study. The next chapter reports the results.

CHAPTER 4: PRESENTATION OF RESULTS

4.1 INTRODUCTION

The current chapter reports the results that were obtained using various statistical analyses, starting with a discussion of missing values and the results of descriptive statistics. The subsequent sections report the results of testing the hypotheses using inferential statistics.

4.2 MISSING DATA

A total of 85 hardcopy and electronic questionnaires were received. All 85 respondents met the inclusion criteria of the study; however, one respondent did not fully complete the questionnaire. This respondent's questionnaire was therefore not included in the analysis. Incomplete questionnaires typically indicate boredom or fatigue, and because the data is not missing at random, it is not prudent to estimate the missing variables (Kline, 2011). The electronic questionnaires were more complete, as respondents had to respond to an item before they were able to proceed to the next. Generally, the missing data in the hardcopy questionnaires were minimal (less than 5% in total), and, as a result, simple pairwise deletion was used to deal with the missing data (Bhandari, 2022).

4.3 INFERENTIAL STATISTICS AND DATA SCREENING

The data were inputted into SPSS Version 28 and screened for outliers and typing errors. Other than screening for out-of-range responses, it was important to test the assumptions of SEM. The most important assumptions to test before specifying CFA and the SEM model are: (a) multicollinearity and singularity, (b) multivariate normality, and (c) homoscedasticity of residuals (Phakiti, 2018). None of the scales indicated multivariate normal distributions, and it was thus decided to use RML as estimation technique. RML is relatively robust against deviation from normality of items. Furthermore, multicollinearity has an impact on the admissibility of the factor structures. At the level of the CFA models, multicollinearity is evaluated by looking at the correlations between items making up a scale or sub-scale (Zygmont & Smith, 2014). In SEM path modelling, multicollinearity is assessed at the level of the latent

variables. In other words, latent variables that are highly correlated pose a threat to the overall admissibility of the SEM model and its ability to converge to an admissible solution (Hair et al.,2021). The psi matrix was examined for multicollinearity, and the results are reported in the discussion of the CFA results of each measurement model.

4.4 ITEM ANALYSIS

The collection of data for this study was done using four instruments: Selected items from the VIE project Questionnaire; Bandura's (1977) GSE Scale; Dahlem et al., (1991) MPSS; and the Financial Risk Sub-scale of Blais and Weber (2006) DOSPERT. These are discussed below.

4.4.1 Attitude Towards Behaviour Scale

The Attitude Towards Behaviour Scale consisted of six items. New variables were created by combining two sub-dimensions in the VIE scale and averaging the two. The ATB scale showed a Cronbach alpha of 0.784, which indicated that the scale was adequately reliable. This meant that almost 79% of the variance was true variance, and 21% was random error. All the items reported good item–total correlation, which ranged from 0.429 to 0.632. According to Pallant (2001), the recommended cut-off value is 0.30. Therefore, all the items contributed to the reliability of the scale. None of the items if deleted would increase the Cronbach's alpha value; therefore, no items were deleted.

4.4.2 Perceived Behavioural Control Scale

The Perceived Behavioural Control Scale consisted of six items and had a Cronbach alpha of 0.838, which indicated that the scale was adequately reliable. This meant that almost 84% of the variance was true variance, and 16% was random error. All the items reported good item–total correlation, ranging from 0.343 to 0.730. Therefore, all the items contributed to the reliability of the scale. Upon closer inspection of the items, item DES4 had a low item–total correlation when compared to the other items, but was nevertheless above the recommended cut-off value of 0.30 (Pallant, 2001). If the item were to be deleted, the Cronbach alpha would have increased slightly, to

0.862. Given the marginal gain in the Cronbach alpha if the item were to be deleted, it was decided not to delete item DES4 in this stage of the analysis.

4.4.3 Entrepreneurial Intent Scale

The Entrepreneurial Intent Scale consisted of five items, and showed a Cronbach alpha coefficient of 0.897. This indicated that the scale was adequately reliable, and that almost 90% of the variance was true variance. Random error variance accounted for only 10%. All items except the reverse-scored item (R_E13) demonstrated strong internal consistency. Although the item total correlation of Item R_E3 was below the cut-off value of 0.30 (Pallant, 2001), deleting the item would not have increased the Cronbach alpha by much. It was therefore decided to not delete the item.

4.4.4 Multidimensional Scale of Perceived Social Support

The MPSS (Dahlem et al., 1991) consisted of 12 items, and showed a Cronbach alpha coefficient of 0.915, which indicated that the scale was sufficiently reliable. This meant that 92% of the variance was true variance, and only 8% was due to random error. All the items reported average item–total correlation, which ranged from 0.616 to 0.723. If any of the items were to have been deleted, the Cronbach alpha would have been lower than that of all the items combined; therefore, no items were deleted. All the items in the scale contribute to the reliability of the scale.

4.4.5 DOSPERT Scale — Financial Risk Perception Sub-scale

The DOSPERT Scale consisted of six risk sub-scales (Financial Risk, Health Risk, Recreational Risk, Ethical Risk, Social Risk, and Risk Perception), but only the Financial Risk sib-scale was used in the present study, as financial risk is the most important for nascent entrepreneurs. The Financial Risk sub-scale showed a Cronbach alpha of 0.681. This meant that 68% of the variance was true variance and 32% was random error.

In looking at the item–total statistics the researcher identified a possibly problematic item, Item FIN2. The Cronbach alpha would increase to 0.698 if this item were deleted, with a slight adjustment to the reliability.

In summary, most of the scales had high internal consistency reliability. Only the Financial Risk sub-scale had reliability slightly below the normative cut-score of 0.70. All the other scales demonstrated robust internal consistency reliability, as shown in Table 4.1.

Table 4.1

Summary of Reliability Coefficients per Scale/Sub-scale

Scale/Subscale	Reliability
Attitude Towards Behaviour	0.784
Perceived Behavioural Control	0.838
Entrepreneurial Intention	0.897
Perceived Social Support	0.915
Financial Risk	0.681
General Self-efficacy	0.945
Subjective Norms	0.821

The next section reports the results of the CFA of the measures.

4.5 RESULTS OF CFA OF MEASURES

4.5.1 Attitude Towards Behaviour Scale

The Attitude Towards Behaviour Scale consisted of six items. The RMSEA (0.170) was greater than the normative cut-off value of 0.08, which was indicative of poor fit. The SRMR (0.075) was smaller than 0.08, which suggested a good fit. However, the CFI (0.796) was below the cut-off value of 0.90, which indicated poor fit of the model, and the TLI (0.660) was also below the cut-off value, thus also indicating poor fit. It was decided to remove items ATB3 and ATB because they had a low standardised factor loading, compared to the other items. The results are shown in Table 4.2.

Table 4.2

Fit Indices of Attitude Towards Behaviour Scale

	Indices		
Index	**Goodness-of-fit**	**Absolute**	**Incremental**
x^2	29.520		
Df	9		
p-value	0.0005		
Scaling correction factor	0.9210		
RMSEA		0.170	
90% CI		0.104 0.240	
Probability RMSEA <= .05		0.004	
SRMR		0.075	
CFI			0.796
TLI			0.660

Note. x^2: Satorra-Bentler scaled chi-square; *Df*: degrees of freedom; RMSEA: root mean square error of approximation; CI: confidence interval; SRMR: standardised root mean squared residual; CFI: comparative fit index; TLI: Tucker-Lewis index

The revised scale reported the following fit indices: RMSEA: 0.178, SRMR: 0.072, CFI: 0.845, and TLI: 0.691. All the fit indices indicated that the revised scale did not fit the empirical data well. However, given the relatively small number of items, the researcher had limited options in revising or adapting the scale further. The results are shown in Table 4.3.

Table 4.3

Fit Indices of Attitude Towards Behaviour Scale

	Indices		
Index	**Goodness-of-fit**	**Absolute**	**Incremental**
x^2	17.453		
Df	5		
p-value	0.0037		
Scaling correction factor	1.0098		
RMSEA		0.178	

90% CI	0.092 0.272	
Probability RMSEA <= .05	0.011	
SRMR	0.067	
CFI		0.845
TLI		0.691

Note: x^2: Satorra-Bentler scaled chi-square; *Df*: degrees of freedom; RMSEA: root mean square error of approximation; CI: confidence interval; SRMR: standardised root mean squared residual; CFI: comparative fit index; TLI: Tucker-Lewis index

The standardised factor loadings and associated *p*-values are presented in Table 4.4.

