

**ASSESSING STUDENT ENTREPRENEURIAL READINESS AT A SELECTED  
SOUTH AFRICAN UNIVERSITY**

**By**

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## PLAGIARISM DECLARATION

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I declare that the above dissertation is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

I further declare that I submitted the dissertation to originality-checking software and that it falls within the accepted requirements for originality.

I further declare that I have not previously submitted this work, or part of it, for examination at Unisa for another qualification or at any other higher education institution.



**Signature**

**01/12/2021**

**Date**

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## **ABSTRACT**

South Africa is faced with the challenge of unemployment among the youth. Despite this challenge, there are very few opportunities that can enable youth to remain relevant in the economy. While a rising number of young people are considering establishing a business, the sector is beset by challenges such as a lack of information, capital, networking, and mentoring. This makes it very difficult for the youth, especially graduates from universities, to embark on entrepreneurship, which is viewed as an alternative career. This study examined the readiness of students towards entrepreneurship at a selected South African university. A quantitative and descriptive research design was adopted using a positivist research philosophy. Data was collected using a self-administered questionnaire. A total of 400 students were selected as respondents using a probability sampling technique known as simple random sampling. However, only 332 questionnaires were returned, representing an 83% response rate, which is considered adequate by social research standards.

A structural equation model was used to analyse data by means of a statistical package known as AMOS and SmartPLS3. In addition, descriptive and inferential statistics were used to analyse the data. This study used a Likert scale to gauge students' perception, and the findings showed that there was an overwhelming agreement by the students on the key attributes of entrepreneurship readiness, namely, subjective norms, perceived behaviour control, personal attitude, self-efficacy, and entrepreneurship intention, with mean scores above 3.5. Furthermore, the relationships between subjective norms, perceived behaviour control, personal attitude, and entrepreneurship intention were positive and significant. Conversely, the relationship between self-efficacy and entrepreneurship intention was negative and insignificant. Finally, an entrepreneurship intention was developed, which validates the theory and original model of planned behaviour by Ajzen (1991). Recommendations have been provided to enable higher education institutional managers to instil an entrepreneurship culture. This study has contributed to the literature on entrepreneurship in the higher education sector and the developing world. In addition, it is envisaged that this study will assist scholars, practitioners, and policymakers to understand the dynamics of entrepreneurial intentions among students in higher education institutions.

**Keywords:** entrepreneurship, unemployment, planned behaviour, higher education institutions, entrepreneurship intention, structural equation model, SmartPLS3.

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# CHAPTER 1

## INTRODUCTION AND PROBLEM ORIENTATION

### 1.1 Introduction

In South Africa, the number of unemployed youth accounts for 63.4%. This is a concern as the burden of unemployment is very high among youth between the ages of 15 and 34. In the first quarter of 2019, the unemployment rate was approximately 31% among graduates in the 15–24 age bracket, compared to 19.5% during the last quarter of 2018 (Statistics South Africa, 2019). Graduate unemployment is caused by low levels of economic development, fast changing labor market demands, and an education system that has failed to keep up with the times. University administrators have been instructed to encourage students to start their own businesses rather than seeking for work. To improve the life prospects of their graduates, colleges should encourage the development of entrepreneurial attitudes and skills that will enhance graduates' capacity to contribute to the creation of new employment opportunities (Sobuwa, 2021).

Another challenge is that young South Africans are schooled and equipped to enter professions from preschool through to university graduation, yet this training frequently ignores the principles of entrepreneurship. This imbalance in South Africa's educational system prevents aspiring entrepreneurs from obtaining the skills required when beginning a firm. This presents an opportunity for experienced entrepreneurs and organisations to provide foundational training programmes for students in their communities who seek core entrepreneurial training, mentorship, and help through their business development initiatives. Thus, young eager entrepreneurs should enrich their knowledge and skills under the tutelage of a seasoned business person who can provide them with information, mentorship, and advice to start successful business ventures (Mjadu, 2018: 1).

According to Nickels, McHugh and McHugh (2010: 430), entrepreneurship is an important element of economic growth, productivity, and social development. Furthermore, the authors believe that students who have the privilege to learn

entrepreneurship and business education at an early stage enjoy several benefits, such as freedom in decision-making, higher self-esteem, and a greater sense of control. However, Leshilo and Lethoko (2017: 55) believe that young entrepreneurs face immense hurdles owing to a lack of access to finance, business education and training, market possibilities, and awareness of government activities, all of which are worsened by stringent government laws and restrictions. Similarly, Sibisi (2018: 1) averred that Africa is in desperate need of a path out of poverty, and business could be the key. It has the potential to create millions of employment opportunities in Africa, and young entrepreneurs may be the catalyst for the positive change that is notably required. Whilst an increasing number of young people are considering starting a business, the sector faces numerous hurdles, including a lack of information, funding, networking, and mentoring. These four pillars are essential for modern-day entrepreneurship and establishing a virtual presence in the digital economy. Everything around people is connected, and, in order to succeed in future smart cities, entrepreneurs must inhabit the virtual world.

In South Africa, overall levels of education and training, social and cultural norms, and the regulatory environment all play a key role in influencing the level of early-stage entrepreneurial activity. Education's continuous relevance as a limiting element in South Africa contradicts findings in other developing or efficiency-driven economies, where education (as a limiting factor) is not as important as it is in South Africa (Herrington, Kew, Kew and Monitor, 2010: 15). In addition, the challenge has been that academics, practitioners, and policymakers have only recently recognised the importance of entrepreneurship. In this regard, Ndofirepi, Rambe and Dzansi (2018: 14) believe that entrepreneurship education and training interventions should be provided to students as one way of inspiring them to build creativity and self-efficacy. Therefore, this study analysed student entrepreneurial readiness at a selected South African university.

## **1.2 Research Problem**

As institutions of higher learning seek to create graduates who are employable, there is also a need to balance the development of future entrepreneurs. Therefore, in addition to the need to produce and develop quality and employable graduates such

that they are competitive in the job market, there is also a need to develop students with an entrepreneurial spirit, flexibility, and readiness to conquer the world where job opportunities are limited (Shaik, 2019: 1). This implies that South Africa's entrepreneurial environment, particularly among university students, should be researched as a means of finding answers to the country's present economic woes, boosting growth, and alleviating high unemployment (Nsahlai et al., 2020:1). As Rao (2014) points out, many of today's successful entrepreneurs started while still enrolled as students at a university. While pursuing their degrees, these students turned their interests into enterprises. Numerous university spinoffs have proven to be financially successful. Therefore, as stated earlier, this study evaluated student entrepreneurial readiness at a selected South African university. Specifically, the study considered factors that are key to entrepreneurial intention viz. personal attitude, perceived behaviour control, self-efficacy, and subjective norms.

### **1.3 Research Aim and Objectives**

This study's aim was to analyse student entrepreneurial readiness at a selected South African university.

#### **1.3.1 Objectives**

The following objectives were derived from the aim of the study:

- To analyse the perception of students' readiness towards entrepreneurship (personal attitude, perceived behaviour control, self-efficacy, and subjective norm)
- To evaluate the relationship between personal attitudes, subjective norms, perceived behaviour control, self-efficacy, and entrepreneurial intentions
- To develop a model for students' readiness towards entrepreneurship

#### **1.3.2 Research Questions**

The research questions for the study are as follows:

- What is the perception of students' readiness towards entrepreneurship (personal attitude, perceived behaviour control, self-efficacy, and subjective norms)?
- What is the relationship between personal attitude, subjective norms, perceived behaviour control, self-efficacy, and entrepreneurial intentions?
- How does one develop a model for students' readiness towards entrepreneurship?

#### **1.4 Rationale for this Study**

Economies the world over have been facing several challenges, which have arisen as a result of economic meltdowns and recessions. This phenomenon has necessitated the development of young people to be trained or empowered with entrepreneurial skills such that they can tap into or utilise available opportunities and be able to contribute to economic development. Thus, there is a need to research youth readiness towards entrepreneurship to understand the business environment and challenges that they are encountering. The role of youth in entrepreneurship has been debated in several forums, and there are still doubts about whether young people are prepared to take up entrepreneurial challenges and opportunities globally. Therefore, enabling young people to participate in entrepreneurship by making them ready and providing them with the necessary support towards new business creation gives an economy a comparative advantage over another (Olugbola, 2017: 156).

#### **1.5 Significance of the Study**

This study could help several stakeholders to understand the readiness of students towards entrepreneurship. South Africa is faced with the challenge of high unemployment among the youth (Statistics South Africa, 2019), and it is only the students with an entrepreneurial mindset who can survive in this type of environment, hence there is a need to understand their perception of readiness towards entrepreneurship. Thus, this study can help institutional managers to develop initiatives that can develop and entrench entrepreneurial skills and mindsets in students such that they are well prepared to face the unpredictable and ever-changing world.



## **1.6 Literature Review**

### **1.6.1 Theoretical Foundation**

“Entrepreneurship is the process of creating something new with value by devoting the necessary time and effort, assuming the accompanying financial, psychic, and social risks, and receiving the resulting rewards of monetary and personal satisfaction and independence” (Hisrich and Peters, 2002: 10). Another school of thought suggests that entrepreneurship is a continuous and lifelong learning experience and that it is best mastered through a combination of formal training and experience. Thus, the training must be based on real-life scenarios if it is to be effective (Halim, Ahmad, Ramayah and Hanifah, 2017: 10). Rauch and Hulsink (2015: 201) believe that promoting entrepreneurship education can facilitate the creation of employment and economic growth.

The theory of planned behaviour, which is an extension of the theory of reasoned action, underpins entrepreneurial intention and preparation. The intention of an individual to do a certain behaviour is central to the notion of planned behaviour. These intents are thought to represent motivating variables that drive behaviour; they demonstrate how diligently individuals work or are ready to “go the extra mile” to achieve a specific behaviour (Ajzen, 1991: 181). Intentions are created by attitudes, subjective norms, perceived behavioural control, and self-efficacy. Self-efficacy is defined as the individuals’ conscious beliefs in their inherent skills and abilities to accomplish tasks (Bandura, 1986: 365). Attitudes are shaped by the belief that individual behaviours will trigger a favourable result. Perceived behavioural control shows the perception held by individuals regarding a certain behaviour as something that can be personally controlled as well as the difficulty or ease of instigating a behaviour. In addition, perceived behavioural control highlights past experiences as well as the presence or lack of opportunities and resources. This means that perceived behaviour control acknowledges that many behaviours cannot be stated to be completely under volitional control (Rauch and Hulsink, 2015: 190; Armitage and Conner, 2001: 494).

According to Elster (1989: 109), subjective norms influence individuals’ social and political life. Thus, these embedded norms are powerful because they have a direct

impact on individuals' behaviour in a given environment. Simply stated, subjective norms are rules and regulations that are not written but are set and embraced by groups. These groups are expected to mould their behaviours by following certain acceptable rules and regulations. Furthermore, subjective norms are expected to be shared by others and sustained by society's compliance. Rauch and Hulsink (2015: 190) argued that subjective or social norms are created by believing in the views of others, such as family members and friends, about certain behaviours and the extent to which individuals are willing to adhere to such views or beliefs.

### **1.6.2 Entrepreneurial Intentions**

Entrepreneurs are not only instrumental in contributing to economic development but also play a critical role in society development. Thus, many governments throughout the world are promoting entrepreneurship among people, especially the youth, such that they participate in society and economic development. Entrepreneurs play a crucial role in the growth of national income by increasing per capita income and can help in reducing unemployment among youth, which is one of the major problems confronting governments (Zulfiqar Asmi, Chandia, Sarwar, and Aziz, 2017: 162). However, in South Africa, one of the major obstacles hindering the setting up of a new business, especially for young people who come from a disadvantaged background, is access to start-up capital. Furthermore, young people who are in business are confronted with the challenge of access to expansion capital that can help young entrepreneurs to grow their business from its current state to new heights (Gwija, Chuks and Iwu, 2014: 17). According to Tanveer, Gillani, Rizvi, Latif, Maqbool, and Rizwan (2012: 77), unstable and weak economic environments, market conditions that are not certain, stringent and unfriendly bank financing regimes, high interest rates, a lack of skills and expertise, and the absence of family support are some of the factors discouraging young people from taking up entrepreneurship as a career.

The potential or readiness of students to be entrepreneurs can be forecasted by evaluating the entrepreneurial intentions of the students and factors that affect their intentions (Yıldırım, Çakır and Aşkun, 2016: 278). The entrepreneurial intention in higher education institutions is the first step towards creating a dynamic and sustainable economy driven and maintained by innovation and entrepreneurial

activities. Thus, higher education institutional managers are advised to focus their attention on improving the university's curriculum as one way of developing students' entrepreneurial readiness or intentions. In addition, tailor-made and well-crafted formal courses and practices should be proffered to students to enhance their entrepreneurship intentions (Yıldırım, Çakır and Aşkun, 2016: 286).

Fayolle and Liñán (2014) believe that several variables impact entrepreneurial intention, including the setting, institution, and educational process present at a higher education institution. Moraes, Lizuka and Pedro (2018: 241) argued that the university environment contributes to entrepreneurial intentions such that when a university provides an enabling environment for the development of attitudinal characteristics of students, it enhances their entrepreneurial intentions. Turker and Selcuk (2009: 155) observed that providing adequate knowledge and inspiration for entrepreneurship in institutions of higher learning or universities increases the chances for students or young people to choose entrepreneurship as a career.

According to Misoska, Dimitrova and Mrsik (2016: 1070), the educational system should serve as a foundation and support framework for students' entrepreneurship knowledge base. This is crucial because a solid educational system may help instil more positive attitudes towards entrepreneurship, a sense of more control, and greater societal acceptance of entrepreneurship. These elements function as a trigger for increased levels of entrepreneurial ambition. Thus, Olugbola (2017: 168) believes that it is imperative for the management of higher education institutions to create an enabling environment where students can practise creating or setting up a business while at university as part of their entrepreneurship project. This can be implemented by helping students to develop practical and innovative business ideas that can be launched on campus. This will give them a chance to operationalise business ideas as done by individuals who are fully fledged in business in the outside world. In addition, Olugbola (2017: 168) added that there is a need for deliberate initiatives to provide funds and resources to students who have outstanding business ideas and to also continuously monitor their business progress and growth process before they graduate. Furthermore, any business created by students can be used as a tool for generating revenue for the institutions. In this regard, training provided to students needs to focus on what students envisage to create after graduation.