Table 4.4

Standardised Factor Loadings of Attitude Towards the Behaviour Scale

Item	**Factor loading**	**Two-tailed *p*-value**
ATB1	0.886	0.000
ATB2	0.738	0.000
ATB3	0.590	0.000
ATB5	0.563	0.000
ATB6	0.490	0.001

All the remaining factor loadings were strong, ranging between 0.490 and 0.886. The CFA results for the Perceived Behavioural Control Scale are discussed in the next section.

4.5.2 Perceived Behavioural Control Scale

The fit of the scale was RMSEA: 0.167, SRMR: 0.041, CFI: 0.919, and TLI: 0.865. Whilst the SRMR, CFI, and TLI were good, the RMSEA was indicative of poor fit. However, given the strong standardised factor loadings, the decision was made not to delete any items. The over fit statistics for the Perceived Behavioural Control scale are shown in Table 4.5.

Table 4.5

Fit Indices of Perceived Behavioural Control Scale

	Indices		
Index	**Goodness-of-fit**	**Absolute**	**Incremental**
x^2	28.843		
Df	9		
p-value	0.0007		
Scaling correction factor	1.5123		
RMSEA		0.167	
90% CI		0.101 0.237	
Probability RMSEA <= .05		0.004	
SRMR		0.041	
CFI			0.919
TLI			0.865

Note: x^2: Satorra-Bentler scaled chi-square; *Df*: degrees of freedom; RMSEA: root mean square error of approximation; CI: confidence interval; SRMR: Standardised root mean squared residual; CFI: comparative fit index; TLI: Tucker-Lewis index

All the standardised factor loadings were strong, as all were more than 0.80, as shown in Table 4.6.

Table 4.6

Standardised Factor Loadings of Perceived Behavioural Control Scale

Item	**Factor loading**	**Two-tailed *p*-value**
EP1	0.802	0.000
EP2	0.828	0.000
EP3	0.823	0.000
EP4	0.859	0.000
EP5	0.872	0.000
EP6	0.915	0.000

4.5.3 Subjective Norms Scale

Table 4.7 indicates the standardised factor loadings of the Subjective Norms Scale.

Table 4.7

Model Fit of Subjective Norms Scale

	Indices		
Index	**Goodness-of-fit**	**Absolute**	**Incremental**
x^2	0.352		
Df	0		
p-value	0.0000		
Scaling correction factor	1.000		
RMSEA		0.000	
90% CI		0.000 0.000	
Probability RMSEA <= .05		0.000	
SRMR		0.023	
CFI			1.000
TLI			1.000

Note: x^2: Satorra-Bentler scaled chi-square; *Df*: degrees of freedom; RMSEA: root mean square error of approximation; CI: confidence interval; SRMR: standardised root mean squared residual; CFI: comparative fit index; TLI: Tucker-Lewis index

The results in Table 4.8 show that most of the standardised factor loadings of the Subjective Norms Scale were strong.

Table 4.8

Standardised Factor Loadings of Subjective Norms Scale

Item	**Factor loading**	**Two-tailed *p*-value**
SON1	0.483	0.020
SON2	0.539	0.037
SON3	0.950	0.029

4.5.4 Entrepreneurial Intent Scale

The Entrepreneurial Intent Scale consisted of five items. The RMSEA (0.179) was greater than the normative cut-off of 0.08, indicating poor model fit to the data. The SRMR (0.028) was indicative of a good fit. The incremental fit indices CFI (0.951) and TLI (0.902) values were above the recommended cut-off scores of 0.90, indicative of a good model fit. Overall, the fit can be described as mediocre, due to the high RMSEA value. Table 4.9 indicates the fit indices of the Entrepreneurial Intent Scale.

Table 4.9

Fit Indices of Entrepreneurial Intent Scale

	Indices		
Index	**Goodness-of-fit**	**Absolute**	**Incremental**
X^2	17.641		
Df	5		
p-value	0.0034		
Scaling correction factor	1.2484		
RMSEA		0.179	
90% CI		0.093 0.273	
Probability RMSEA <= .05		0.011	
SRMR		0.028	
CFI			0.951
TLI			0.902

All the factor loadings were robust. Item EI3R had the lowest standardised factor loading (0.419), but it by no means indicated that it was a bad item, and deleting it would not have increased the model fit substantially. For this reason, it was decided to keep all the items in the scale. The result are shown in Table 4.10.

Table 4.10

Standardised Factor Loadings and Associated p-values of Entrepreneurial Intent Scale

Item	Factor loading	Two-tailed *p*-value
EI1	0.956	0.000
EI2	0.954	0.000
EI3R	0.419	0.000
EI4	0.962	0.000
EI5	0.851	0.000

4.5.5 General Self-efficacy Scale

Bandura's (1977) GSE Scale comprised 10 items. The scale demonstrated an average fit. RMSEA (0.113) was above the normative cut-off of 0.08, with SRMR (0.082) indicating a mediocre fit. Both the incremental fit indices for CFI (0.830) and TLI (0.781) were below the normative cut-off value of 0.90, as shown in Table 4.11.

Table 4.11

Fit Indices of General Self-efficacy Scale

	Indices		
Index	Goodness-of-fit	Absolute	Incremental
x^2	70.030		
Df	35		
p-value	0.0004		
Scaling correction factor	1.1437		
RMSEA		0.113	
90% CI		0.074 0.152	
Probability RMSEA <= .05		0.007	
SRMR		0.082	
CFI			0.830
TLI			0.781

x^2: Satorra-Bentler Scaled Chi-Square; *Df*: Degrees of freedom; RMSEA: Root Mean Square Error of Approximation; C.I: Confidence Interval; SRMR: Standardised Root Mean Squared Residual; CFI: Comparative Fit Index; TLI: Tucker-Lewis Index

As shown in Table 4.12, most of the standardised factor loadings were strong.

Table 4.12

Standardised Factor Loadings of General Self-efficacy Scale

Item	Factor loading	Two-tailed *p*-value
GSE1	0.426	0.001
GSE2	0.476	0.000
GSE3	0.552	0.000
GSE4	0.636	0.000
GSE5	0.695	0.000
GSE6	0.491	0.000
GSE7	0.632	0.000
GSE8	0.695	0.000
GSE9	0.667	0.000
GSE10	0.752	0.000

Given the strong factor loadings, it was decided not to delete any of the items; all items were included in the structural model.

4.5.6 The Multidimensional Scale of Perceived Social Support

The MPSS (Dahlem et al., 1991) consisted of 12 items and three subscales, namely *Social Support, Friends Support, and Family Support*. Due to the hierarchical structure of the measure, it was decided to stipulate a higher-order CFA model. The overall fit of the model can be described as mediocre, as the RMSEA (0.105) was above the normative cut-off of 0.08, with SRMR (0.059) also indicating a mediocre fit. Both the CFI (0.934) and TLI (0.914) were above the normative cut-off value of 0.90. The model fit can therefore be described as average. The results of the CFA of the scale are shown in Table 4.13.

Table 4.13

Fit indices: The Multidimensional Scale of Perceived Social Support Scale

	Indices		
Index	**Goodness-of-fit**	**Absolute**	**Incremental**
x^2	95.379		
Df	51		
p-value	0.0002		
Scaling correction factor	1.1437		
RMSEA		0.105	
90% CI		0.072 0.137	
Probability RMSEA <=		0.006	
.05			
SRMR		0.059	
CFI			0.934
TLI			0.914

x^2: Satorra-Bentler Scaled Chi-Square; *Df*: Degrees of freedom; RMSEA: Root Mean Square Error of Approximation; CI: Confidence Interval; SRMR: Standardised Root Mean Squared Residual; CFI: Comparative Fit Index; TLI: Tucker-Lewis Index

As shown in Table 4.14, most of the standardised factor loadings were strong.

Table 4.14

Standardised Factor Loadings and Associated p-values of Multidimensional Scale of Perceived Social Support Scale

Item	**Factor loading**	**Two-tailed *p*-value**
SO1	0.886	0.000
SO2	0.964	0.000
SO3	0.862	0.000
SO4	0.865	0.000
FRI1	0.956	0.000
FRI2	0.924	0.000

FRI3	0.853	0.000
FRI4	0.873	0.000
FAM1	0.834	0.000
FAM2	0.956	0.000
FAM3	0.922	0.000
FAM4	0.799	0.000
PSS		
SOCIAL	0.672	0.000
FRIENDS	0.631	0.000
FAMILY	0.669	0.000

The factor loadings in Table 4.14 suggest robust coefficients. None of the standardised factor loadings were lower than the minimum threshold of 0.40. The standardised correlations between the latent variables indicated that the correlations between the Social, Friends, and Family sub-scales were moderately strong. However, the correlations were not sufficiently strong to indicate multicollinearity.