Thus, to enable students to acquire entrepreneurial qualities, there is a need to review the way that teaching is done and also how educational courses are designed. For example, in their curriculum, educators should include relevant content that energises and motivates students to chase life-changing goals as one way of buttressing entrepreneurial intentions. In addition, higher education institutions should harness teaching strategies through the use of mentors, role models, and presentations by eminent entrepreneurs to inculcate skills and help students achieve their educational goals. Pedagogical methods should be crafted in such a way that they enhance students' awareness of the benefits that can be derived by choosing entrepreneurship as a career (Ndofirepi, 2020: 16).

Higher education institutions have a critical role to play in the development of students as future entrepreneurs. Therefore, higher education institutions need to provide students with opportunities that will arouse and develop their interest in entrepreneurship. There is a belief that these interests will subsequently lead to the development of productive and innovative ideas that will provide self-employment to young entrepreneurs (Turker and Selcuk, 2009: 155). In this regard, it is important to introduce entrepreneurship classes at an early stage. Furthermore, coursework embedded with entrepreneurship should be offered to students throughout the educational cycle. In the early stages, the content given to students should focus on developing their interests and pro-entrepreneurial attitudes. Subsequently, education institutions should facilitate the provision of sound knowledge and skills that will enable them to create and successfully manage a business (Yıldırım, Çakır and Aşkun, 2016: 285). However, it is important to be cognisant of the fact that encouraging the youth to participate in business is of no use and unethical if deliberate efforts are not put in place to empower them with skills and knowledge that will enable them to sustain their ventures for longer periods, as is the case with some successful entrepreneurs (Staniewski and Szopiński, 2015: 616).

### **1.6.3 Relationship Between Personal Attitude, Perceived Behaviour Control, Self-Efficacy, and Subjective Norm and Entrepreneurial Intention**

The relationship between the antecedent of students' readiness and entrepreneurial intention is well documented in the literature (Ajzen, 1991: 182). A study conducted among entrepreneurial students in Macedonia found that attitude, perceived behaviour control, and subjective (social) norms have a significant influence on entrepreneurial intentions (Misoska, Dimitrova and Mrsik, 2016: 1069). Similarly, the relationship between self-efficacy and the entrepreneurial intention was found to be significant (Moraes, Iizuka and Pedro, 2018: 240). Another study conducted in Turkey on entrepreneurial intention among international students revealed that personal attitude, perceived behaviour control, and subjective norm have a positive and significant relationship with entrepreneurial intention (Usman and Yenita, 2019: 20).

## **1.7 Overview of the Research Methodology**

### **1.7.1 Research Design**

Research design is a blueprint that is developed to guide the research process, such as the collection and analysis of data (Pandey and Pandey, 2015: 18). Research design is multidimensional, encompassing exploratory, causal, and descriptive aspects. This study adopted a quantitative and descriptive design because it was aimed at ascertaining the relationship between variables (Sekaran and Bougie, 2016:97). In this study, descriptive research was used. Descriptive research aims to describe the characteristics of a phenomenon. Descriptive research is further used to ascertain the relationship between variables (Nassaji, 2015: 129).

Traditionally, there have been three methodologies for carrying out research: quantitative, qualitative, and mixed methods. The quantitative research technique works with numerical data, whereas the qualitative research approach tackles research problems that need textual data. The mixed methods research technique focuses on the mixing of both qualitative and quantitative research approaches such that the methodology for research questions involves both numerical and textual data (Williams, 2007: 65). A quantitative, descriptive, and cross-sectional technique was used in this study. Cross-sectional studies are conducted at the same time or at a

single point in time. They are used to determine the prevalence of the desired outcomes in a particular population (Levin, 2006: 24).

### **1.7.2 Target Population**

The population of interest from whom the researcher wishes to draw conclusions is referred to as the target population. Furthermore, a target population is finite and can be counted (Lune and Berg, 2017: 36). The target population for this study was all full-time students at the University of KwaZulu Natal.

### **1.7.3 Sampling Approach**

The sampling approach adopted in this study was a probability sampling technique. In using a probability sampling technique, every member of the population is selected based on the theory of probability. Therefore, in this technique, the characteristics of a sample are treated as similar to the ones in the target population or from which it is selected (Adwok, 2015: 95). Probability sampling encompasses five different types of sampling methods, namely, simple random sampling, stratified sampling, cluster sampling, multistage sampling, and systematic random sampling (Schindler, 2019: 88). Respondents were chosen using a simple random sample method in this study. Thus, simple random sampling is a procedure in which each element of the population has an equal probability of being chosen – sample of  $n$  from  $N$  population (Frerichs, 2008: 31).

### **1.7.4 Sample Size**

The sample size is one of the most important elements of the research design that researchers must consider during the planning of the study. According to Taherdoost (2017: 2), a sample size should be adequate if one is to generalise from a random sample and avoid bias or errors. Thus, the sample size represents the number of responses gained from a survey rather than the number of questionnaires given, which is generally raised to account for spoiled and non-responses. A total of 400 students were used as respondents in this study; however, 332 responses were collected. Previous research on entrepreneurial intention in the higher education sector at a South African university (Boris and Pendame, 2015: 268) and a Nigerian university (Chukwuma-Nwuba, 2019: 5) utilised a comparable sample size. Furthermore, in

structural equation modelling, the rule of thumb for sampling is to employ at least 200 samples to ensure the delivery of parameter values with a high level of confidence (Gerbing and Anderson, 1993: 39) but not more than 500 to prevent a poor goodness-of-fit measure (Hair, Black, Babin, Anderson, and Tatham, 2006).

### **1.7.5 Data Collection Methods**

In this study, both primary and secondary data were collected. According to Osang, Udoimuk, Etta, Ushie and Offiong (2013: 59), primary data is information acquired directly from the source using different techniques, such as surveys, interviews, focus groups, and a panel of respondents assembled by the investigator or researcher. In this study, primary data was gathered through the use of a self-administered online questionnaire. Given the COVID-19 pandemic, the researcher followed the COVID-19 guidelines to guarantee that the study did not become a vehicle for viral dissemination. In this regard, the researcher employed SurveyMonkey, a web-based data collection tool, to avoid personal interaction. As a result, the students were given a link to the questionnaire.

Saunders, Lewis and Thornhill (2006: 356) argued that the design of a questionnaire affects the response rate and reliability and validity of the study. Therefore, it is recommended to researchers to have questionnaires that are properly laid out with individual questions designed. The questionnaire in this study was developed from existing constructs or variables and was adapted to suit the context (Iqbal, Melhem and Kokash, 2012; Martins, da Cunha and Serra, 2018: 2). A Likert scale – with answers ranging from “strongly disagree”, representing scale number 1, to “strongly agree”, representing scale number 5 – was used to evaluate the student feeling (Saunders *et al.*, 2006: 380) on entrepreneurial intention. Furthermore, secondary data was gathered from a variety of sources, including electronic databases, university records or archives, government publications, and media industry research.

### **1.7.6 Pretesting**

Pretesting is frequently performed to ensure that the measuring instrument is ready for use in the main investigation. It allows the researcher to uncover flaws and other

areas that may need to be improved. In this study, 10 students from the University of KwaZulu Natal were used as respondents during the pretesting of the questionnaire.

### **1.7.7 Data Analysis**

Quantitative data in its raw form is meaningless. Therefore, there is a need to process the data such that it can be meaningful and easily interpreted. Techniques that were used when analysing data included the use of graphs, charts, tables, and statistics (Saunders *et al.*, 2006: 406). Thus, the data was analysed using both descriptive and inferential statistics. In addition, the data analysis was done using a structural equation model through a statistical package known as Analysis of Moment Structures (AMOS) and SmartPLS3. Structural equation models are normally referred to as linear structural relations (LISREL) models and are useful when assessing the relationship between latent variables. The relationship is formulated by a linear regression equation and a graphical representation by path diagrams using arrows (Nachtigal Kroehne, Funke and Steyer, 2003: 3).

### **1.7.8 Reliability and Validity**

The reliability of a study means that data is evaluated based on certain standards and methodologies, the results of which should be the same when similar measurements are repeated (Peersman, 2014: 6). The reliability of this study was measured using Cronbach's alpha. Thus, the values of alpha above 0.6 are considered acceptable (Wiid and Digginess, 2015: 249). Validity simply refers to the ability of the measurement instrument to ascertain what it is intended to measure (Peersman, 2014: 6). To ascertain the validity of the study, a factor analysis of the constructs was performed. In this regard, factor loadings of above 0.5 were adequate and retained for the purposes of grouping a variable or factor, and all the items below the acceptable threshold were deleted (Balasundaram, 2009: 7).

### **1.7.9 Limitation of the Study**

The limitation of this study was that the intended sample size was small; therefore, the findings could not be extrapolated to the 26 public institutions in South Africa or elsewhere. The findings of this study, on the other hand, may be relevant to other institutions with comparable management structures or operational structures.



### **1.7.10 Ethical Considerations**

According to Saunders *et al.*, (2006: 178), ethics is the “appropriacy” of the researcher’s behaviour towards the persons who are the subject of the research or who are affected by it. Ethical issues were guaranteed in this investigation by seeking permission to perform the study from the University of KwaZulu Natal. The research was submitted for assessment, and the University of South Africa’s Department of Applied Management Research Ethics Committee (DAMREC) granted the ethics approval. The anonymity of the participants was ensured by not publishing the identities of the respondents when presenting the results of this study. Furthermore, the respondents were informed that their participation was entirely optional and that they may opt out of the online survey at any moment without explanation.

### **1.7.11 Outline of Chapters**

Chapter 1 – Introduction: This chapter explains the study’s background, problem statement, research purpose and objectives, and a summary of the research methods.

Chapter 2 – Literature Review: This chapter covers the literature on topics such as entrepreneurial intention, social norms, and entrepreneurship in general, both in the South African context and abroad.

Chapter 3 – Research Methodology: This chapter discusses the research approach that was employed in this investigation in depth. A description of the research design, target population, sampling technique, data collecting, data analysis, reliability and validity, pilot study, and ethical issues is provided in this respect.

Chapter 4 – Data Analysis and Discussion of Findings: This chapter gives a comprehensive examination of the findings of the data analysis guided by the research methodology.

Chapter 5 – Summary, Conclusion, and Recommendations: This chapter contains a summary of the study’s findings, conclusions, and recommendations and also discusses the limitations and prospects for further study.

## **1.8 Conclusion**

The problem orientation has been thoroughly discussed in this chapter. The study's background, problem statement, research aims and objectives, and justification for performing this study have all been covered in this respect. In order to create a solid foundation, an explanation of the study's importance and theoretical background has been provided. Finally, the chapter explained the research approach in general. The following chapter describes the literature review, which is based on the theoretical framework established in the current chapter.

# **CHAPTER 2**

## **ENTREPRENEURSHIP IN HIGHER EDUCATION INSTITUTIONS**

### **2.1 Introduction**

This chapter provides an overview of entrepreneurship in the context of higher education institutions. An extensive literature review has been conducted to broaden the understanding on different concepts that are likely to induce students to embrace entrepreneurship or drive their intention towards entrepreneurship. Firstly, a general overview of entrepreneurship and the challenges that are faced by society are presented with specific reference to unemployment and the absence of capital and other capacity-building mechanisms. Secondly, this chapter discusses entrepreneurial intention, followed by self-efficacy, entrepreneurial attitude, subjective norms, and perceived behaviour control.

### **2.2 Global Perspective on Entrepreneurship**

Young people in the education sector, especially at the tertiary level, are faced with a disastrous reality about their future after completing their degrees. The challenge of finding employment remains a large problem, and this makes entrepreneurship a viable and alternative activity for survival. South Africa is one of the leading and large economies in the African continent; however, in the past 5 years, it has suffered economic setbacks, which have subsequently resulted in the downgrading of the economy into a non-investment grade, known as “junk status”, by top rating agencies, namely, Moody’s, Fitch, and Standard and Poor’s (S&P) Global Ratings (Wallace, 2019).

The problem of unemployment among the youth is a global phenomenon as it has remained crucial in South Africa and around the world. Despite several initiatives to create investment and opportunities in the South African labour market across government structures, the private sector, and civil society, the level of youth unemployment remains high. Extant research has suggested that South Africa has

52.9% of unemployed young people compared to 41.8% in 2014 (StatsSA, 2019a), while the category of the age of the youth affected by this social problem ranges between 15 and 24 years, with an unemployment rate of approximately 52.2% registered in the first 4 months of 2019 (StatsSA, 2019b). In addition, given the high cost of living, people continue to work for additional years by refusing to retire due to the “fear of the unknown” (Business Live, 2019). As a result, young people leaving high school or universities need to think of their future by planning to become entrepreneurs such that they can fight poverty and the high scale of unemployment in the country.

In Pakistan, approximately 8 million citizens have completed their highest education at the tertiary level but remain without work (Pakistan Bureau of Statistics, 2018: 56-65), while some of these former students work in odd employment circumstances or remain unemployed (Anjum, Ramani and Nazar. 2020: 543). Afridi, Afsar, Shahjehan, Rehman, Haider and Ullah (2020: 1867) believe that the motivational factor for students to embark on entrepreneurship is lacking such that they are afraid to take risks as one way of combating the problems that they face. Thus, countries around the world have used entrepreneurship in many ways depending on the objectives that they seek to attain. In India, for instance, entrepreneurship has been commonly used as a second vocational alternative because people have a better salary income, which motivates them not to start a new business (Arafat, Saleem, Dwivedi, and Khan, 2018: 350).

Globally, one of the factors that drives people to begin a personal initiative of starting a new business is believed to be the dearth of work opportunities. Jovanov, Cabuleva and Mitreva (2020: 281) estimated that approximately 2% of the population run businesses in countries such as Puerto Rico, Egypt, Mexico, and Oman; 20% in Madagascar; 16% in Brazil; 15% in Guatemala and Ecuador; and 14% in Greece. In the United States (US), 65% of the population is considered to have adequate information and structures, experience, and the environment to start a prosperous business.

The need for Africa to champion the spirit of entrepreneurship has been echoed by many people, including former President Barack Obama of the United States of America, who reiterated:

“And I’m making this trip to Africa because I believe this is a region on the move. Even as this continent faces great challenges and they are great, and we can’t paper over them or pretend that those challenges don’t exist even as too many Africans still endure tremendous hardship and great injustice, there is, as the song says a “new Africa” more prosperous, more confident, taking its place on the world stage. We’ll focus on civic leadership and public administration and business and entrepreneurship, the skills you need to serve your communities and start and grow businesses and run effective ministries” (White House Press, 29 June 2013).

Recently, in educational institutions and among policymakers, entrepreneurship has taken centre stage. This is due to the fact that an increase in entrepreneurship will result in economic growth. Entrepreneurship is thought to be a solution to issues such as unemployment and poverty. The growth of the traditional entrepreneurial culture is critical to the nation’s economic viability, and this must be supported or integrated into educational activities, particularly in schools. Entrepreneurship development initiatives, such as entrepreneurship education, should be adopted at an early age to foster an entrepreneurial culture in the school setting. This will foster the development of a new generation of entrepreneurs who are eager to put their entrepreneurial expertise to use (Mwaura, Hiuu and Gathenya, 2015: 9-10).

In recent times, it has been normal practice in South Africa for students nearing the end of their degrees to start their entrepreneurial ventures at the tertiary level, a process known as “university entrepreneurship” (Shirokova, Osiyevskyy and Bogatyreva, 2016: 388). Thus, universities have taken on the mantle to prepare their respective students to gain entrepreneurial skills and engage in entrepreneurial activities as one way of fighting the dearth of employment in the country (Amadi-Echendu, Phillips, Chodokufa and Visser, 2016: 25). The Entrepreneurship Development in Higher Education (EDHE) programme has been operational for more than 4 years, running a series of programmes to promote entrepreneurial activities among students. Despite these initiatives, very few students take up entrepreneurship as a career, and, as a result, unemployment levels remain very high. The reality is that graduate unemployment is currently hovering around 5% to 7%, which, while lower

than the total joblessness rate of 27.7%, is nonetheless concerning (Pennington, 2021: 1).

Some researchers have questioned the significance of education given the increase in unemployment in South Africa (Bhorat, Cassim, Kanbur, Stanwix and Yua, 2016). However, it has been noted that the escalation of unemployment in South Africa has been exacerbated by not only the number of youth leaving school at an early age (Spaull, 2015) but also the proportionate little access of the youth to post-secondary learning (Branson, Hofmeyr and Lam, 2013). Studies in the entrepreneurship sector have become increasingly important to fulfil the employment gaps of the youth in almost all countries in the world. Furthermore, people involved in entrepreneurship are considered the catalyst of the financial and economic development of a nation. Thus, one way of empowering the youth is through education, which is believed to be a crucial instrument that boosts financial progress, as indicated in the human capital theory (Gillies, 2015).

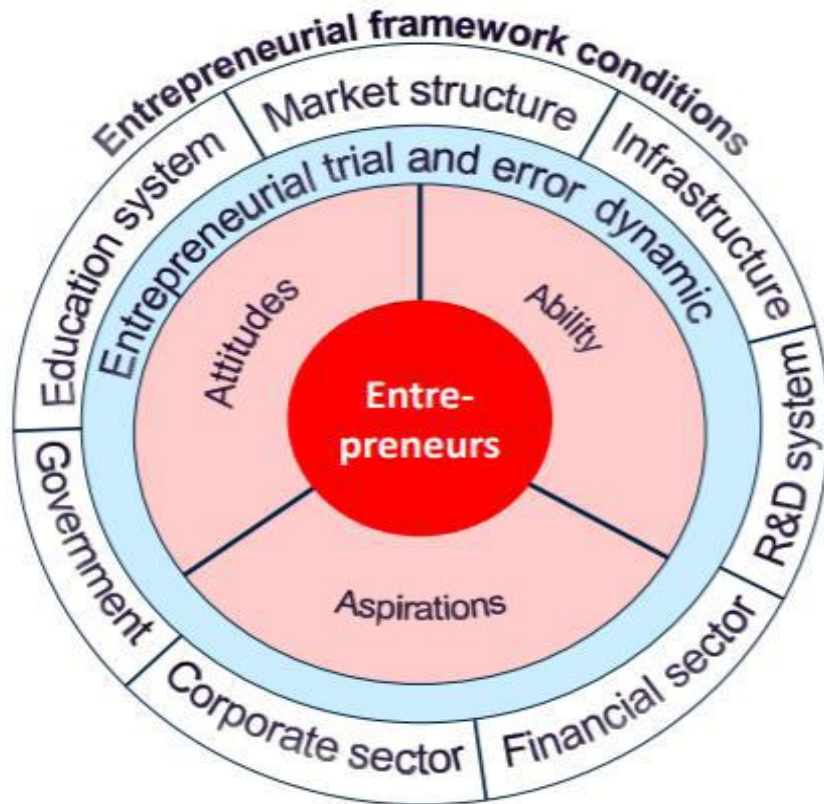
The challenges faced by university graduates after completing their respective degrees are multifaceted. These students battle with thinking about whether to secure employment or create their own business, which requires knowledge and funding. The increase in the number of young people who go astray during the period that follows after the completion of their studies plays a crucial role in the increase in unemployment in South Africa. With the high rate of unemployment of the youth in South Africa and very few support programmes that exist in the country, priority should be given to tertiary graduates to start their entrepreneurial businesses. There is a need for more youth enterprise development in South Africa supported by the government through policies that provide enough funding opportunities (Herrington and Kew, 2014: 47).

Regrettably, some of these initiatives launched since the dawn of the new democratic dispensation in 1994 have not yielded positive results due to the non-responsiveness of the youth. Thus, one of the ways to enhance such programmes for their effectiveness towards the youth is to tackle the issue by implementing practical placements (internships) in universities across the country in the sector of entrepreneurship as well as business management. This will serve as a pragmatic

knowledge-acquisition factor of entrepreneurship education while students are still attending university (Herrington, Kew and Kew, 2015: 40).

One way of attaining and building the capacity of the youth in the entrepreneurial career path after completing the tertiary education cycle is to provide them with satisfactory entrepreneurial skills and capabilities through courses that transform their mindset. The involvement of the South African government to invest in entrepreneurship is encouraging. For instance, the implementation of the Entrepreneurship Development Programme (EDP) under the National Youth Development Agency (NYDA) was initiated to embolden the abilities of the youth in the field of entrepreneurship, thereby reducing the scourge of unemployment. More encouraging is the fact that several South African institutions of higher education as well as training establishments, including some high schools, have joined the fray by providing learning materials on entrepreneurship to encourage learners' curiosity to select entrepreneurship as their preferable vocation (Herrington, Kew and Mwanga, 2017). This opens up chances for the youth to be inspired to become entrepreneurs and think about setting up well-organised structures to initiate small activities to learn and practise entrepreneurial work. By starting such practical ways of intentional entrepreneurial activities, young people are able to acquire skills and knowledge to "whet their appetite" for becoming entrepreneurs (Bueckmann-Diegoli and Gutiérrez, 2020; Fuller, Liu, Bajaba, Marler and Pratt, 2018).

It is important to understand that the entrepreneurship sector is not rooted or does not have its foundation in the amount (quantity) but rather in excellence (quality) and an enabling environment. Furthermore, from the country's perspective, it is advised that to encourage the majority of the population to implement startups, the country is required to have an operative entrepreneurial system. These systems have multifaceted configurations and can only be revived through personal attitude, aspirations, and ability; hence, there is a need for one to understand how these systems work as well as the necessary features that inspire the spirit of entrepreneurship (Malecki, 2017: 6). A description of the way these ecosystems work is presented in Figure 2.1.



**Figure 2.1:** Entrepreneurship Ecosystem (Source: Malecki, 2017)

### 2.3 The Concept of Entrepreneurship

The prime objective of an economy is to build and maintain strong businesses, which, in the long run, may result in positive benefits for all stakeholders involved. Previous research findings have suggested that mixing both “innovation and entrepreneurship” may result in growth in revenue margins, contribute to the well-being of society, improve communal integration, and boost economic growth and development (Uslu and Kedikli, 2019: 1). Furthermore, several studies have suggested that entrepreneurship plays a key role in developing economies that are in crisis and opens up several opportunities for employment because as a business grows, the demand for labour increases, thus providing jobs for the unemployed (Weforum, 2020). The field of entrepreneurship has evolved and expanded into various interdisciplinary methods that intertwine with entrepreneurial intention (Arafat *et al.*, 2018: 348). In recent times, scholarly attention has been drawn to entrepreneurship because of its potential to drive economic growth. This particular interest in entrepreneurship has also been due to its ability to stimulate the labour market by way of creating



employment, which enhances the lives of citizens by affording them quality income. As a result, many tertiary educational establishments have joined hands in imparting entrepreneurship skills and knowledge to people as one way of boosting self-employment (Prakash, Jain and Chauhan, 2015).

The concept of entrepreneurship should not be merely understood or seen as fortuitous in the sense that one can easily engage in it and succeed. It is a process that must be taken seriously because it requires one to be patient, have desire, be able to take risks, be consistent, and abide by principles of proper design and originality (Al-Awlaqi, Aamer and Habtoor, 2018). Entrepreneurship has been lauded by many scholars and policymakers as a tool that offers an opportunity to create wealth and social value in society (Welter, Baker, Audretsch, and Gartner, 2017: 312; Chandra and Shang, 2017). Particularly, there has been a growing interest from experts and researchers about the idea of a community-free enterprise (Canestrino, Ówiklicki, Magliocca, and Pawelek, 2020), which has been extensively covered in literature and also been a subject of debate for those in the “scientific and non-scientific” fields (Dwivedi and Weerawardena, 2018: 34). There is a common understanding that establishing a business requires many aspects. Thus, everything starts from having positive intentions to working on a concept or an idea that might be implemented for the business to start. In this regard, an entrepreneur has been defined as a person who has a high ambition to succeed, is self-confident, and has capabilities to transact and take risks using knowledge and learning prospects and to become involved in intentional preparation and participate in active business (Al-Ani, Musawi and Osman, 2020: 1).

The continuous development of entrepreneurship education has been presented as contributing to skills and a pool of potential entrepreneurs. This view is shared by Bazkiaei, Heng, Khan, Saufi and Kasim (2020) who believe that the educational system is now recognising the significance of creating a philosophy and attitude that are essential for entrepreneurial growth. Thus, the incorporation of entrepreneurship within the educational sector entrenches best practices and approaches that have the potential to extend prospective entrepreneurs’ understanding, attitudes, and consciousness. Students who desire to follow an entrepreneurial career path, according to Nicolaidis (2011: 1048), should receive greater government financial

help during their education. In addition, private sector investment initiatives in entrepreneurial education should be increased, and the government should provide incentives to private sector firms that support high-quality entrepreneurial programmes. For example, businesses may help colleges establish digital libraries that would make entrepreneurial initiatives available to virtually all entrepreneurship students throughout the world. This would also allow students to communicate with specialists in the field. Furthermore, each entrepreneurial student may communicate with a large number of people from all over the world in a short amount of time and for a low cost. For entrepreneurship students, the use of the Internet can radically alter their future perspective. Higher education institutions must re-emerge as vibrant intellectual communities, as they were during the renaissance, in which academic teachers and students may cooperate more and find, interpret, and meaningfully apply knowledge together (Nicolaidis, 2011: 1048).

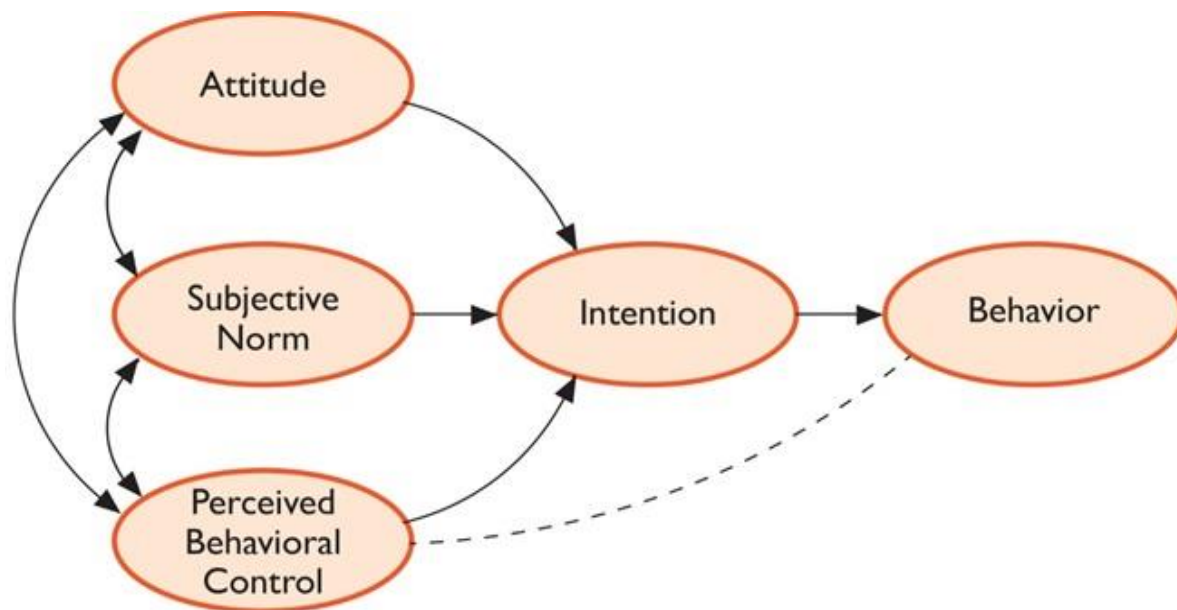
In South Africa, there is a perception that young people are suffering in their social life because they find themselves unemployed after they leave high school or tertiary institutions. Given that the high unemployment rate in South Africa is contributing to numerous social ills among the youth, the involvement of the education sector in implementing initiatives that inculcate entrepreneurship knowledge and skills in various higher education institutions needs to be encouraged because few of those who have had the opportunity to acquire entrepreneurial knowledge from their respective institutions have succeeded to put in place appropriate businesses that have assisted them to create more jobs (Graham and Mlatsheni, 2015: 51).

Thus, there is a need to strengthen education in entrepreneurship to rekindle the entrepreneurial passion in students, whether via the development of an entrepreneurship curriculum or the support of extracurricular initiatives that promote the learning of entrepreneurship skills. Therefore, innovative pedagogies that incorporate entrepreneurial project-based classes, company concept contests, and research and technology creation provide experiences that lead to the subsequent stage of practical entrepreneurial preparation. This method extends beyond theoretical classes that are merely targeted at conveying knowledge. Furthermore, an entrepreneurial culture must be established, as well as entrepreneur mentorship, team

building, cooperative communication tactics, financial help, and a college-level support framework (Lim, Kim and Kim, 2021: 543).