4.5.7 DOSPERT Scale — Risk Perception Sub-scale

The DOSPERT (Weber & Blais, 2006) scale consists of 30 items in five sub-scales: Social Risk, Financial Risk, Health and Safety Risk, Ethical Risk, and Recreational Risk. As discussed earlier, only the Financial Risk subscale was used in the current study.

4.5.7.1 Financial Risk sub-scale

The model fit was very poor. RMSEA (0.214) was higher than the normative cut-off of 0.08, while SRMR (0.053) indicated mediocre fit. Both the incremental fit indices for CFI (0.702) and TLI (0.503) were below the normative cut-off value of 0.90. This suggested that the model did not fit the data well. The results are shown in Table 4.15.

Table 4.15

Expression Fit Indices of Risk Perception Subscale

	Indices		
Index	**Goodness-of-fit**	**Absolute**	**Incremental**
x^2			
Df			
p-value			
Scaling correction factor			
RMSEA		0.214	
90% CI			
Probability RMSEA <= .05			
SRMR		0.128	
CFI			0.702
TLI			0.503

To improve the overall model fit of the Financial Risk sub-scale, items with weak factor loadings were deleted. Items Fin2 (0.075), Fin4 (0.242), and Fin6 (0.163) had weak factor loadings. After deletion of these three items, the RMSEA (0.098) SRMR (0.025) increased substantially. Both the incremental fit indices for CFI (0.976) and TLI (0.928) increased to above the cut off value of 0.90, indicating good fit to the data. These improvements suggested that deleting these two items was justified. The results are shown in table 4.16.

Table 4.16

Fit Indices of Financial Risk Sub-scale

	Indices		
Index	**Goodness-of-fit**	**Absolute**	**Incremental**
x^2	3.518		
Df	2		
p-value	0.17222		
Scaling correction factor	0.4762		
RMSEA		0.098	
90% CI		0.000 0.264	
Probability RMSEA <= .05		0.231	
SRMR		0.025	
CFI			0.976
TLI			0.928

Most of the standardised factor loadings were strong, ranging between 0.237 and 0.991. Although Item FIN4 had a low factor loading, it was decided not to delete this item. The standardised factor loadings of the remaining items are indicated in Table 4.17.

Table 4.17

Standardised Factor Loadings of Financial Risk Sub-scale

Item	**Factor loading**	**Two-tailed *p*-value**
FIN1	0.709	0.000
FIN3	0.991	0.000
FIN4	0.237	0.063
FIN5	0.747	0.000

The foregoing section examined the structural integrity of the chosen measures as calculated using CFA. Most of the scales had poor or mediocre fit. This may, in part,

be explained by the small sample size and low statistical power. The researcher attempted to revise the scales and improve fit by deleting problematic items. However, even after omission of items from the original scale, the fit could not be regarded as satisfactory. The weak measurement results may have had an impact on the integrity of the structural model and, hence, the hypotheses testing. Thus, results in the structural model need to be interpreted with caution, and may not be generalisable to the study population.

4.6 STRUCTURAL EQUATION MODELLING

Given that the measurement properties of all the scales were confirmed in the previous section, it was reasonable to progress to structural equation modelling. The overall fit of the SEM model is summarised in Table 4.18.

Table 4.18

Fit Indices of the SEM Model

	Indices		
Index	**Goodness-of-fit**	**Absolute**	**Incremental**
x^2	1701.989		
Df	970		
p-value	0.0000		
Scaling correction factor	0.9506		
RMSEA		0.098	
90% CI		0.090 0.105	
Probability RMSEA <= .05		0.000	
SRMR		0.099	
CFI			0.750
TLI			0.733

The fit of the overall structural model can be regarded as mediocre, given the relatively low CFI (0.750) and TLI (0.733) values. In addition, the RMSEA (0.09) and SRMR (0.09) were higher than the normative cut-scores. This all indicated that the overall

theoretical model may not fit the empirical data. This is somewhat expected, given the poor fit of the individual CFA models (presented in the previous section). Since the model parameters and fit of the measurement models were discussed in detail in the previous section, this section focuses on the path coefficients.

Table 4.19

SEM Model

EI	**ON**				
	ATB	0.491	0.239	2.055	0.040
	SN	0.461	0.313	1.474	0.141
	PBC	0.295	0.201	1.469	0.142
	GSE	-0.199	0.193	-1.033	0.302
	PSS	-0.482	0.359	-1.341	0.180
	FR	-0.056	0.057	-0.984	0.325
ATB	**ON**				
	PBC	1.471	0.378	3.897	0.000
	SN	-0.592	0.390	-1.521	0.128
	GSE	-0.116	0.610	-0.191	0.849
	PSS	0.593	0.365	1.622	0.105
PBC	**ON**				
	SN	2.115	8.533	0.248	0.804
	GSE	-5.670	27.031	-0.210	0.834
	FR	0.513	3.506	0.143	0.887
GSE	**ON**				
	ATB	1.394	0.556	2.507	0.012
PSS	**ON**				
	SN	0.708	0.151	4.678	0.000
FR	**WITH**				
	SN	0.065	0.090	0.722	0.470

PBC	**ON**			
SN	0.055	0.245	0.226	0.821
GSE	1.840	3.830	0.480	0.631
FR	-0.194	0.102	-1.907	0.056
FRXGSE	0.129	0.292	0.443	0.658

EI = Entrepreneurial intent; ATB = Attitude towards behaviour; PBC = Perceived behavioural control; GSE = General self-efficacy; PSS = Perceived social support; FR = Financial risk

Table 4.20

SEM Model: Interaction Effects

Effects from GSE to EI				
Indirect	-1.671	8.113	-0.206	0.837
Effects from PSS to EI				
Direct	0.291	0.233	1.248	0.212

The results of the hypothesis testing are reported below.

Hypothesis 1: Attitude towards the behaviour have a positive relationship with entrepreneurial intent.

The correlation between ATB and EI (0.491; $p < 0.05$) indicated a moderate correlation. Statistical significance was achieved; therefore, the hypothesis was accepted.

Hypothesis 2: Subjective norms have a positive relationship with entrepreneurial intent.

The correlation between SN and EI indicated a moderate correlation (0.461). However, the relationship was not statistically significant (0.461; $p > 0.05$), and the hypothesis was therefore rejected.

Hypothesis 3: Perceived behavioural control have a positive relationship with entrepreneurial intent.

The correlation between PBC and EI indicated that the relationship was not statistically significant (0.295; $p = 0.05$). Thus, the hypothesis was rejected.

Hypothesis 4: Perceived behavioural control have a positive relationship attitude towards the behaviour.

The relationship between PBC and ATB was confirmed (1.471; $p < 0.05$). Thus, the hypothesis was accepted.

Hypothesis 5: Subjective norms have a positive relationship attitude towards the behaviour.

A negative relationship was found between SN and ATB (-0.592; $p > 0.05$). The direction of the relationship is not congruent with *a priori* theorising. Thus, the hypothesis was rejected.

Hypothesis 6: Subjective norms have a positive relationship with perceived behavioural control.

The relationship between SN and PBC was not statistically significant (SN 2.115 > $p = 0.05$). The hypothesis was therefore rejected.

Hypothesis 7: General self-efficacy is positively related to entrepreneurial intent.

The relationship between GSE and EI was not confirmed by the empirical data (GSE -0.119 > $p = 0.05$). Thus, the hypothesis is rejected.

Hypothesis 8: General self-efficacy is positively related to perceived behavioural control.

A negative and non-significant relationship was found between GSE and PBC (GSE -5.670 > $p = 0.05$). The hypothesis was therefore rejected.

Hypothesis 9: The relationship between general self-efficacy and entrepreneurial intent is mediated by perceived behavioural control.

The mediation of PBC on the relationship between GSE and EI was found to be statistically non-significant (-1.671; $p > 0.05$). Therefore, the hypothesis was rejected.

Hypothesis 10: General self-efficacy have a positive reciprocal relationship with attitude towards the behaviour.