### **2.3.1 Understanding the Theory of Planned Behaviour (TPB) in Entrepreneurship**

The theory of planned behaviour (TPB) is a commonly known theory that has been utilised in the field of entrepreneurship and theorises the power of an intent to be an antecedent of behaviour (Ajzen, 2019). The TPB has been used and tested in different sectors of the working environment. For instance, Ru, Wang and Yan (2018: 93) revealed that the TPB has been used regularly to predict the intentions of pro-environment and comporment. Despite the positive contribution of TPB in elucidating factors related to pro-environmental behaviour, various other studies have enriched the TPB philosophy. Thus, it is important to highlight that there are factors that drive the inner intention of an individual to become an entrepreneur, and these should be prioritised and encouraged. In terms of education, entrepreneurship education can stimulate students to think of putting in place a business or corporation. Thus, the likelihood of success for individuals or students who get trained in the field of entrepreneurship is higher than those who have not received such training and knowledge (Global Entrepreneurship Monitor, 2016). As shown in Figure 2.2, the TPB is composed of subjective norms, perceived behaviour control, attitude, intention, and behaviour. The TPB claims that three factors impact behavioural intentions, namely, attitude towards the behaviour, subjective norms regarding the behaviour, and perceived behavioural control. This theory suggests that a favourable attitude and a supportive subjective norm provide motivation to engage in the action; however, an intention to do so is formed only when perceived control over the conduct is strong enough.



**Figure 2.2:** Theory of planned behaviour (Source: Ajzen, 1991)

Previous research has shown that individual attitudes, as well as their “perceived behavioural control”, are crucial because they impact positively on entrepreneurial intention (an intention that motivates students to start a business in the future). Thus, for youth to gain entrepreneurial skills, there is a need for policymakers, academics, the public, and other stakeholders to identify the pull factors that hinder their success in this field. One of the ways of handling the issue of motivating students to embrace entrepreneurship is for stakeholders to balance the level of responsibility and understand that the government alone cannot bear the burden of stimulating high levels of production and employment (Akolgo, Li, Donor, Udimal and Adamako, 2018: 16).

### 2.3.2 Entrepreneurial Intention (EI)

Extant research has shown that several factors trigger or determine the behaviour of individuals towards entrepreneurship, and emphasis on or attention to students’ perception of entrepreneurship has been given in entrepreneurship intention. Thus, a person’s foundation in intentions of entrepreneurship has been presented by utilising a great number of psychological models (Gelderens, 2016: 543). Therefore, there is a need to understand how successful businesses are established from the conception of a novel free enterprise/business to their successful development. This means

having an explicit description and an understanding of people's intentions to be involved in entrepreneurial activities (Kirkley, 2016: 151) is important.

The need for researchers to generate a theoretical and experiential connection between "intentions, beliefs and cognitions" (Sahin, Karada and Tuncer, 2019: 1191) has been discussed and widely addressed in literature. When a person has an intention, the process of launching a business begins. The search for and eventual finding of possibilities begin after an entrepreneurial goal has been formed. Intention models have always been valuable in the study and implementation of the cognitive approach to entrepreneurship because they allow people to improve their capacity to explain and predict entrepreneurial behaviour. Thus, the way intention-based models explain the causes of behaviour is a distinguishing feature. Simply stated, behaviour is best predicted by intentions (Debarliev, Janeska-Iliev, Bozhinovska and Viktorija, 2015: 146).

In recent times, the role of education in the entrepreneurship sector has been well documented in the literature as a contributing factor helping the youth to find some opportunities (Entrialgo and Iglesias, 2016: 1212; Fayolle and Gailly, 2015: 78). The TPB has been used to gauge or predict students' entrepreneurship intentions (Saraih, Aris, Mutalib, Ahmad and Amlus, 2018). Yi (2020: 6) asserted that entrepreneurial intention (EI) is how individuals depict their intention to inaugurate a novel project or idea and serves as a tool that is used to create a means for survival other than normal employment. Similarly, Ladd, Hind and Lawrence (2019: 393) considered EI as an intention that deals with the behaviour of students in tertiary institutions in terms of formulating business ideas at the end of their studies. However, in South Africa, one of the major obstacles hindering the setting up of a new business, especially among young people who come from a disadvantaged background, is access to start-up capital. Furthermore, young people who are in business are also confronted with the challenge of access to expansion capital that can help young entrepreneurs to grow their business from its current state to reach new heights (Gwija, Chuks and Iwu, 2014: 17).

Turker and Selcuk (2009: 155) observed that providing adequate knowledge and inspiration for entrepreneurship in institutions of higher learning or universities

increases the chances for students or young people to choose entrepreneurship as a career. Fayolle and Liñán (2014) believe that EI is influenced by several factors, such as the context, institution, and educational process that are provided by the higher education institution's university environment. These views have been echoed by Moraes, Lizuka and Pedro (2018: 241) as they argued that the university environment is an important factor that contributes to entrepreneurial intentions such that when the university provides an enabling environment for the development of attitudinal characteristics of students, it enhances their entrepreneurial intentions.

According to Misoska, Dimitrova and Mrsik (2016: 1070), the educational system should act as a foundation and support structure for students regarding their knowledge base on entrepreneurship. This is critical because a good educational system can help in inculcating more positive attitudes towards entrepreneurship, a feeling of better control, and higher social approval of entrepreneurship. These factors are a catalyst for higher levels of entrepreneurial intentions.

Thus, there are three main motivations that contribute to individuals' intentions to become involved in entrepreneurship. Firstly, entrepreneurial intents are believed to symbolise an intellectual state of mind that inspires the entrepreneurial behaviour of individuals (Thompson, 2009: 18). Secondly, the deliberate behaviour of being interested in becoming a business person/entrepreneur is another step towards entrepreneurship (Kessler and Frank, 2009: 725). Finally, the intentions that grow in individuals towards entrepreneurship have the potential to provide a better understanding of planned behaviour (Krueger and Carsrud, 2003: 316). One of the important factors that leads to success in a business start-up is the capacity of individuals to translate their knowledge of entrepreneurship into lucrative ventures. Thus, having knowledge and being able to use it effectively rests on the willingness of individuals to participate in entrepreneurial activities (Olugbola, 2017: 155).

EI should be understood as the search for awareness that is likely to be useful towards the achievement of commercial activity. Moreover, some scholars believe that intentions should be understood as a precursor of authentic behaviour. However, it is important to underline that intentions do not always translate into real entrepreneurial activity because they are affected by unknown pushing and pulling factors that hinder

their realisation. For instance, the intention that an individual develops over time regarding starting a business is affected by financial availability. Some individuals fail to realise the dream of their life due to constraints in accessing a financial package that might help them to launch their business and grow in the long run. In cases where the state provides funding to support entrepreneurial initiatives, those with intention, business-related qualities, opportunities, and a risk-taking attitude are likely to have a chance to obtain funding and succeed – this specifically involves the youth, who are the most likely targeted social group due to their vitality in society (Shinnar, Hsu, Powell and Zhou, 2018: 70).

Entrepreneurship does not happen by chance and cannot take off without challenges. It takes individuals who are courageous and who understand that in every business activity in which one becomes involved, there are always risks to succeed or fail. Experienced individuals who have tried five to six times but failed have finally become successful after many trials. Thus, the disposition towards risk is connected to the intention that one has regarding entrepreneurship (Yukongdi and Lopa, 2017: 335). Conversely, other researchers have averred that there is no link between propensity towards risk and EI (Munir, Jianfeng and Ramzan, 2019).

Hsu, Burmeister-Lamp, Simmons, Foo, Hong and Pipes (2019: 314) indicated that people who are enthusiastic and motivated to begin a corporation have a different temper than individuals who are unwilling to start a business. As a result, if someone has no interest in the field of entrepreneurship, they are likely to face problems related to the procedure compared to those with a positive inclination towards entrepreneurship (Esfandiar, Sharifi-Tehrani, Pratt and Altinay, 2019: 177). Thus, motivated people who tackle the challenges of entrepreneurship are those who are willing to take the risks associated with it, highly optimistic, and set their intention to start and succeed by any means necessary (Davidsson, 2015: 677). Research on the behaviour of entrepreneurial beginners has focused on the differentiation between someone exhibiting intentional motivation and one who does not (Schlaegel and Koenig, 2014: 293). On the one hand, Shirokova, Osiyevskyy and Bogatyreva (2016: 389) averred that understanding entrepreneurial intentions is the first step because not all plans come to fruition. According to Van Gelderen, Kautonen and Fink (2015: 657), not all individuals have inner intentions to become involved in business using

their funds. At some point, their intentions are altered because of particular inclinations or other constraints.

Entrepreneurial intentions are supported by creativeness, which is defined as a social competence to deliberate, adapt, learn, and generate ideas. Linking this definition with the way that the mind of an individual operates in the entrepreneurial process entails the prerequisite for one to be an entrepreneur, that is, to be imaginative, analytical, and able to develop opportunities from novel ideas and translate them into a new project. An individual who possesses an extraordinary capacity for inventiveness, confidence, and a constructive attitude is likely to succeed in the process of undertaking entrepreneurship (Anjum, Amoozegar, Nazar and Kanwal, 2020: 1328). In addition, passion, commitment, and persistence are the key tenets of success for anyone seeking to embark on an entrepreneurship journey (Fisher, Merlot and Johnson, 2018: 22; Drnovsek, Cardon and Patel, 2016: 194). Similarly, previous studies on entrepreneurship have underscored the importance of passion as a key factor that helped Iranian students become involved in entrepreneurship (Karimi, 2020).

Cardon, Post and Forster (2017: 282) believe that there is some form of motivational factor or desire in individuals regarding entrepreneurship, and this pushes them to look for available opportunities and develop their intention to begin their novel business. In the same vein, students are motivated or develop their desire to gain more information about prospects in the field of entrepreneurship through the process of orientation and learning (Jabarullah and Hussain, 2019: 552), thus nurturing imagination, awareness, action, commitment, and participation. Therefore, it is important to realise that the process of planning to start a business always starts with an intention, which precedes activities related to entrepreneurship. Thus, engaging in entrepreneurial activity requires one to identify and develop an interest in available opportunities (Sriyakul and Jermsittiparsert, 2019: 195).

Numerous studies have been conducted to evaluate the effects of EI on students' attitudes and behaviour. Firstly, a qualitative study carried out on EI using the TPB, and specifically factors that drive EI among students in Turkey, revealed that personal attitude and perceived behaviour control (PBC) have a positive relationship with EI



(Usman and Yenita, 2019: 2). Another study that investigated the push factors that motivate entrepreneurial students' intention found that education programmes and subjective norms do not have a positive effect on EI whereas PBC has a positive effect on EI (Cera and Nevila, 2017).

Similarly, Shar and Soomro (2017: 841) investigated entrepreneurship intentions in selected universities in Pakistan. This study aimed to ascertain the effect of several factors on entrepreneurial students' intention. The results of the investigation revealed that a positive association exists between "subjective norms, attitude towards behaviour and entrepreneurial intention." Conversely, the results revealed that a negative association exists between PBC and EI. The authors further observed that graduate students from universities in Pakistan tend to set up their own businesses after they have completed degrees, even though they believe that the financial and moral support of members of their family, colleagues, teachers, and experts are crucial for success. Kim-Soon, Ahmad and Ibrahim (2016) also evaluated the intention and entrepreneurial enthusiasm of undergraduate students at tertiary education institutions using the TPB. The results of this study found that the elements of entrepreneurship motivation that subsequently affect EI are "social norms, subjective norm, and attitude towards behaviour." Furthermore, subjective norm and attitude towards self-employment played an important role in determining students' instant and future entrepreneurship intentions whereas perceived "behaviour control" was found to be significantly related to students' immediate career intentions but not to entrepreneurship intentions.

### **2.3.3 Self-Efficacy in Entrepreneurship (SE)**

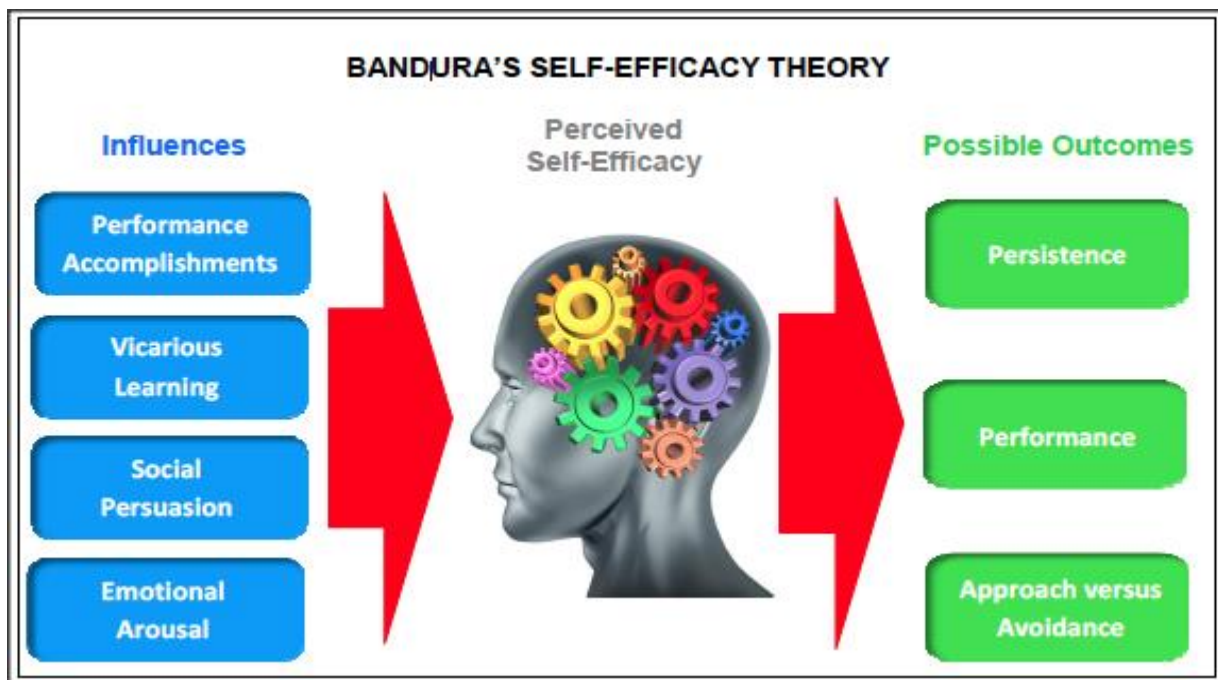
Some similarities exist between self-efficacy in entrepreneurship (SE) and the expectancy theory (ET) because they both work as behavioural instruments or theories; therefore, they are often compared in the entrepreneurial field. Part of what makes them slightly different is that ET is based on two expectations. One lies in the likelihood that effort will culminate into performance, while the other lies in the likelihood that performance culminates into an outcome. The similarity of SE and ET is that they both focus on individual self-assessments of their capabilities and are

concerned with performance (Chen *et al.*, 1998: 299; Shaheen and AL-Haddad, 2018: 2386).

Entrepreneurship is viewed differently by researchers, taking into consideration that there are many factors at play. For instance, Chang, Shu, Wang, Chen and Ho (2019) described entrepreneurship as a consequence of an individual's exhibitions and determinations, including personal characteristics such as entrepreneurial self-efficacy (ESE), which is one of the factors driving the attitude predisposition. While ESE has been identified as an antecedent of entrepreneurial efforts and intentions, it must be noted that individuals have a higher propensity to turn their intentions into action if they have a strong inner drive (Pérez-Lopez, González-Lopez and Rodríguez-Ariza, 2019: 256).

Recent and current research have mostly emphasised the SE concept as a tool used for evaluating entrepreneurial activities (Palmer, Niemand, Stöckmann, Kraus and Kailer, 2019: 185). Thus, motivated individuals displaying high self-efficacy behaviour trust their capacities but also remain confident of achieving their planned responsibilities. SE helps one who has a plan to start making proper choices and understand the effort needed to invest in the planned intention. It has been discovered that SE has not only a significant impact on the performance of entrepreneurial activities (Bouncken and Reuschl, 2018: 318) but also a positive effect in terms of performance on a newly implemented business (McGee and Peterson, 2019).

In organisational structures where there is robust leadership, self-efficacy is stated to inspire creative and innovative behaviour (Maran, Furtner, Kraus, Liegl and Jones 2019; Brand, Tiberius, Bican and Brem, 2019). Self-efficacy may also be defined as a person's conviction in their own ability to act. Furthermore, someone with strong self-efficacy is very confident in carrying out an action. As a result, self-efficacy is required to motivate employees to believe in their abilities to attain goals or expected outcomes (Rahmi, Yusuf and Priyatama, 2014). According to Ghufron and Risnawita (2010: 77), self-efficacy is a person's conviction in their capacity to cope with a wide variety of life conditions. Figure 2.3 shows the different types of self-efficacy.



**Figure 2.3:** Dimensions or foundations of self-efficacy (Source: OVP Management consulting group, 2018)

SE is based on four foundations (Philippakos, 2020: 2). The first foundation of SE is “*enactive mastery experiences or performance accomplishment or outcomes*”; this is a key foundation of SE because of its principles, which are based on the previous successes, experience, and knowledge in a person. This principle requires expectations towards success while performing a task to be linked with experiences. Thus, past experiences are believed to have a positive or negative effect on upcoming tasks. The second foundation is “*vicarious experience or learning*”, which is a prototype of individual efficiency by virtue of a person’s association with people of similar or higher capabilities. This principle lies in the belief that when someone attains an objective, it has a constructive effect on the other person (Rhaiem and Amara, 2019).

The third foundation is referred to as “*verbal or social persuasion*”. This links the behaviour of an individual to the information that they gain from numerous sources, such as encouragement generated by the close social environment. Verbal persuasion has the power to augment one’s objective and also provides assurance that it is possible. The last foundation is the “*psychological and affective states or emotional arousal*”, which plays a key role in influencing the level of efficiency. The implication is

that the judgement, capacity, or capability of an individual is connected to somatic information emerging from mental and emotive states. For example, if a student or an individual is discouraged or frustrated, they will be distracted from achieving an objective and are not likely to succeed (Swaim and Henley, 2017: 118).

SE suggests that someone's belief is connected to their capacity to set up a business. As such, self-efficacy is a predictor of EI. It is also important to highlight that individuals who can become entrepreneurs may not do so if they believe that entrepreneurship will not assist them to achieve or fulfil their needs (Hsu, Wiklund and Cotton, 2017: 22). Thus, individuals with a high level of self-efficacy show a profound certainty in their capabilities but also confidence about their capacity to complete given tasks (Palmer *et al.*, 2019). Crespo, Belchior and Costa (2018: 12) asserted that SE drives individuals to have the desire to become an entrepreneur. Similarly, Gielnik, Uy, Funken and Bischoff (2017) added that self-efficacy is also believed to boost desire and encourage the creation of a business. Previous research has also concluded that ESE has a direct impact on EI (Sultana, Im and Im, 2019: 106), and, in some cases, it is believed to affect firm performance (McGee and Peterson, 2019: 728). In addition, self-efficacy stimulates creative and innovative behaviour, which is crucial in terms of managing the daily running of a business or organisation (Díez-Martín, Blanco-González and Prado-Román, 2020).

#### **2.3.4 Personal Attitude Towards Entrepreneurship**

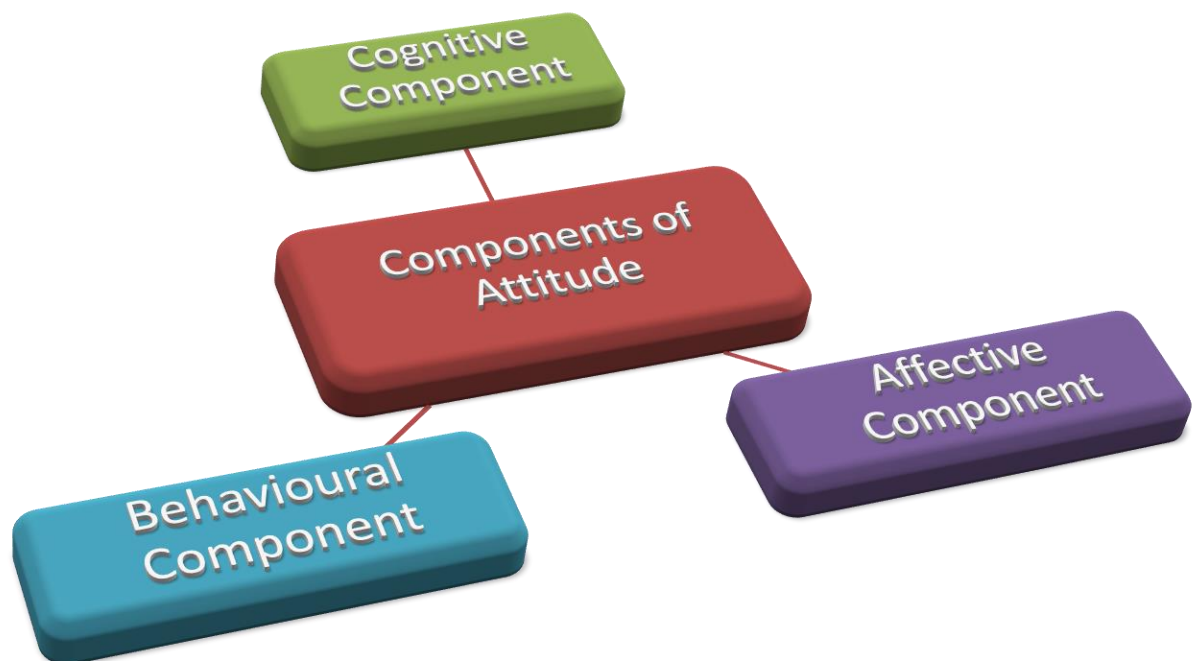
In Africa, youth have a positive attitude towards entrepreneurship such that they are, in many ways, actively involved and fully aware of the importance of entrepreneurship. In addition, most of the youth in Africa have shown great zeal for an entrepreneurial career because it provides an opportunity for one to gain personal independence. This simply means that most youths have a positive attitude, would love to be self-employed, and believe that entrepreneurship provides that platform (Adebayo and Kavoos, 2016: 35). Attitude is defined as one's capacity to perform or act in a certain way and is also shown in terms of one's behaviour. Therefore, an attitude towards entrepreneurship is the willingness shown by an individual to be involved in becoming a business person. It is important to highlight that in the process of one becoming an entrepreneur, the individual has to firstly show an intention to embark on

entrepreneurship, and this is subsequently reflected in the attitude of the person (Tengku, Abdullah and Mohamed, 2020: 2).

Attitude has been defined by many scholars in different contexts. Another school of thought suggests that attitude is an evaluation of things or objects, which may constitute a positive or negative behaviour. Attitude towards a certain behaviour by an individual leads to a stronger intention to perform the behaviour (Lin, Goodsite and Sanderson, 2015: 13164). Personal development aimed at developing favourable attitudes towards entrepreneurship should be supported in the framework of higher education alongside incubators that improve individual attitudes towards entrepreneurship. Personal growth and incubators may also aid in the formation of social networks that will assist the entrepreneur in their endeavour. Therefore, the development of incubators where the entrepreneur may receive balanced support and a holistic strategy is advocated (Fenech, Baguant and Ivanov, 2019: 9).

Attitude in respect of behaviour is “the degree to which a person has a favourable or unfavourable evaluation or appraisal of the behaviour in question” (Ajzen, 1991: 188). Attitude is a multidimensional concept comprising affective or experiential attitude and instrumental or cognitive attitude. Affective attitude refers to feelings or emotions such as joy, anger, and satisfaction, which are key in driving behaviour, whereas cognitive attitude refers to arguments, beliefs, and thoughts (Ajzen, 1991; Fernandes and Proença, 2013). Thus, higher education institutions offering entrepreneurship education programmes should offer a variety of courses and not only focus on management courses offered, in most cases, by a business school and aimed at increasing students’ business skills or competence but also focus on developing self-confidence and creating positive emotions towards entrepreneurship (Vamvaka, Stoforos, Palaskas and Botsaris, 2020: 19). Entrepreneurship, from both the points of view of rhetoric and practice, requires one to acquire knowledge or educational elements that can influence the attainment of success. Thus, the achievement of a certain level of education influences individual characteristics to plan for a significant role in the entrepreneurial sector. Some of the elements or features that contribute positively to an individual’s entrepreneurial career and success are inventiveness, determination, concern, promise, persuasion, self-assurance, and confidence (Kaur and Bains, 2013: 32).

Another school of thought suggests that entrepreneurial attitude has three dimensions, namely, affection, cognition, and conation. Affection represents sentiments and emotions, cognition represents thoughts and beliefs, and conation represents action and conduct. An individual's attitude towards entrepreneurial conduct is created as a consequence of the combination of these three variables (Robinson, Stimpson, Huefner and Hunt, 1991: 29). Similarly, Pulka, Aminu and Rikwentishe (2015) investigated students' views about entrepreneurship education from cognitive, emotional, and behavioural perspectives. Students' thoughts, beliefs, and knowledge about entrepreneurship education are referred to as the cognitive dimension; students' feelings and emotions about entrepreneurship education are referred to as the affective dimension; and students' actions, responses, and willingness to adapt to new ways of carrying out tasks are referred to as the behavioural dimension, as shown in Figure 2.4.



**Figure 2.4:** Dimensions or components of attitude (Source: Pulka, Aminu and Rikwentishe, 2015)

Entrepreneurial attitude helps to build up the entrepreneurial comportment of an individual. In addition, attitude brings some variations in terms of temperament, abilities, awareness, opinion, and capability from an entrepreneurial perspective. Entrepreneurial attitude is indispensable simply because it has the power to stimulate the intent of someone to begin a business. However, the question of whether entrepreneurship is effective once taught to an individual in the school or university environment remains a subject of debate (Ayalew and Zeleke, 2018). This is because some scholars suggest that abilities and free enterprise mentalities cannot be taught by others. Thus, individuals learn by themselves through the achievements and setbacks that they have experienced. On the other hand, some researchers contend that it is not necessary to teach entrepreneurship because of the dissimilar characteristics that some entrepreneurs may have from their birth. For instance, some people have the capacity to take opportunities and finalise their projects or new initiatives until they succeed whereas others do not (Sarasvathy, 2015).

An individual's attitude to engage in entrepreneurship is also encouraged by many other factors such as the quest to contribute to creating new job opportunities. While it is disputed that some people are born with an entrepreneurial mindset, which is innate or to which these individuals are predisposed from birth, other individuals have the broad-mindedness to acquire knowledge, master the contours on how to go about it, and practise it without failure. For instance, youth engagement in any activity is left in their hands such that they can select or choose opportunities that are in sync with their passion rather than relying on outmoded systems (Alecusan and Dimitrescu, 2016: 145). Thus, an entrepreneurial attitude is key to initiating new business ventures, which subsequently contribute to developing better opportunities for the community. In this regard, countries need to put in place regulations that encourage young people to nurture their entrepreneurial ability and develop initiatives that will help them to launch their businesses without experiencing many challenges (Danyal and Ornek, 2015: 1148).

#### Parental Role in Influencing Entrepreneurial Attitude

Parents play a crucial role in the upbringing of children until they become independent. Their respective involvement in education and guidance to prospects should be considered. Parents' attitudes and modes of talking in the family contribute to shaping

children's perceptions of their future career, although the final choice remains entirely in the hands of the children. Parents' attitudes are, nevertheless, taken seriously; therefore, there is a need to understand how they encourage and guide their children to make good decisions when choosing their career. A family is considered "a complex structure composed of mutually dependent groups of people who share the same story, experience some level of emotional bond, and introduce interaction strategies needed by individual family members and the group as a whole" (Staniewski and Awruk, 2021:539).

Previous research on entrepreneurship has shown that families with a father or mother who is an entrepreneur augment the likelihood that some of the children in the family will become entrepreneurs (Lindquist, Sol and Van Praag, 2015: 270). Parents' position as business persons and their influence during parenting stimulate the intent and entrepreneurial approaches of children. While research has given little attention to investigating the influence of the foundation of the family in terms of attaining positive results by an entrepreneur in the future, the family social background – that is, parental attitudes, communication, and family structure – remains the key factor that shapes psychological constructs of self-confidence (Biernat, 2016: 164). According to Jagannathan, Camasso, Das, Tosun, and Iyengar (2017: 16), parents and the social environment of the youth play a critical role in the formation of entrepreneurial attitudes and interests towards entrepreneurship. The attitudes are further strengthened if the youth have been employed before. In addition, values that are oriented towards achievement, personality traits, and power play a role in an individual's propensity towards entrepreneurship.

Another important stream in the domain of entrepreneurship, especially regarding the intention of free enterprise, is the role of gender in the construction of EI. This is justified by the fact that career arrangements differ across genders because although there is enough representation of women in the enterprise sector, there are more men than women in this sector (Shirokova, Osiyevskyy and Bogatyreva, 2016: 387; Zampetakis, Bakatsaki, Litos, Kafetsios, and Moustakis, 2017: 451). The most perceived opinion about entrepreneurship and one that is widely embraced or in people's minds is that it is more suitable for men than women. A commonly held view is that men are more predisposed to engage in the field because they possess certain



characteristics and qualities, such as fierceness, self-sufficiency, and bravery. Nonetheless, while opinions are scattered on the issue of gender and its role in free enterprise, Luca, Cazan and Tomulescu (2012: 1045) believe that women are not as interested in entrepreneurship than men due to their apparent aptitude in this field as well as their risk attitude, which is viewed or regarded as being indifferent.