A negative correlation was evident between GSE and ATB (-0.116; $p > 0.05$). The correlation did not reach statistical significance. Thus, the hypothesis was rejected.

Hypothesis 11: Perceived social support have a positive relationship with entrepreneurial intent.

The correlation between PSS and EI was weak (-0.482; $p > 0.05$) and was not statistically significant. Thus, the hypothesis was rejected.

Hypothesis 12: Perceived social support have a positive relationship with attitude towards the behaviour.

An average correlation was found between PSS and ATB ($0.593 > p = 0.05$), which was not statistically significant. The hypothesis was therefore rejected.

Hypothesis 13: The relationship between perceived social support and entrepreneurial intent is mediated by attitude towards the behaviour.

The mediating role of ATB on the relationship between PSS and EI was found to be statistically non-significant ($0.291 > p = 0.05$). Thus, the hypothesis was rejected.

Hypothesis 14: Subjective norms have a positive impact on perceived social support.

A strong and statistically significant correlation was found between SN and PSS (0.708; $p < 0.05$). The hypothesis was therefore accepted.

Hypothesis 15: Financial risk is negatively related to entrepreneurial intent.

The correlation between FR and EI indicated a weak and statistically non-significant correlation (-0.056; $p > 0.05$). Thus, the hypothesis was rejected.

Hypothesis 16: Financial risk have a negative relationship with perceived behavioural control.

A strong but statistically non-significant correlation was found between FR and PBC (0.513; $p > 0.05$). Thus, the hypothesis was rejected.

Hypothesis 17: The relationship between financial risk and perceived behavioural control is moderated by general self-efficacy.

The interaction effect between FR and PBC was not statistically significant (0.129; $p > 0.05$). Thus, the relationship between FR and PBC was not moderated by GSE, and the hypothesis was.

4.7. SUMMARY

This chapter reported the results of the statistical analyses. First, the results of the item analyses and CFA were discussed, which indicated the construct validity and reliability of the measures included in the structural model. The item analysis identified some items that were problematic. Many of these items were also indicated as problematic by the CFA analyses. The researcher addressed each of the problematic items in a case-by-case manner to obtain the best measurement properties for each of the scales and sub-scales. Unfortunately, most of the measurement models did not indicate strong empirical fit to the observed data.

The structural model was then assessed. Support was obtained for three of the 17 hypotheses. The section that follows examines the results and offers recommendations for future research. Thereafter, the limitations of the research study are discussed.

CHAPTER 5: DISCUSSION OF RESULTS

5.1 INTRODUCTION

The results of the statistical analyses reported in Chapter 4 are discussed according to the hypotheses in this chapter.

5.2 AIM AND OBJECTIVES

The aim of this study was to determine how to unlock entrepreneurial capabilities within South Africa as well as to add to the body of knowledge regarding entrepreneurial intentions. The primary objective was to determine the impact of the role that self-efficacy, perceived social support, and risk perception has on the entrepreneurial intentions of nascent entrepreneurs.

5.3 DISCUSSION OF HYPOTHESES

Hypothesis 1: Attitude towards behaviour have a positive relationship with entrepreneurial intentions.

The correlation between ATB and EI (0.491; $p < 0.05$) indicated a moderate correlation that was statistically significant ($0.040 < p = 0.05$). Thus, the hypothesis was accepted.

This finding is in line with other research. Engle et al. (2008) posit that attitude towards the behaviour is an important driver of entrepreneurial intentions, in line with Azjen's (1991) theory of planned behaviour. Attitude towards the behaviour is a subjective assessment of entrepreneurial activities. If individuals expect the outcome of entrepreneurial activities to be positive, they are more likely to partake in those activity and venture into creating a new business (Nowinski & Haddoud, 2018).

Hypothesis 2: Subjective norms have a positive relationship with entrepreneurial intent.

The correlation between SN and EI indicated a moderate correlation (0.461). However, the relationship was not statistically significant (0.461; $p > 0.05$), and the hypothesis was thus rejected.

Literature on the relationship between subjective norms and entrepreneurial intent is inconclusive. In a study of American students, the link between subjective norms and entrepreneurial intent was found to be weak (Shook & Bratianu, 2010). Similarly, in a study done on Scandinavian students, no relationship was found between subjective norms and entrepreneurial intent. Shook and Bratianu (2010) propose that weak relationships between the two constructs may be a reflection of weak support of entrepreneurship in these countries. In Romania, entrepreneurship is not readily accepted, while there is notable support of entrepreneurship in Northern Europe and in the United States of America.

Hypothesis 3: Perceived behavioural control have a positive relationship with entrepreneurial intent.

The correlation between PBC and EI indicated that the relationship was not statistically significant (0.142; $p < 0.05$). Thus, the hypothesis was rejected.

This result is not in line with what other studies found. According to Mwiya et al., (2017), studies conducted in Spain, Ukraine, USA, Turkey, China, and Malaysia found that higher perceived behavioural control is correlated with higher entrepreneurial intent. Individuals who are of the opinion that they have the relevant knowledge, suitable networks, and important skills are likely to experience a high level of perceived behavioural control. Conversely, individuals who perceive that they lack these resources are likely to have lower levels of perceived behavioural control PBC (Mwiya et al., 2017). Although the SEM results indicated a positive coefficient, it was not statistically significant. However, the results may become statistically significant when studying a larger sample.

Hypothesis 4: Perceived behavioural control have a positive relationship with attitude towards the behaviour.

The relationship between PBC and ATB was statistically significant (1.471; $p < 0.05$). Thus, the hypothesis was accepted. However, the result should be viewed with caution, as the correlation (1.471) was an out-of-range response, which could indicate an over-fitted model. Although standardised path coefficient can exceed 1, it is not normative, and may be indicative of specification issues in the structural model (Kwan & Chan, 2011).

Hypothesis 5: Subjective norms have a positive relationship with impact on attitude towards the behaviour.

A negative relationship was found between SN and ATB (-0.592; $p > 0.05$). The direction of the relationship is not congruent with *a priori* theorising. Thus, the hypothesis was rejected.

This finding is not aligned with extant literature, which states that subjective norms play an important role in the type of behaviour that is deemed as standard behaviour (Barba-Sanchez and Atienza-Suhuquillo (2010). Individuals are not motivated to engage in behaviour that violates societal norms, even if this behaviour would maximise their own functionality. Barba-Sanchez and Atienza-Sahuquillo (2017) state that individuals are motivated to put in the required effort when starting a business if they believe that they are likely to reach their goals, and that the goals are congruent with societal norms. For this reason, it was expected in the current study that subjective norms would have a positive influence on attitude towards behaviour and perceived behavioural control. Although the result was not statistically significant, the direction of the relationship indicated a negative correlation. While it is not possible to draw wide-ranging inferences, it may be that the entrepreneurs in the current study did not feel that being an entrepreneur carries significant social support in their communities. The entrepreneurs may have felt that entrepreneurship is frown upon because a stable and salaried job is more congruent with the prevailing social norms.

Hypothesis 6: Subjective norms have a positive relationship with perceived behavioural control.

The relationship between SN and PBC was not statistically significant (SN 0.804 > p = 0.05). The hypothesis was therefore rejected.

This result is not aligned with literature in this domain. In a study on women's entrepreneurial intent in the Federation of Bosnia and Herzegovina, it was found that subjective norms have a positive impact on perceived behavioural control (Din & Budic, 2016), and that family, friends, and their environment impact their perceptions. These women had a very strong belief that they could establish new businesses, and were inclined to do so (Din & Budic, 2016).

Hypothesis 7: General self-efficacy is positively related to entrepreneurial intent.

The relationship between GSE and EI was not confirmed by the empirical data (GSE 0.302 > p = 0.05). Thus, the hypothesis was rejected.

This result is not in line with literature. According to Liguori et al. (2020), general self-efficacy beliefs strongly predict entrepreneurial intentions, as they form part of a set of beliefs individuals have about their capability to perform certain actions within a domain. These predispositions, together with environmental factors, have an influence on an individuals' general self-efficacy beliefs, which, in turn, impact their entrepreneurial intentions.

Hypothesis 8: General self-efficacy is positively related to perceived behavioural control.

A negative and non-significant relationship was found between GSE and PBC (GSE 0.834 > p = 0.05). The hypothesis was therefore rejected.