### **2.3.5 Perceived Behaviour Control (PBC) in Entrepreneurship**

Perceived as the principal factor for financial growth, entrepreneurship has gained a considerable place in the debate among academicians as well as policymakers. As a result of the effect of entrepreneurship on society, most students view the field of entrepreneurship as their alternative vocation (Lechner, Sortheix, Obschonka and Salmela-Aro, 2018). Interestingly, when one considers the educational dialogue, emphasis has been placed on drivers of EI as important elements for an increase in entrepreneurship. Understanding what motivates entrepreneurial behaviour is, thus, critical for policymakers and educational managers since it may assist to improve the efficacy of public policies and educational initiatives (Hsu, Shinnar, Powell, and Coffey, 2017: 78). PBC, as a concept, has been applied across several disciplines. PBC is an individual's control of behaviour or the challenge faced by an individual to control or carry out their behaviour. Compared to other prototypes that contribute to intentions that people have regarding entrepreneurship, PBC permits an individual to appreciate and foresee intentions that are accurately focused on social dynamics (Anh and Mai 2013: 57). The presence of sufficient resources and the ability to control behavioural barriers have an impact on behaviour performance. Individuals sense greater behavioural control and stronger intentions to do tasks when they perceive more resources and fewer obstacles (Hardin-Fanning and Ricks, 2017: 4).

Other scholars, such as Malowi (2015), have suggested that PBC should also be seen as an individual capacity to convey a particular behaviour. It is also used in different contexts to predict wedding intent (Shahrabadi, Karimi-Shahanjarini, Dashti, Soltanian, and Garmaroudi, 2017: 4092), succession exchanging intent (Lois, Mariano and Rondinella, 2015: 102), and people looking for work (Tsang, Wang and Ku, 2015: 668). Previous research has paid attention to investigating students' perceptions of PBC and EI (Benachenhou, Fethi and Djaoued, 2017: 274; Marire, Mafini and Dhump

2017; Saraih *et al.* 2018), and the results found have shown mixed relationships. Some studies have revealed the existence of a positive relationship between attitude towards behaviour and EI (Fantaye, 2019: 28), whereas others have reached a conclusion showing that the relationship between PBC and EI is not significant (Kadir *et al.*, 2012: 2170).

Entrepreneurial PBC has a significant influence on EI. Entrepreneurial PBC states that when people think that they are in control of their own behaviour, they are more likely to act on their desires. Given that entrepreneurial PBC has a significant influence on EI, it, therefore, follows that entrepreneurship is a protracted process to accomplishing corporate goals (Lim, Kim and Kim, 2021: 539).

### **2.3.6 Subjective Norms in Entrepreneurship (SN)**

Although behavioural standards are seldom formalised into official legislation or rules, they provide strict order to human activity in every aspect of social life. Indeed, their effect on social life is critical in preventing it from being ugly, brutish, and brief. Human contact may descend into psychological or even physical violence in the absence of societal rules. Everyone knows that striking another person in the face in a conversation does not convey disagreement, even if the concept is seductive at times. Norms also make it simpler for individuals to coordinate with one another, preventing ordinary life from devolving into unmanageable chaos (Anderson and Dunning, 2014: 721).

Subjective norms have been a subject of debate among both academics and practitioners in trying to understand individuals' entrepreneurship intentions (Canestrino, Ówiklicki, Magliocca, and Pawelek, 2020: 133). Thus, subjective norms are widely viewed as the driver of EI (Hockerts, 2015: 263). To a large extent, many theoretical prototypes are being developed to understand SN. An assessment of SN backgrounds has also been conducted to understand different ways of handling SN in a practical context in the domain of entrepreneurship and other areas. SN is connected to individual disposition, such as proactive personality (Chipeta and Surujlal, 2017), including characteristics of communal demography such as gender, and is a predictor of entrepreneurial intentions (Chipeta, Surujlal and Koloba, 2016: 6886). A society with

evident collectivistic tendencies indicates that the social framework is given significant priority. As a result, family, friends, and several other linked sub-groups influence the individual decision-making process (Tiwari, Bhat and Tikoria, 2017: 10).

Subjective norms refer to perceived societal pressure to engage in, or refrain from engaging in, a certain behaviour; as a result, this factor becomes the primary reflection of social and cultural values. An estimation of subjective norm is obtained by analysing two variables: beliefs about how other significant people believe the individual should behave (normative beliefs), and motivation, which refers to the general tendency that exists in complying with the norms of a group taken as a reference (Shook and Bratianu, 2010: 235). Subjective norms influence social EI, according to Tiwari, Bhat and Tikoria (2017: 20). However, it has been highlighted that the findings involving subjective norms are counterintuitive to Ernst's (2011) earlier study, which found that subjective norms had no significant link with EI. Therefore, the role of subjective norms should be investigated further in collectivist nations with strong family ties. This is because pressure from key individuals and the immediate surroundings has an impact on decision-making.

Another school of thought suggests that norms, no matter how powerful, do not always influence behaviour. People do not merely act in response to what others are doing in a particular scenario; they sometimes act defiantly, refusing to follow conventions as done by the majority. Many historical individuals, such as Rosa Parks, Nelson Mandela, and Mahatma Gandhi, have achieved prominence precisely because they used their superior judgement and refused to conform to conventional standards. Indeed, one may describe leadership as the ability of individuals to instil new standards. As a result, while there is data illustrating both the strengths and limits of norms, a useful area of study would be to clarify the situations under which norms may exert an effect on behaviours and those under which norms are not accurate behavioural predictions (Chung and Rimal, 2016: 10).

Correlating the influence of social norms in entrepreneurship, a study conducted by Anwar, Jamal, Saleem and Thoudam (2021: 52-53) revealed that considering the "weakest coefficient", the opinion of the community influences the comportment of an individual's business intent. Stimulatingly, whether there is an open agreement or

disagreement from the household, colleagues, and peers relating to a startup, a substantial role has been played while deciding on an individual's intent towards entrepreneurship. Unfortunately, the results of this research both approve and diverge from the previous ones (Krakauer, de Moraes, Coda, and Berne, 2018: 363).

Subjective norm has a significant impact on students' EI. This implies that the social environment that drives students to become entrepreneurs has a significant impact on students' decisions to pursue entrepreneurship. Students with a social–environmental background and those who are interested in doing business would create positive encouragement for other students to pursue the same, which is to conduct business. Subjective norm is thought to be a characteristic that gives individuals the social pressure to behave in a certain way based on the environment's views (Farrukh, Alzubi, Shahzad, Waheed, and Kanwal, 2018: 50).

### **2.3.7 Relationship Between Personal Attitude, Perceived Behaviour Control, Self-Efficacy, and Subjective Norm and Entrepreneurial Intention**

The relationship between the antecedent of students' readiness and EI has been well documented in the literature (Ajzen, 1991: 182). A study conducted among entrepreneurial students in Macedonia found that attitude, PBC, and subjective (social) norms have a significant influence on entrepreneurial intentions (Misoska, Dimitrova and Mrsik, 2016: 1069). Similarly, the relationship between self-efficacy and EI has been found to be significant (Moraes, Iizuka and Pedro, 2018: 240). Another study conducted in Turkey on EI among international students revealed that personal attitude, PBC, and social norms have a positive and significant relationship with EI (Usman and Yenita, 2019: 20).

Previous research has reported a positive association between attitude and EI (Fantaye, 2019). Other researchers have found a negative relationship (Benachenhou, Fethi and Djaoued, 2017). Another study was conducted using two regulator variables comprising gender and the main (educational specialisation). The dichotomous variable of gender (0: female, 1: male) was found to have a positive effect on the intention of entrepreneurship (Camelo-Ordaz, Diáñez-González and Ruiz-Navarro, 2016: 264). In addition, previous research findings have revealed that

business intentions might change due to education specialisations (Maresch *et al.*, 2016). Other studies have also found that self-efficacy and emotional attitude have a significant relationship with intention (Huang and Chen, 2015: 1688; Conner *et al.*, 2015: 645). Similarly, a strong and positive link between EI and attitude has been discovered (Agolla *et al.*, 2019). Huang and Chen (2015: 1688) have also sought to develop an understanding of attitude and other concepts such as PBC. Thus, the TPB has shown that both attitude and PBC are determinants of EI.

## **2.4 Conclusion**

This chapter provided a general overview of entrepreneurship with specific reference to the challenges that are confronting the youth, specifically unemployment, thereby leaving them with no choice but to choose entrepreneurship as an alternative vocation. The concept of entrepreneurship was discussed as a tool that offers an opportunity to create wealth and social value in society. Furthermore, the chapter discussed EI and its antecedents, namely, entrepreneurial attitude, self-efficacy, PBC, and subjective norms. Thus, it was noted that intention plays a crucial role or is a step towards entrepreneurship. This, coupled with a positive attitude, helps one to make an informed choice regarding entrepreneurship. In order to build a positive attitude in students towards entrepreneurship, educational programmes in schools, parents, or family members have a role to play in shaping their mindset. With respect to subjective norms, extant literature has shown that every society has standards within which individuals must operate, and these are key to entrepreneurship because the social environment has an impact on the decision-making process. Regarding PBC, it was noted that behavioural disposition is a natural precursor to intention, which leads to action. Lastly, the reviewed literature showed that many scholars have found that EI has a positive relationship with self-efficacy, entrepreneurial attitude, PBC, and subjective norms. The following chapter discusses the methodology that guided this study.

# **CHAPTER 3**

## **RESEARCH METHODOLOGY**

### **3.1 Introduction**

The preceding chapter discussed the literature review of this study by analysing different concepts of entrepreneurship and the TPB. The current chapter provides a detailed discussion of the research methodology that guided this study. In this regard, the research design, comprising exploratory, experimental, explanatory (causal), and descriptive research, is presented. In addition, this chapter discusses the sampling techniques, target population, sample size, data collection, and the reliability and validity of the study. Lastly, ethical considerations are highlighted to show the ethical standards that were utilised in the study.

### **3.2 Research Design**

The research design is the overall strategy used by a researcher to integrate the different elements of their study in a logical and coherent manner, thus ensuring that the problem being investigated is adequately addressed. It serves as the template for gathering, evaluating, and analysing data (Neuman, 2014: 88). Exploratory or formulative research, descriptive research, explanatory research, and experimental research are all types of research design. Exploratory studies are typically more appropriate when there is little research experience on a subject (Akhtar, 2016: 73). Exploratory research employs procedures such as questionnaires, two-stage designs, and focus groups (Blumberg, Cooper and Schindler, 2014: 156).

Explanatory research is a strategy for researching a phenomenon that has never been studied or fully described. Its major objective is to provide scholars with information on where they may locate a small amount of data. This technique enables the researcher to develop a broad concept and then utilise research to assist them to get closer to the issues that may need to be investigated later. Its goal is to determine which topics are worth studying and why. Explanatory research is tasked with finding why events occur by identifying cause-and-effect relationships (Creswell, 2012: 98; Akhtar, 2016: 77-

78). An experimental study is one that follows a scientific research technique. It comprises a hypothesis, a variable controlled by the investigator, and other variables that may be evaluated and compared. Simply stated, the research environment for experimental studies is controlled. The investigator seeks to establish the link between two variables, namely, the dependent and independent variables. The researcher collects data, and the results either support or contradict the theory (Blumberg, Cooper and Schindler, 2014: 158; Akhtar, 2016: 78-79).

Descriptive research is a form of study that uses methodologies to describe the variables that are the subject of research investigation. The focal point of this method is the “what” of the research rather than the “why.” Instead of focusing on the “why,” descriptive research centres on simply reporting the nature of the demographics being investigated. Descriptive research is referred to as an observational research technique since none of the variables in the study are modified during the entire process. Simply stated, descriptive research is a quantitative research method that utilises variables to address a market problem using a quantitative research tool (Blumberg, Cooper and Schindler, 2014: 158). The steps in descriptive research involve deciding on a data collection method, selecting a sample size, collecting data, and analysing the results (Akhtar, 2016: 76). In this study, a descriptive research design was utilised because the researcher wanted to ascertain the relationship between variables, namely, EI and subjective norm, personal attitude, PBC, and self-efficacy.

### **3.3 Research Philosophy**

Interpretivism and positivism are two schools of thought in research philosophy. In an interpretative technique, the researcher defines the phenomena as precisely as possible while avoiding any “pre-established framework” and being true to the facts (Creswell, 2009: 43). Thus, the interpretative method is used in qualitative investigations. Interpretive researchers believe that reality is composed of people’s individual experiences of the universe; as a result, they may hold an inter-subjective epistemology and the ontological belief that reality is a social construct (Jason and Glenwick, 2016: 102).

Similarly, Bryman and Bell (2015: 90) argued that researchers using the interpretivism paradigm believe that human experiences of the outer universe are a reality; therefore, they can embrace inter-subjective epistemology and the ontological concept that truth is founded on society. The interpretivist philosophy stresses the observation of phenomena in their natural contexts as well as the understanding that scientists cannot avoid affecting the phenomena that they examine. They recognise that many alternative interpretations of reality exist, but they assert that these views are part of the scientific information that they seek. Babbie and Mouton (2014: 87) suggested that the major disadvantages of interpretivism derive from the approach's subjective character and the researcher's proclivity towards bias. Because data is largely determined by individual opinions and attitudes, primary data from interpretive research cannot be generalised. As a result, the data's trustworthiness and representativeness are jeopardised to some degree.

Positivists believe that the only means to learn and uncover the truth is through scientific approaches. As a result, according to Saunders, Lewis and Thornhill (2009: 136), the positivist philosophical approach relies on scientific techniques in which the researcher establishes causal relationships in the data in order to create a generalisation. Stated another way, a researcher who adopts a positivist philosophical approach should seek out and identify the reasons that contribute to outcomes. According to Creswell (2014: 7), the post-positivist perspective is frequently founded on facts that are supported by evidence and rational reasoning. As a result, empirical observation of the element, hypothesis generation based on existing theories, and quantitative analysis are all part of the post-positivist research mindset (Saunders *et al.*, 2009: 137). Creswell (2014: 7) emphasised that in a post-positivist philosophical perspective, the researcher should objectively collect and interpret data with little involvement with the research participants. This study was aimed at conducting an empirical enquiry intended to analyse student entrepreneurial readiness at a selected university in South Africa and, therefore, adopted a positivist research philosophy.