This result is not aligned with literature. Shook and Bratianu (2010) posit that, if individuals believe they can perform the required tasks (general self-efficacy), they may feel more in control of the behaviours that are needed to start the business. In

short, general self-efficacy gives nascent entrepreneurs the confidence to engage in behaviours that are essential to start and manage a successful business.

Hypothesis 9: The relationship between general self-efficacy and entrepreneurial intent is mediated by perceived behavioural control.

The mediation of PBC on the relationship between GSE and EI was found to be statistically non-significant (-1.671; $p > 0.05$). Therefore, the hypothesis was rejected.

In this regard, Parkinson et al. (2017) note that perceived behavioural control is based on individuals' perception of their ability to perform a certain behaviour. This perception is, in part, a function of individuals' environment. General self-efficacy, on the other hand, relates to individuals' perception of their ability to perform the desired behaviour. Parkinson et al. (2017) differentiate the two constructs by arguing that general self-efficacy is primarily reflective of internal factors, whereas perceived behavioural control is reflective of both internal and external factors. Perceived behavioural control is also dependent on the magnitude of the performance that is expected, while general self-efficacy is based on the ease or difficulty of performing the behaviour.

Perceived behavioural control can further be broken down into two parts: the first being the expected outcome if the individuals behave in a certain way, and the second being that they are able to successfully perform the required behaviours (Parkinson et al., 2017). Mouselli and Khalifa (2017) posit that general self-efficacy is a mediator between entrepreneurial intent and entrepreneurial actions. Based on the foregoing, it was expected in the current study that general self-efficacy would mediate the relationship between perceived behavioural control and entrepreneurial intent. Perhaps, the relationship is interactive rather than mediative. In other words, general self-efficacy may moderate the relationship between perceived behavioural control and entrepreneurial intent.

According to Dinc and Budic (2016) perceived behavioural control may be seen as another type of general self-efficacy. This suggests that individuals believing they have the skills and abilities to create a successful new business will increase their entrepreneurial intent.

Hypothesis 10: General self-efficacy has a positive reciprocal relationship with attitude towards the behaviour.

A negative correlation was found between GSE and ATB (-0.116; $p > 0.05$). The correlation did not reach statistical significance. Thus, the hypothesis was rejected.

This result is not aligned with literature. In a study by Lanero et al. (2016), cited by Nowinski and Haddoud (2018), it was found that if students perceive personal or financial obstacles (i.e., a negative attitude or perception), it negatively impacts their willingness to take part in entrepreneurial activities. The inverse would also be true. A positive attitude towards entrepreneurship may lead to positive entrepreneurial general self-efficacy, which, in turn, leads to positive attitudes towards entrepreneurship.

Hypothesis 11: Perceived social support have a positive relationship with entrepreneurial intent.

The correlation between PSS and EI was weak and negative (-0.482; $p > 0.05$). Therefore, the hypothesis was rejected.

Research by Pruett (2021) on a sample of American, Spanish, and Chinese university students found a strong relationship of support of family and friends with entrepreneurial intentions. The support of family and friend is important because they have close bonds with the entrepreneur, and may assist the entrepreneur to overcome failures and mistakes (Molino et al., 2018).

Hypothesis 12: Perceived social support have a positive relationship with attitude towards the behaviour.

A weak, statistically insignificant relationship was found between PSS and ATB ($0.105 > p = 0.05$). Thus, the hypothesis was rejected.

Aragon-Sanchez et al. (2017) found that children who have close relations with family members who are in business have higher levels of perceived behavioural control, and the success of these family businesses may lead to a positive attitude towards

the behaviour (entrepreneurial activities). The non-significant results of the current study may be due to the small sample size and, thus, lack of statistical power.

Hypothesis 13: The relationship between perceived social support and entrepreneurial intent is mediated by attitude towards the behaviour.

The mediating role of ATB on the relationship between PSS and EI was found to be statistically non-significant (0.291 > p = 0.05). Thus, the hypothesis was rejected.

Zapkau et al. (2015) argue that individuals are exposed to parental behaviour from a young age, and that parents play an important role in the formation of children's attitudes. The more relevant and credible the role model is, the stronger the effect on the child will be. Children internalise what they learn from their parents, and this knowledge, in turn, influences the decisions they make later in life, including their career decisions. Exposure to entrepreneurial parents shapes children's attitude with regard to entrepreneurial intent. Thus, the combination of social support and role modelling has a positive impact on attitudes towards entrepreneurial activities, but only in societies where entrepreneurship is valued (Zapkau et al., 2015).

In the current study, in addition to the direct effect, a mediating effect was expected between perceived social support and entrepreneurial intention via attitude towards the behaviour. Although the indirect effect was found, it did not reach statistical significance.

Hypothesis 14: Subjective norms have a positive relationship with perceived social support.

A strong and statistically significant correlation was found between SN and PSS (0.708; p < 0.05). The hypothesis was therefore accepted.

This result is aligned with previous research. The influence of a role model can occur through social persuasion. Most parents who are entrepreneurs value continuity of their business ventures, and put significant pressure to their children to become entrepreneurs. In addition, it is very likely that social bonds with other entrepreneurs will drive individuals' own entrepreneurship (Zapkau et al., 2015). This influence is likely to lead to a strong relationship between subjective norms and perceived social

support. The relationship between these two aspects is probably mutually reinforcing, but the direction of causality is probably from subjective norms to perceived social support (Drew, 2017).

According to Klyver et al. (2018), nascent entrepreneurs are surrounded by social structures that either enhance or restrict their entrepreneurial intentions. Hasan et al. (2011) define perceived social support as the perception of individuals that they have of the support of family, friends, significant others, and society. According to Klyver et al. (2018), the actual materialisation of social support is not what is important; rather, the value lies in the perception.

Hypothesis 15: Financial risk is negatively related to entrepreneurial intent.

The correlation between FR and EI indicated a weak and statistically non-significant correlation (-0.056; $p > 0.05$). Thus, the hypothesis was rejected.

This result is not aligned with extant literature. Nabi and Linan (2013) posit that there exists a direct relationship between risk perception in terms of opportunity and entrepreneurial intent. The fear missing an opportunity enhances entrepreneurial behaviour.

Hypothesis 16: Financial risk have a negative relationship with perceived behavioural control.

A strong but statistically non-significant correlation was found between FR and PBC (0.513; $p > 0.05$). Thus, the hypothesis was rejected.

Robinson and Marino (2015) posit that individuals associate risk with loss and uncertainty, which has a negative influence on the decision to become an entrepreneur. If an individual is of the belief that the chance of success is low or that substantial losses are likely in the creation of a new venture, the individual will not pursue the opportunity. Conversely, when an individual believes that there are probably gains (which means the risk perception is low), the individual believes that the possibility of loss is manageable (Robinson & Marino, 2015).

Hypothesis 17: The relationship between financial risk and perceived behavioural control is moderated by general self-efficacy.

The interaction effect between FR and PBC was not significant (0.129; $p > 0.05$), which suggested that the relationship was not moderated by GSE.

Nabi and Linan (2013) suggest that risk perceptions impact whether individuals take part in entrepreneurial activities. Individuals who have a greater sense of control over their actions may judge the potential outcome as positive. The opposite can then be said about individuals who perceive the risk as a threat, as they will experience higher levels of anxiety, leading to a lower sense of control and ultimately, decreased entrepreneurial intent (Nabi & Linan, 2013).

This concludes the discussion of the study's results. The next section discusses the implications of the results.

5.4 PRACTICAL IMPLICATIONS FOR ORGANISATIONS

This study contributes to the body of knowledge on the impact that general self-efficacy, perceived social support, and the perception of financial risk has on entrepreneurial intent. Additional hypotheses were included in this study in order to give an overall view of the motivational and contextual factors linked to the primary objectives identified. Although most of the hypotheses were not confirmed in this study, it may have been due to the limited sample size and relatively poor measures. The model that was presented in this study utilises the well-known model of Azjen's (1991) theory of planned behaviour. The main intention of this study was to use Azjen's (1991) theory of planned behaviour as a base to predict entrepreneurial intent. The discussion of implications of the results addresses the following main areas: policy implication, access to information, access to financial resources, and other contextual factors.

5.4.1 Policy Implications

Governments around the world, and in South Africa in particular, have dedicated significant time and energy to understanding the ideal climate to incubate new businesses (Bodolica & Spraggon, 2021). Creating new ventures is critical to the

development of most emerging economies, because they are the main source of employment and drive economic growth. However, many of the policies fall short in promoting new venture creation within South Africa. Government and provincial entities have to gain a better understanding of the push and pull factors related to entrepreneurship. The aim of the current study was, therefore, to make a contribution to knowledge on the motives of nascent entrepreneurs.

Although not all the hypotheses were confirmed, it is argued that general self-efficacy, perceived behavioural control, and attitude towards entrepreneurship are important antecedents of entrepreneurship. If aspiring entrepreneurs do not regard entrepreneurship as a viable and valuable alternative to paid employment, they will not pursue it as a career. Thus, it is very important that entrepreneurship is promoted amongst children of school-going age (Rolefoss & Kolvereid, 2005). Politicians, government departments, banking institutions, and the social environment need to support entrepreneurship and promote it as both desirable and feasible (Krueger, Reilly, & Carsrud, 2000).

5.4.2 Access to Information

Education is a key to individuals aspiring to become entrepreneurs. It is important that entrepreneurs be assisted through mentoring and networks to identify and exploit potential business opportunities (Ozgen & Baron, 2007). Organisations should offer conferences, seminars, and workshops on entrepreneurship, and encourage attendance. Creating an environment that encourages social interaction as a source of opportunity is an important factor for organisations to consider (Picincu, 2019). Mentors can offer their mentees evidence and insights based on their own experience (Ozgen & Baron, 2007). Mentors could also assist nascent entrepreneurs in interpreting complex information such as technological changes and advances, market trends, and government policies (Picincu, 2019).

5.4.3 Access to Financial Resources

Nascent entrepreneurs often have to rely on family and friends for seed capital, as they have limited access to potential lenders and investors (Roundy, Holzhauer, & Dai, 2017). Investors and potential funders need to understand the financial needs of an

entrepreneur. They need to enhance the access of entrepreneurs to funding, and strategically create funds that will assist entrepreneurs in all stages of the business life cycle (Roundy et al., 2017).

5.4.4 Other Contextual Factors

Research has shown that individuals from an disadvantaged background rarely attempt business startups, and mechanisms therefore need to be introduced to support these individuals (Rolefoss & Kolvereid, 2005).

The SEDA (2016) offers business advice on various aspects of entrepreneurship, including registration, marketing, and training. The SEDA could also actively reach out to individuals who may not have the means to access their services.

The next section reviews the limitations of the study, together with recommendations for future research.

Entrepreneurs face high taxes, which discourage entrepreneurial endeavours. Policies and programmes need to be created that encourage and support the tax compliance of nascent entrepreneurs (Dinc & Budic, 2016). Running an ethical and credible business may open more avenues for funding, and may also broaden the base of taxpayers.

5.5 LIMITATIONS FOR FUTURE RESEARCH

This study followed a quantitative approach, and the sample size was small, which limits generalisability. This study was also limited to South Africa. Future research could use a larger sample and follow a mixed-methods approach by conducting interviews with nascent entrepreneurs. The study could also be conducted in other provinces of South Africa and abroad, which will enable comparisons. The current study was cross-sectional, and future research could be conducted longitudinally, to identify changes over time.

The measures used in this study were problematic, which may have had an impact on the results. On average, most of the scales were reliable, but few reported good fit to the data when subjected to CFA. This may have played a part in the poor SEM results.

Only three of the 17 hypotheses were accepted. Most of the reported path coefficients were consistent with *a priori* theorising, but failed to reach statistical significance. The structural model itself may have been overfitted with too many structural paths given the degrees of freedom. Coupled with the small sample size, this may have led to an out-of-bound parameter estimate. The results could therefore be viewed with caution. However, we believe in the ecological validity of the proposed model, and recommend that other researchers test the model using bigger and more stable samples.

This study argued that initiatives aimed at promoting entrepreneurial intent may be ineffective if the complex web of personal and contextual variables impacting entrepreneurial intent are not understood. It is hoped that study will initiate a research agenda focused on the theory of planned behaviour in gaining further knowledge on perceived social support, general self-efficacy and additional personality factors for inclusion in the model. For example, it may be interesting to examine which personality factors promote a positive attitude towards entrepreneurial behaviour and entrepreneurial intent. This is important because personalities are relatively stable and have been consistently linked with work outcomes such as tenure, counterproductive behaviours, and extra-role behaviours. Understanding the role of personality in entrepreneurial intent will automatically connect research on entrepreneurs to the wider canon of personality research.

More research is required on building an enabling business environment and policy framework. The DSBA in the USA is a good example of how the regulatory environment could spur entrepreneurship, and future research could examine the applicability of its policies and initiatives in South Africa.

Although certain initiatives in South Africa, such as the provisions of grants and loans, tax incentives for start-ups, and training and development opportunities have implemented, entrepreneurs still face administrative red tape and inadequate support. For any new business venture, careful planning and thinking is required on the individual's part. Future research could examine these, together with the reasons for the low participation of certain demographic groups (see Rehman, Yosra, Khattak, & Fatima, 2023). Little is known about the contextual factors that may facilitate or inhibit an individual's decision to become an entrepreneur. Future research needs to focus

on factors such as economic conditions and infrastructure, i.e., access to finance and information; technological factors such as inventions; political factors such as laws and regulations; and cultural factors such as values and customs of societies. It is important that the model of the current study be expanded to include these factors.

5.6 CONCLUSION

The aim of this research study was to contribute to the body of knowledge regarding the relationship between general self-efficacy, perceived social support, and the perception of financial risk in how it shaped entrepreneurial intent. Although only three hypotheses were confirmed in this study, it is important to bear in mind that the sample size was relatively small.

Nevertheless, Ajzen's (1991) Theory of Planned Behaviour model provided a solid foundation for the basis of this study in being able to understand and predict entrepreneurial intention. Implications of the study were discussed, and several key areas were put forward for decision makers to consider. These included policies to encourage entrepreneurial endeavours. Providing access to information and resources for aspiring entrepreneurs were discussed. The need for further research was highlighted as a more comprehensive understanding of the entrepreneurial mindset is of utmost importance if South Africa is to reach its goal set out by the NDP 2030 of creating 90% of job creation.

The limitations inherent in this study is important to be addressed in future research. Utilising a mix methods approach would be the best approach as extensive insight via interviews will provide deeper understanding with nascent entrepreneurs.

The dynamics of entrepreneurial intent needs to be comprehensively understood. Focus on contextual factors, economic conditions, technological innovations, legal and regulatory aspects need to be integrated into a model. If done so, the model will be able to provide a holistic understanding of the inhibitors or driving forces that affects an individual in the decision to become an entrepreneur.

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University of the Western Cape
Economic & Management Sciences Faculty
Industrial Psychology Department
Robert Sobukwe Road
Bellville 7535
Tel: 021 959 3187/2585

Appendix A: Information sheet

The role of self-efficacy, perceived social support and risk perception on the entrepreneurial intent of nascent entrepreneurs

Dear Participant,

Thank you for participating in the study.

The goal of this document is to provide you with more information about the study. Your participation in the study will help me to identify the personal attributes that shape entrepreneurial intent of nascent entrepreneurs as well as to explain the network of variables that motivates entrepreneurial intentions.

The questionnaire you are about to complete is designed to allow you to express your personal point of view with regards to different aspects related to your entrepreneurial intentions. **Please note that you do not have to be an entrepreneur to partake in the study.**

The questionnaire will take about 30 minutes to complete and consists of 123 questions. Please provide only one answer per question. It is essential that you answer all the questions by selecting the response which best reflects your thoughts on each statement. Please read the instructions carefully before responding to the statements and questions in each subsection.

If at any time you feel that the need to withdraw from participating in the study you are free to do so without any negative consequences. You are free to decline answering any question or questions . We don't anticipate that any risk (psychological, physical, and vocational) will result from your participation in this study. In the event that you require some support, the supervisor of this study is a registered industrial psychologist and can be contacted for debriefing.

Don't forget that:

1. Your participation in the programme is completely **voluntary**.
2. Your information will remain **strictly confidential**.
3. Your information will **not be shared** with anyone.
4. Your participation in this programme does not in any manner impact your current employment or relationship with any of your colleagues/employer/incubation centre.

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Appendix B: Consent form

The role of self-efficacy, perceived social support and risk perception on the entrepreneurial intent of nascent entrepreneurs.