### **3.4 Research Approach**

According to Creswell and Creswell (2018: 296), quantitative, qualitative, and mixed-methods are the different approaches used in social research. These approaches



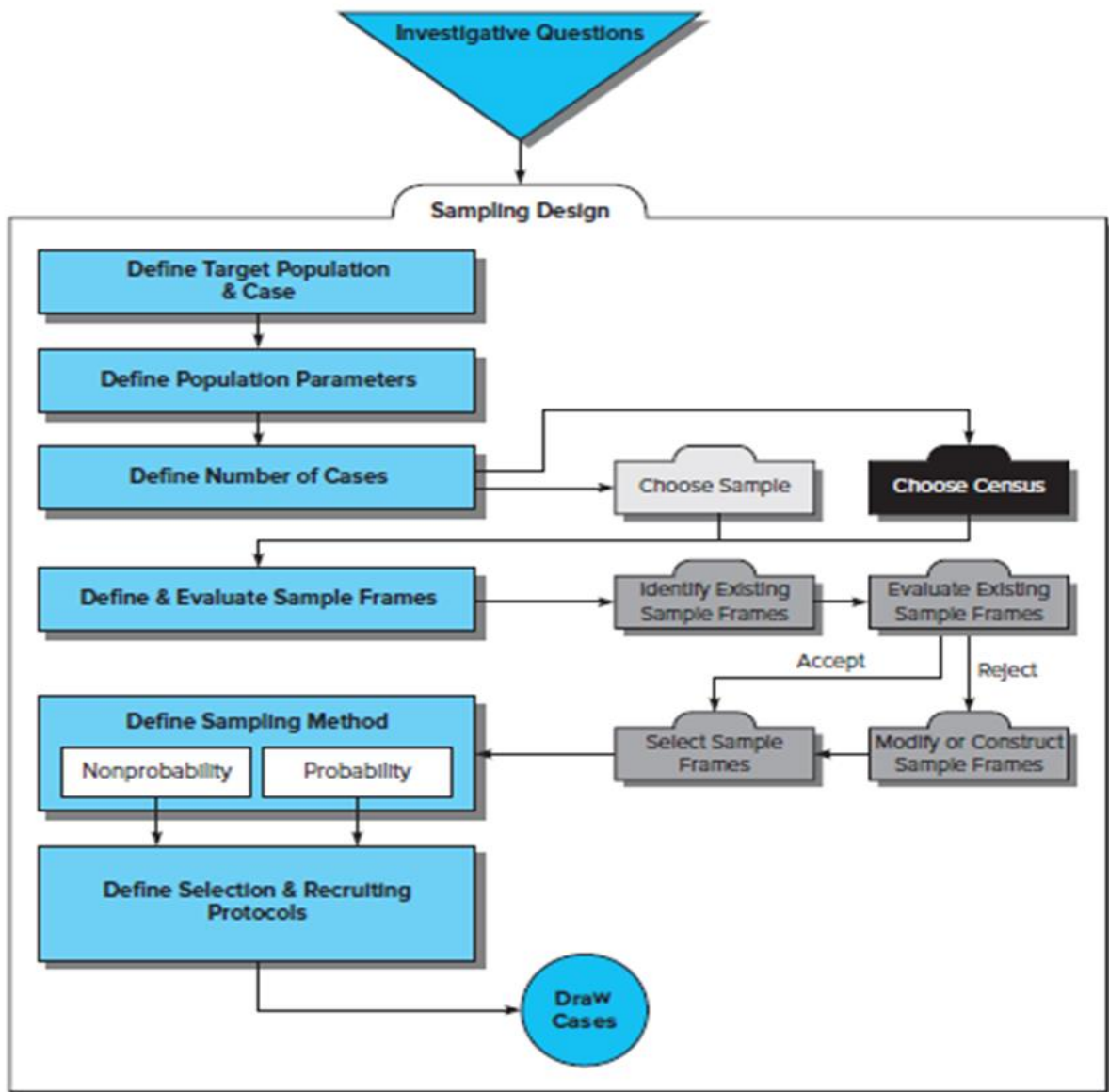
guide the researcher regarding the procedure to be adopted. The distinction between qualitative and quantitative studies lies in the use of words rather than numbers. The quantitative and qualitative approaches can further be distinguished based on the data collection approach adopted, where quantitative research uses close-ended questions and qualitative studies use open-ended questions that are used during interviews or focus groups. According to Hammarberg, Kirkman and de Lacey (2016: 499), qualitative research is ideal for addressing questions about meaning and viewpoints; experiences; and, most typically, from the respondents' point of view, using semi-structured interviews.

Yin (2013: 75) stated that the quantitative approach is a systematic empirical analysis of a topic that employs statistical, mathematical, or numerical data techniques. A quantitative research design is conclusive in its intent and aims to quantify the problem and establish how widespread it is by looking for results that can be projected to the whole population. The goal of quantitative research is to establish theories and/or hypotheses about a topic, and the measuring process is crucial to quantitative research because it offers a vital connection between empirical observation and the articulation of quantitative relationships (O'Leary, 2013: 94). Furthermore, the construction of hypotheses; the invention of instruments and techniques for measurement, such as the close-ended structured questionnaire; the collection of empirical data; and the modelling and analysis of the data are all part of quantitative research. Therefore, because the researcher wanted to evaluate the relationship between variables, this study adopted a quantitative approach (Paulsen, 2018).

### **3.5 Sampling Strategy**

Berger (2015) explained that sampling is the process of identifying a smaller number of elements from a population as representative or possessing specified attributes of the population of interest. Similarly, Anderson and Shattuck (2012: 18) argued that a sample is a subset of the population that is used in an investigation. Lavrakas (2008) posited that a sample design is a blueprint that governs the selection of a survey sample while also impacting many other important aspects of the survey. In this study, the researcher adopted the sampling design illustrated in Figure 3.1. Essentially, this

study started by defining the target population, the sampling method, and the sample size.



**Figure 3.1:** Sampling design in the research process (Source: Schindler, 2019: 86)

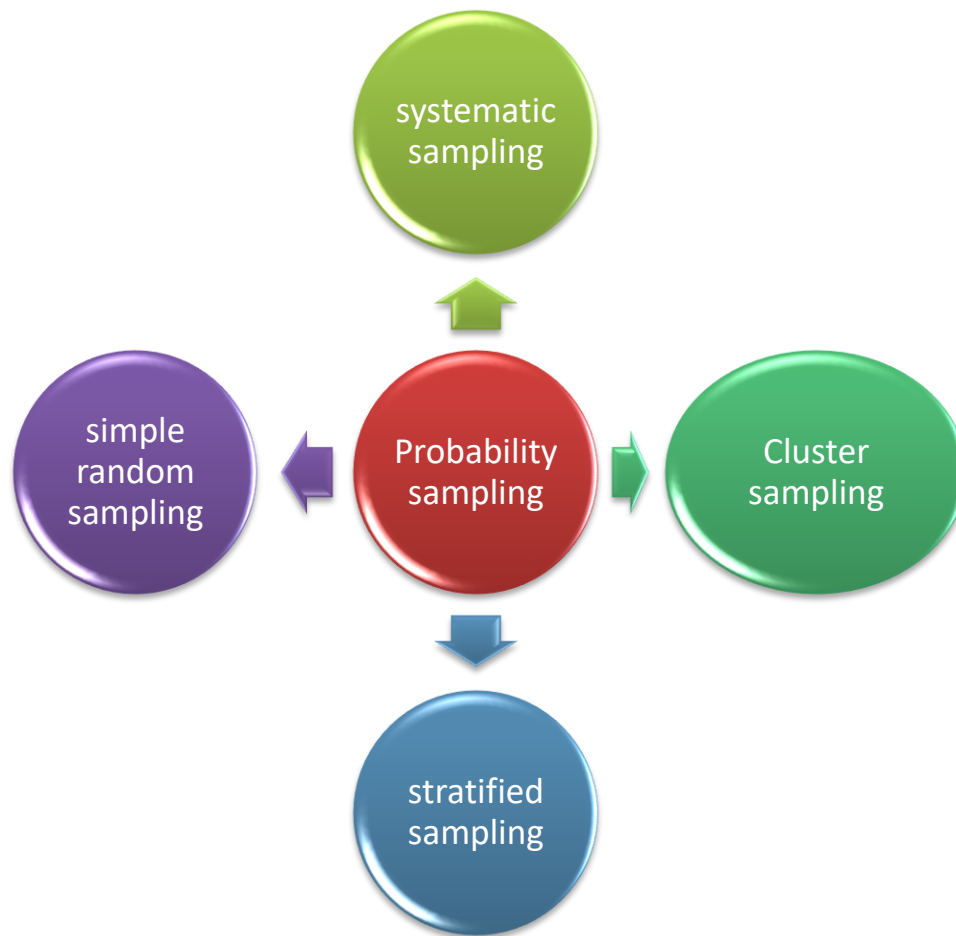
### 3.5.1 Target Population

A target or theoretical population is the entire number of people or objects that are subject to an investigation and that are subsequently used to draw conclusions or make inferences. The target population has varied characteristics. Simply stated, it is the number of potential respondents who may be used in a particular study during the

data collection process (Creswell, 2012: 166). In this study, the theoretical population involved full-time students registered at the University of KwaZulu Natal.

### **3.5.2 Sampling Methods**

Yin (2013: 82) identified two types of sampling procedures: probability and non-probability sampling techniques. Non-probability sampling is primarily utilised in qualitative investigations. According to Creswell (2012: 81), non-probability sampling does not choose participants at random, which means that not everyone in the population has an equal chance of being selected to participate in the study. Probability sampling, on the other hand, is the process of selecting a sample from a population using a random approach. Probability sampling is more difficult, takes time, and is more costly than non-probability sampling. However, because elements from the population are chosen at random, the probability of each selection may be analysed so that meaningful projections and statistical conclusions about the population can be made (Creswell 2012: 79). This study adopted a probability sampling technique. According to Daniel (2012), four types of probability sampling techniques are simple random sampling, stratified sampling, systematic sampling, and cluster sampling. Figure 3.2 shows the different types of probability sampling designs.



**Figure 3.2:** Types of probability sampling techniques (Source: adapted from Daniel, 2012)

Systematic sampling is a type of probability sampling strategy in which people from a larger population are selected at random but at a defined, periodic interval. The sampling interval is determined by dividing the size of the population by the expected size of a sample. Although the sample population is determined beforehand, systematic sampling is still deemed random because the periodic interval is pre-arranged and the beginning point is selected at random (Taherdoost, 2016: 21). This strategy is utilised for a homogenous population that is combined (Alvi, 2016: 49) and is less expensive and more convenient in a large population and relatively simple to implement (Etikan and Bala, 2017: 2).

Stratified random sampling is one of the probability sampling approaches that utilises the whole population by putting them into several similar groups that do not overlap and chooses the respondents randomly from the many strata, thereby saving money

and time. Each member should be unique enough that, given a simple probability, they have an equal chance of being selected (Taherdoost, 2016: 21). It is employed in a varied population that requires additional resources such as time (Alvi, 2016: 49).

Cluster sampling is a sampling approach where several groups of the population (clusters) are separated. Random sampling is then used to select groups for data collection. There are two methods to categorise this sampling method. The first way is based on the number of steps needed to construct the cluster sample, while the second method is based on how the groups are represented across the cluster. In most cases, cluster sampling occurs in steps. A stage is defined as the first step in obtaining the target sample. This technique can be divided into three categories: single-stage, two-stage, and multiple-stage (Taherdoost, 2016: 21).

In this study, the researcher adopted a simple random sampling technique. Thus, a simple random sample is a randomly selected element of a population. Using this sampling approach, every member of the population has an equal chance of being selected, and the approach needs less prior knowledge about the population. This approach is considered easier than other probability approaches. Any research conducted using this sampling approach has good validity because the samples are identified randomly (Taherdoost, 2016: 21).

### **3.5.3 Sample Size**

The sample size refers to the number of participants drawn from the entire population and is used to collect data for further analysis (Creswell, 2012: 168). The sample size for this study was 400 full-time registered students from the University of KwaZulu Natal. There is no universally applicable sample size guideline. In addition, sample size requirements in the structural equation model can be viewed from at least two perspectives: (1) the number of instances required for statistical precision in the results versus (2) the minimum sample sizes required for structural equation modelling (SEM) significance tests to have sufficient power. Sample size requirements for appropriate statistical power in SEM might be substantially higher than those for adequate statistical precision, depending on the model and analysis (Kline, 2016: 15).

Another school of thought suggests that the sample size has an impact on various fit indices in SEM. For structural equation models, some sources suggest a minimum sample size of 150 (Bentler and Chou, 1987). In the SEM method, the minimum sample size should be at least 10 times the number of parameters that can be estimated in the model (Jayaram, Kannan and Tan, 2004). Extant research has suggested that the sample size for SEM should be between 200 and 500 (Çelik and Yılmaz, 2013).

### **3.6 Data Collection**

This study gathered data from both secondary and primary sources, which were then used to write all the study's chapters and sections. Primary data was also gathered using a self-administered online questionnaire for further analysis. The sections that follow provide in-depth information on how data was gathered, with a focus on secondary and primary data.

#### **3.6.1 Secondary Data Collection**

Secondary data refers to existing information or data that has been collected in previous studies and properly documented and that is accessible from multiple sources. This type of data is not costly, is easy to collect, and is also available in the event that it is not possible to gather primary data (O'Leary, 2013: 87). Secondary sources do not have a direct physical connection to the subject being investigated (Flowerdew and Martin, 2013: 112). Secondary data for this study was gathered from journal papers, relevant books, the internet, media pieces, government records, magazines, and other dissertations and theses.

#### **3.6.2 Primary Data**

According to Bryman and Bell (2015: 182), primary data refers to the information collected from the source using methods such as interviews, surveys, and experiments, among others. Primary data is viewed as the best and most reliable source of data when conducting research. Typically, primary data sources are chosen and altered to meet the expectations or objectives of a certain research study. Before selecting a data-collecting method, it is critical to determine the research study's purpose and who the target population is. Primary data for this research was acquired

using a self-administered online questionnaire. Because of the COVID-19 pandemic, the researcher followed the COVID-19 rules to prevent the study from serving as a vehicle for viral spread. As a result, the researcher used SurveyMonkey, a web-based platform for collecting data, to avoid having to connect with participants personally.

### **3.6.3 Questionnaire Design and Protocols**

A close-ended structured quantitative questionnaire is normally employed to gather data from the selected sample respondents in a quantitative research design. This type of questionnaire was employed in this study, and it was presented with a covering letter assuring the respondents of maintaining their confidentiality as well as a consent form. The questionnaire was created using Fowler's (2013: 119) standards, which include close-ended questions, conciseness, unambiguity, using a reasonable order, and ensuring that the questions are understandable for all respondents. Furthermore, the respondents were asked to rate to what extent they agreed or disagreed with a series of statements using the Likert scale (Morling, 2014: 67). Table 3.1 shows the source of the variables that were used in the measurement instrument, namely, personal attitude, self-efficacy, PBC, subjective norms, and EI.