Please note that:

1. Your participation in the programme is completely **voluntary**.
2. Your information will remain **strictly confidential**.
3. Your information will **not be shared** with anyone.
4. Your participation in this programme does not in any manner impact your current tertiary studies and relationships at your institution.

I hereby agree that I have read through and understood the information that has been provided to me. I agree that I have been afforded the opportunity to contact coordinators of this programme. My signature below confirms that I have agreed to my participation in this study.

_____

(Name & Surname of Respondent)

Optional

_____

(Respondent signature)

Should you require any further information or have any concerns, please feel free to contact the below individuals of the programme.

Coordinator: **Tracey Lee Mocke**
Personal Email: **3118693@myuwc.ac.za**
Contact Number: **0733882248**

Lecturer: **Dr. Jurgen Becker**
Staff Email: **jbecker@uwc.ac.za**
Office Room: **2.29.1 (EMS Building)**
Contact Number: **021 959 3180**

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Appendix C:

Demographic Questionnaire

1. **Age: _____**
2. **Gender:** □ Male □ Female
3. **Nationality: _____**
4. **Job Title :_____**
5. **How long are you in the current position / partaking in the incubation centre? _____**
6. **Do you have any experience as an employee?**

   □ No, I have never worked □ Yes, I have _____ years of experience
7. **Have you ever been self-employed / an entrepreneur?**

   □ No, never □ Yes, for _____ years
8. Are any of your close family members, or have they been, an entrepreneur or business-owners (parents, siblings, grandparents, uncles, aunts, cousins)?

   □ No □ Yes If yes, what kind of business _____
9. **Race:**
   - □ White
   - □ Black/African
   - □ Asian
   - □ Indian
   - □ Coloured
   - □ Other _____
10. **Marital status:**
    - □ Single
    - □ Married
    - □ Divorced
    - □ Co-habitation
    - □ Widow(er)
11. **Principle home language :**
    - □ Afrikaans
    - □ English
    - □ Tswana
    - □ Pedi
    - □ Venda
    - □ Swati
    - □ Southern-Sotho
    - □ Tsonga
    - □ Ndebele
    - □ Zulu
    - □ Xhosa
12. **Highest qualification obtained:**
    - □ Grade 12
    - □ Certificate
    - □ Diploma
    - □ B-Degree
    - □ Honours or equivalent
    - □ Masters
    - □ Doctorate
    - □ Other _____

□ Other : _____

Appendix D:

Entrepreneurial Intent Questionnaire: adaptation of the VIE project

(Liñán, & Chen, 2009)

Instructions **Below are a series of 71 statements. Please read each description and think about how much each person is or is not like you. Mark the statement that shows how much the person in the description is like you. If you make a mistake, simply cross it out and fill in the correct**		**Not at all like me**	**Not like me**	**A little like me**	**Somewhat like me**	**Like me**	**Very much like me**
1.	Thinking up new ideas and being creative is important to her/him. (S)he likes to do things in his/her own original way.	0	1	2	3	4	5
2.	It is important to her/him to be rich. (S)he wants to have a lot of money and expensive things	0	1	2	3	4	5
3.	(S)he thinks it is important for every person in the world to be treated equally. (S)he believes everyone should have equal opportunities in life.	0	1	2	3	4	5
4.	It is very important to her/him to show her/his abilities. (S)he wants people to admire what (s)he does	0	1	2	3	4	5
5.	It is important to her/him to live in secure surroundings. (S)he avoids anything that might endanger her/his safety.	0	1	2	3	4	5
6.	(S)he thinks it is important to do lots of different things in life. (S)he always looks for new things to try.	0	1	2	3	4	5
7.	(S)he believes that people should do what they're told. (S)he thinks people should follow rules at all times, even when no-one is watching.	0	1	2	3	4	5
8.	It is important to her/him to listen to people who are different from her/him. Even when (s)he	0	1	2	3	4	5

	disagrees with them, (s)he still wants to understand them						
9.	(S)he thinks it's important not to ask for more than what you have. (S)he believes that people should be satisfied with what they have.	0	1	2	3	4	5
10.	(S)he seeks every chance (s)he can to have fun. It is important to her/him to do things that give her/him pleasure.	0	1	2	3	4	5
11.	It is important to her/him to make her/his own decisions about what (s)he does. (S)he likes to be free to plan and to choose her/his activities for her/himself.	0	1	2	3	4	5
12.	It's very important to her/him to help the people around her/him. (S)he wants to care for their well-being.	0	1	2	3	4	5
13.	Being very successful is important to her/him. (S)he likes to impress other people.	0	1	2	3	4	5
14.	It is very important to her/him that her/his country be safe. (S)he thinks the state must be on watch against threats from within and without.	0	1	2	3	4	5
15.	(S)he likes to take risks. (S)he is always looking for adventures.	0	1	2	3	4	5
16.	It is important to her/him always to behave properly. (S)he wants to avoid doing anything people would say is wrong.	0	1	2	3	4	5
17.	It is important to her/him to be in charge and tell others what to do. (S)he wants people to do what (s)he says	0	1	2	3	4	5
18.	It is important to her/him to be loyal to her/his friends. (S)he wants to devote her/himself to people close to her/him.	0	1	2	3	4	5

19.	(S)he strongly believes that people should care for nature. Looking after the environment is important to her/him.	0	1	2	3	4	5
20.	Religious belief is important to her/him. (S)he tries hard to do what her/his religion requires.	0	1	2	3	4	5
21.	It is important to her/him that things be organized and clean. (S)he really does not like things to be a mess.	0	1	2	3	4	5
22.	(S)he thinks it's important to be interested in things. (S)he likes to be curious and to try to understand all sorts of things.	0	1	2	3	4	5
23.	(S)he believes all the worlds' people should live in harmony. Promoting peace among all groups in the world is important to her/him.	0	1	2	3	4	5
24.	(S)he thinks it is important to be ambitious. (S)he wants to show how capable (s)he is.	0	1	2	3	4	5
25.	(S)he thinks it is best to do things in traditional ways. It is important to her/him to keep up the customs (s)he has learned.	0	1	2	3	4	5
26.	Enjoying life's pleasures is important to her/him. (S)he likes to 'spoil' her/himself.	0	1	2	3	4	5
27.	It is important to her/him to respond to the needs of others. (S)he tries to support those (s)he knows.	0	1	2	3	4	5
28.	(S)he believes (s)he should always show respect to her/his parents and to older people. It is important to her/him to be obedient.	0	1	2	3	4	5

29.	(S)he wants everyone to be treated justly, even people (s)he doesn't know. It is important to her/him to protect the weak in society.	0	1	2	3	4	5
30.	(S)he likes surprises. It is important to her/him to have an exciting life.	0	1	2	3	4	5
31.	(S)he tries hard to avoid getting sick. Staying healthy is very important to her/him.	0	1	2	3	4	5
32.	Getting ahead in life is important to her/him. (S)he strives to do better than others.	0	1	2	3	4	5
33.	Forgiving people who have hurt her/him is important to her/him. (S)he tries to see what is good in them and not to hold a grudge	0	1	2	3	4	5
34.	It is important to her/him to be independent. (S)he likes to rely on her/himself.	0	1	2	3	4	5
35.	Having a stable government is important to her/him. (S)he is concerned about the social order being protected.	0	1	2	3	4	5
36.	It is important to her/him to be polite to other people all the time. (S)he tries never to disturb or irritate others.	0	1	2	3	4	5
37.	(S)he really wants to enjoy life. Having a good time is very important to her/him.	0	1	2	3	4	5
38.	It is important to her/him to be humble and modest. (S)he tries not to draw attention to her/himself.	0	1	2	3	4	5
39.	(S)he always wants to be the one who makes the decisions. (S)he likes to be the leader.	0	1	2	3	4	5

40.	It is important to her/him to adapt to nature and to fit into it. (S)he believes that people should not change nature.	0	1	2	3	4	5
41.	Being an entrepreneur is important for her/him. (S)he likes taking risks and initiating her/his own projects and ideas.	0	1	2	3	4	5

Instructions: Please read the following statement and mark the one that best describes you.

"*For you, starting a new business (being an entrepreneur) would involve …"*		**Totally unlikely**			**Moderately likely**			**Totally likely**
42.	Facing new challenges.	0	1	2	3	4	5	6
43.	Creating jobs for others.	0	1	2	3	4	5	6
44.	Being creative and innovative.	0	1	2	3	4	5	6
45.	Having a high income.	0	1	2	3	4	5	6
46.	Taking calculated risks.	0	1	2	3	4	5	6
47.	Being my own boss (independence).	0	1	2	3	4	5	6

Instructions: Please read the following statement and mark the one that best describes you.

Please state to what extent these are desirable for you generally in your life		**Not at all desirable**			**Moderately desirable**			**Totally desirable**
48.	Facing new challenges.	0	1	2	3	4	5	6

49.	Creating jobs for others.	0	1	2	3	4	5	6
50.	Being creative and innovative.	0	1	2	3	4	5	6
51.	Having a high income.	0	1	2	3	4	5	6
52.	Taking calculated risks.	0	1	2	3	4	5	6
53.	Being my own boss (independence).	0	1	2	3	4	5	6

Instructions: Please read the following statement and mark the one that is best applicable to you.

Indicate to what extent you would be able to effectively perform the following tasks:		**Totally ineffective**			**Moderately effective**			**Fully effective**
54.	Defining my business idea and a new business strategy.	0	1	2	3	4	5	6
55.	Keeping under control the new-venture creation process	0	1	2	3	4	5	6
56.	Negotiating and maintaining favourable relationships with potential investors and banks.	0	1	2	3	4	5	6
57.	Recognizing opportunities in the market for new products and/or services.	0	1	2	3	4	5	6
58.	Interacting with key people to raise capital to create a new venture.	0	1	2	3	4	5	6
59.	Creating and putting into operation a new venture	0	1	2	3	4	5	6

Instructions: Please read the following statement and mark the one that is best applicable to you.

Think now about your family and close friends. To what extent would they agree if you decide to become an entrepreneur and start your own business?		Totally disagree			Moderately agree			Totally agree
60.	My immediate family (parents and siblings)	0	1	2	3	4	5	6
61.	My close friends	0	1	2	3	4	5	6
62.	My colleagues or mates	0	1	2	3	4	5	6

Instructions: Please read the following statement and mark the one that is best applicable to you.

Thinking about your family and close friends. How do you value the opinion of these people in this regard? I think it is …		Not at all important			Moderately			Very important
63.	My immediate family (parents and siblings)	0	1	2	3	4	5	6
64.	My close friends	0	1	2	3	4	5	6
65.	My colleagues or mates	0	1	2	3	4	5	6

Instructions: Please read the following statement and mark the one that is best applicable to you.

Please state your level of intention with respect to the following statements:		Nothing			Moderately			Very important
66.	It is very likely that I will start a venture someday	0	1	2	3	4	5	6

67.	I am willing to make any effort to become an entrepreneur	0	1	2	3	4	5	6
68.	I have serious doubts whether I will ever start a venture	0	1	2	3	4	5	6
69.	I am determined to start a business in the future	0	1	2	3	4	5	6
70.	My professional goal is to be an entrepreneur	0	1	2	3	4	5	6

If you finally decided to create your own business, you would mainly do it due to …:

	3	2	1	0	1	2	3	
Lack of a better alternative employment	☐	☐	☐	☐	☐	☐	☐	Taking advantage of a business opportunity

Appendix E:

General Self-efficacy Scale

(Bandura, 1977)

Instructions **Below are a series of 10 statements. Please read each statement and think about how these statements apply to you. Mark the statement that is best applicable to you. If you make a mistake simply cross it out and fill in the correct response.**		Not at all true	Hardly true	Moderately true	Exactly true
1.	I can always manage to solver difficult problems if I try hard enough.	0	1	2	3
2.	If someone opposes me, I can find the means and ways to get what I want.	0	1	2	3
3.	It is easy for me to stick to my aims and accomplish my goals	0	1	2	3
4.	I am confident that I could deal efficiently with unexpected events.	0	1	2	3
5.	Thanks to my resourcefulness, I know how to handle unforeseen situations.	0	1	2	3
6.	I can solder most problems if I invest the necessary effort.	0	1	2	3
7.	I can remain calm when facing difficulties because I can rely on my coping abilities.	0	1	2	3
8.	When I am confronted with a problem, I can usually find several solutions.	0	1	2	3
9.	If I am in trouble, I can usually think of a solution.	0	1	2	3
10.	I can usually handle whatever comes my way.	0	1	2	3

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Appendix F:

Multidimensional Scale of Perceived Social Support

(Dahlem, Walker, & Zimet 1991)

Instructions **Below are a series of 12 statements. Please read each statement and think about how these statements apply to you. Mark the statement that is best applicable to you. If you make a mistake, simply cross it out and fill in the correct response.**		Very Strongly disagree	Strongly disagree	Mildly disagree	Neutral	Mildly agree	Strongly agree	Very strongly agree
1.	There is a special person who is around when I am in need.	1	2	3	4	5	6	7
2.	There is a special person with whom I can share joys and sorrows.	1	2	3	4	5	6	7
3.	My family really tries to help me.	1	2	3	4	5	6	7
4.	I get the emotional help and support I need from my family.	1	2	3	4	5	6	7
5.	I have a special person who is a real source of comfort to me.	1	2	3	4	5	6	7
6.	My friends really try to help me.	1	2	3	4	5	6	7
7.	I can count on my friends when things go wrong.	1	2	3	4	5	6	7
8.	I can talk about my problems with my family.	1	2	3	4	5	6	7
9.	I have friends with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
10.	There is a special person in my life who cares about my feelings.	1	2	3	4	5	6	7
11.	My family is willing to help me make decisions.	1	2	3	4	5	6	7
12.	I can talk about my problems with my friends.	1	2	3	4	5	6	7

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Appendix G:

Domain Specific Risk-Taking (Adult) Scale – Risk Perception (Blais & Weber, 2006)

Instructions **Below is a series of 30 statements. Please read each statement and for each one, indicate how <u>risky you perceive</u> each situation. If you make a mistake, simply cross it out and fill in the correct response.**		Not at all risky	Slightly risky	Somewhat risky	Moderately risky	Risky	Very risky	Extremely risky
1.	Admitting that your tastes are different from those of a friend.	1	2	3	4	5	6	7
2.	Going camping in the wilderness.	1	2	3	4	5	6	7
3.	Betting day's income at the horse races.	1	2	3	4	5	6	7
4.	Investing 10% of your annual income in a moderate growth mutual fund.	1	2	3	4	5	6	7
5.	Drinking heavily at a social function.	1	2	3	4	5	6	7
6.	Taking some questionable deductions on your income tax return.	1	2	3	4	5	6	7
7.	Disagreeing with an authority figure on a major issue.	1	2	3	4	5	6	7
8.	Betting a day's income at a high-stake poker game.	1	2	3	4	5	6	7
9.	Having an affair with a married man/woman.	1	2	3	4	5	6	7
10.	Passing off somebody else's work as your own.	1	2	3	4	5	6	7
11.	Going down a ski run that is beyond your ability.	1	2	3	4	5	6	7
12.	Investing 5% of your annual income in a very speculative stock.	1	2	3	4	5	6	7
13.	Going white-water rafting at high water in the spring.	1	2	3	4	5	6	7
14.	Betting a day's income on the outcome of a sporting event.	1	2	3	4	5	6	7

15.	Engaging in unprotected sex.	1	2	3	4	5	6	7
16.	Revealing a friend's secret to someone else.	1	2	3	4	5	6	7
17.	Driving a car without wearing a seat belt.	1	2	3	4	5	6	7
18.	Investing 10% of your annual income in a new business venture.	1	2	3	4	5	6	7
19.	Taking a skydiving class.	1	2	3	4	5	6	7
20.	Riding a motorcycle without a helmet.	1	2	3	4	5	6	7
21.	Choosing a career that you truly enjoy over a more prestigious one.	1	2	3	4	5	6	7
22.	Speaking your mind about an unpopular issue in a meeting at work.	1	2	3	4	5	6	7
23.	Sunbathing without sunscreen.	1	2	3	4	5	6	7
24.	Bungee jumping off a tall bridge.	1	2	3	4	5	6	7
25.	Piloting a small plane.	1	2	3	4	5	6	7
26.	Walking home alone at night in an unsafe area of town.	1	2	3	4	5	6	7
27.	Moving to a city far away from your extended family.	1	2	3	4	5	6	7
28.	Starting a new career in your mid-thirties.	1	2	3	4	5	6	7
29.	Leaving your young children alone at home while running an errand.	1	2	3	4	5	6	7
30.	Not returning a wallet you found that contains R2000.00.	1	2	3	4	5	6	7

****end***