**Table 3.1:** Source of variables in the measurement instrument

<b>Variables</b>	<b>Source</b>
<b>Personal Attitude</b>	Iqbal <i>et al.</i> (2012)
Being an entrepreneur implies more advantages than disadvantages to me	Al-jubari (2019)
A career as an entrepreneur is attractive to me	
if I had the opportunity and resources, I'd like to start a firm	
Being an entrepreneur would entail great satisfaction for me	
<b>Self-Efficacy</b>	Iqbal <i>et al.</i> (2012)
I think I have the skills to detect business opportunities in the market.	
Professionally, I consider myself much more persistent than others.	
I always find creative solutions to the problems I encounter.	
I perform my duties properly, respecting the deadlines set.	
<b>Perceived Behaviour Control</b>	Iqbal <i>et al.</i> (2012)
To start a firm and keep it working would be easy for me	Al-jubari (2019)
I am prepared to start a viable firm	
I can control the creation process of a new firm	
I know the necessary practical details to start a firm	
I know how to develop an entrepreneurial project	
If I tried to start a firm, I would have a high probability of succeeding	
<b>Subjective Norms</b>	Iqbal <i>et al.</i> (2012)
I believe that my closest family think I should be self-employed	Al-jubari (2019)
I believe that my closest friends think I should be self-employed	
I believe that my closest colleague and course mates think I should be self-employed	
I believe people who are important to me think I should be self-employed	
<b>Entrepreneurship Intention</b>	Iqbal <i>et al.</i> (2012)
I am ready to do anything to be an entrepreneur	Al-jubari (2019)
My professional goal is to become an entrepreneur	
I will make every effort to start and run my firm	
I am determined to create a firm in the future	
I have very seriously thought of starting a firm	
I have the firm intention to start a firm someday	

### 3.7 Pretesting

Pretesting is the standard procedure for evaluating a questionnaire using a small group of people to ensure that it is comprehended and that it operates as expected (Hilton, 2017). The importance of pretesting comes from assessing whether the



respondent fully understands each question or statement and whether the language, words, and instructions to the respondents are clear and easy to understand (Drake and Heath, 2010: 85). Pretesting is necessary for the researcher to reach a satisfactory questionnaire design, to make the questionnaire easier to administer, and to encourage positive respondent engagement (Hilton, 2017). A total of 10 students were used to pretest the questionnaire.

### **3.8 Reliability and Validity of the Questionnaire**

#### **3.8.1 Reliability**

Creswell (2012) stated that a measuring instrument's reliability is defined as its consistency or dependability. If a variable is measured repeatedly under almost identical conditions, a trustworthy measuring instrument will return the same results. Cronbach's alpha was employed to evaluate reliability in this study. Each dimension's Cronbach's coefficient is determined separately. The internal reliability of the scale utilised is sufficient if the value is larger than the criterion of 0.7. Cronbach's alpha is a correlation-based metric. It is calculated by multiplying the total of the variances of the scale's elements by the overall variance. It has a range of 0 to 1 as a value. The scale is reliable if the values exceed the 0.7 thresholds. The scale's accuracy is low if it is less than 0.6 (Karagöz, 2016).

Thus, according to Griethuijsen, Eijck, Haste, Brok, Sinner and Mansour (2014: 588), acceptable Cronbach's alpha values should be more than 0.6. The composite reliability (CR) is another value used to calculate the scale's reliability for each dimension. The confirmatory factor analysis factor loads are used to calculate the composite reliability value. It can be claimed that there is composite dependability when CR values are more than or equal to 0.7 (Civelek, 2018: 42). Internal and composite reliability were both evaluated in this study.

#### **3.8.2 Validity**

According to Creswell (2012), validity refers to the extent to which a research instrument measures what it is expected to assess as well as the degree to which discrepancies identified represent genuine measures and/or differences among respondents. In this study, factor analysis was used to ascertain construct validity. The

construct validity of a research instrument establishes whether it correctly represents the item that it seeks to evaluate. It is critical in establishing the overall validity (Sekaran and Bougie, 2016). To confirm unidimensionality, construct validity must be determined. Convergence of observed variables linked to a similar latent variable (convergent validity) and severance of observed variables from other observed variables linked to distinct latent variables (discriminant validity) are both examples of construct validity in a model that is theoretically designed (Civelek, 2018: 32).

Convergent validity or discriminant validity involves the examination of measures against each other rather than against an external standard. If the intercorrelations of variables that are thought to measure the same construct are significant, they are stated to be convergent. However, if measurements ostensibly reflecting the same construct also use the same measurement method, similar method variance could inflate their intercorrelations (Kline, 2016: 93). The degree to which a dimension in a measuring model varies from other dimensions is measured by discriminant validity. It implies a poor correlation between the questions that comprise one variable and those that comprise another. To calculate the discriminant validity for each dimension, one first computes the average variance extracted (AVE) value. To be regarded as acceptable, the AVE value should be more than 0.50. It is important to note that the AVE value alone does not show discriminant validity; nevertheless, discriminant validity can be established when the square root of each construct's AVE value is greater than the inter-dimensional correlation value (Fornell and Larcker, 1981). The average variance extracted values are calculated as suggested by Fornell and Larcker (1981) and shown in section 4.3.2.

$$AVE = \frac{\sum \lambda_i^2}{\sum \lambda_i^2 + \sum (1 - \lambda_i^2)} \dots\dots\dots(1)$$

### 3.8.3 Factor Analysis

Factor analysis is divided into two categories: exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) and the results are presented in section 4.3.1. The following are the distinctions between these two strategies. The EFA approach does not require several factors to be determined beforehand. An EFA computer technique could theoretically produce all conceivable solutions, from a one-factor model to a

model with as many factors as indicators, if given no further instructions. In some EFA computer techniques, the researcher can request a solution with a specific number of factors (e.g., three), in which case the computer will examine only that model. In CFA, however, the researcher must always state the actual number of components (Kline, 2016: 190).

Because estimating factor correlations is not necessary for EFA, the symbol for an unanalysed relationship in the figure is dashed rather than solid. By default, most EFA computer procedures do not examine associated elements. When the purpose is to evaluate correlated factors, the researcher must often choose a rotation choice that allows the factors to covary. Rotation is used in EFA to improve the interpretability of retained factors. It operates by reweighting the initial solution (shifting the factor axis) based on statistical criteria that vary depending on the approach. The desired result is a solution with a simple structure in which each factor explains as much variance as possible in non-overlapping sets of indicators. This means that the absolute values of factor–indicator correlations should shift towards 0 or 1.0, making factor–indicator connections more distinct (Kline, 2016: 192).

CFA is used when there is an a priori assumption about which items or variables should be categorised as manifestations of an underlying construct and when the researcher wants to assess if the data matches or fits the model correctly. Drawing the hypothesised relations in a diagram, as with path analysis, is notably useful. CFA is a highly effective and helpful instrument in and of itself. When validating a scale, EFA relies on post hoc reasoning: “Yes, these results appear to make sense and more or less conform to what I had expected”. However, when using CFA, a hypothesis must come before the analysis of the data; thus, a good match is another indication that the scale has been organised in the way the researcher conceived it (Streiner, 2006: 318).

### **3.9 Analysis of Data**

A data set was created by capturing the responses to the structured quantitative close-ended questionnaire. Following this, the responses were analysed using AMOS. Data analysis employs descriptive and inferential statistics. Descriptive statistics are used

to describe a data collection set derived from a population sample (Sutanapong and Louangrath, 2015: 22-25). As a result, descriptive statistics for demographic factors were calculated using the raw data in this study. The sample's makeup and features, as well as the data summarised in the figures, were analysed using descriptive statistics. Measures of central tendency, frequency, position, and variation and dispersion are examples of descriptive statistics (Kaur, Stoltzfus and Yellapu, 2018: 61-63). The mean (the average of the sum of all the items), median (the number in the centre of the set of units), and mode (the number that occurs most frequently) are the measures of central tendency (Sekaran and Bougie, 2016). The sample means and weighted mean are two more central tendency measurements (Saunders, 2009). Measures of variation or dispersion ascertain how similar or dissimilar the values of a variable are (Kaur *et al.*, 2018: 62).

The range, interquartile range, standard deviation, coefficient of variation, standardisation, and variance are all examples of variation metrics (Sekaran and Bougie, 2016). Ratios, percentages, rates, and proportions are examples of frequency measures, which are used to display the most common values, whereas lower quartile, interquartile, and percentile measures are used to determine a value's location (Kaur *et al.* 61-63). In descriptive statistics, the Z-score, which is the standard score for assessing how far a data point is from the mean, is also utilised. It is derived using the t-formula, which measures the distribution of the data points in the set and inserts them in the t-table (Sutanapong and Louangrath, 2015: 27).

Inferential statistics use the data drawn from a sample to make inferences about the entire population. Thus, sufficient confidence is needed to ascertain if the intended sample reflects the population accurately. This is done because there is an expectation that any sample drawn for the purpose of a study must be truly representative to facilitate inferences and generalisations to the entire population (Creswell, 2012). Examples of inferential statistics include regression analysis, p-values, and the testing of hypotheses (Babbie and Mouton, 2014). Parametric (MANOVA and ANOVA) and non-parametric (Chi-square) tests are employed in inferential statistics (Saunders, 2006). In this study, the researcher used both descriptive and inferential statistics to analyse the data.

### 3.9.1 Structural Equation Modelling

Structural equation modelling (SEM) is a statistical method that uses a confirmatory (i.e., hypothesis-testing) approach to analyse a structural theory that is relevant to a phenomenon. Typically, this theory refers to “causal” processes that result in numerous variables being observed (Bentler and Chou, 1987). The phrase “structural equation modelling” refers to two fundamental components of the procedure: (i) the causal procedures under examination are represented by a sequence of structural (i.e., regression) equations, and (ii) these structural linkages can be portrayed pictorially to facilitate a clearer grasp of the theory under inquiry. The suggested model may then be statistically verified by carrying out a concurrent analysis of the entire system of variables to evaluate how well it matches the data. If the goodness-of-fit is enough, the model argues for the plausibility of purported relationships between variables; if it is insufficient, the model denies the plausibility of such relationships (Byrne, 2010: 3).

SEM is used to test the links between observable and latent variables. Observed variables are factors that are directly measured during data collection, while latent variables are those that are evaluated by linking to observed variables (Civelek, 2018: 5). SEM can be approached in a variety of ways. The first method is to use software programmes such as AMOS, EQS, LISREL, and MPlus to perform a covariance-based SEM (CB-SEM). The second method is partial least squares (PLS), which is focused on the analysis of variance and may be done with PLS-Graph, VisualPLS, SmartPLS, and WarpPLS. It can also be used with the “r” statistical software package’s PLS module. The third approach, known as generalised structured component analysis (GSCA), is a component-based SEM that can be implemented using VisualGSCA or a web-based tool called GeSCA. Nonlinear Universal Structural Relational Modeling (NEUSREL), which uses NEUSREL’s Causal Analytics software, is another approach to perform SEM (Wong, 2013: 2). In this study, both AMOS and SmartPLS were used to analyse the data.

#### Model Fit Indices used for CFA (AMOS)

The degree of similarity between the collective relationships defined in a particular model (i.e., parameter estimations) and the covariance matrix is used to determine the

structural equation model fit – that is, the unstandardised correlation matrix, which represents all pairwise relationships in the data set (Peugh and Feldon, 2020: 2). Table 3.2 shows the model fit indices for the CFA, the results of which are given in Chapter 4, specifically in Figure 4.1 in Section 4.3.1. Thus, a model is deemed fit if it meets the acceptable threshold.

**Table 3.2:** Model fit indices for the CFA (SEM–AMOS)

<b>Fit indices</b>	<b>Threshold</b>
Normed fit index (NFI)	A value equal to or higher than 0.90
Increment fit index (IFT)	A value higher than 0.90
Tucker Lewis index (TLI)	A value higher than 0.90
Comparative fit index (CFI)	A value higher than 0.90
Chi-square (CMIN/DF)	A value less than or equal to 3
Root mean square error of approximation (RMSEA)	A value less than 0.80

Source: Baggozi and Yi (2012: 15)

### 3.9.2 SmartPLS

SmartPLS is a software package that enables a researcher to create structural equation models using PLS. The maximum likelihood estimation approach is the default choice in SEM tools outside of SmartPLS. This estimation method is identified in the literature as covariance-based SEM. If necessary, however, various estimating approaches can be applied (Civelek, 2018: 105). It is worth noting that when SmartPLS builds the model, it assumes that the indicators are reflective, with arrows pointing away from the latent variable. When utilising SmartPLS, one of the most common errors that researchers make is forgetting to adjust the direction of the arrows when the indications are “formative” rather than “reflective.” In addition, a multicollinearity test is frequently included in a comprehensive PLS-SEM analysis. In other words, each pair of exogenous latent variables in the inner model is evaluated for potential collinearity issues to see if any variables should be deleted or combined into one, or if a higher-order latent variable is produced (Wong, 2013: 32).

### 3.9.3 Model Fit Indices used for SmartPLS

Table 3.3 shows the model fit indices that were used to ascertain the model fitness of the saturated model in Section 4.10.1 and Figure 4.2 in Chapter 4.

**Table 3.3:** Structural model fit indices in SmartPLS

Fit index	Acceptable threshold
Normed Fit Index	NFI $\geq$ 0.80
Standardized Root Mean Square Residual (SRMR)	SRMR $\leq$ 0.10
Chi-Square	$p \geq$ 0.05
d_ULS	N/A
d_G	N/A

Source: Akkus (2019: 713); Byrne and Campbell (1999: 570)

## 3.10 Ethical Considerations

Trochim, Donnelly and Kanik (2016: 34) stated that ethical norms are vital for researchers to follow when conducting a study because they promote moral and social values. Furthermore, ethical standards ensure that the research is of high quality and integrity. Similarly, Gravetter and Forzano (2016: 101) argued that researchers should be governed by ethical norms based on honesty, responsibility, and respect for all those involved in their investigations. Kumar (2014: 284) added that ethics entail the proper conduct and processes that a researcher must follow in order to undertake a research project. The ethical clearance for this study was granted by UNISA's Department of Applied Management Research Ethics Committee. The subsections that follow present the ethical standards that were considered during the study.

### 3.10.1 Participants' Informed Consent

According to Babbie and Mouton (2014: 191), before taking part in a study, individuals must first express their consent. The researcher provided a field in the study that enabled the respondents to give their consent. The researcher clarified the study's

objectives and stated that it was simply academic. No one was compelled to participate unless they agreed to the study's objectives. Throughout the trial, the researcher kept no track of the participants' names.

### **3.10.2 No Harm to Participants**

The researcher ensured that the respondents were not injured as a result of their involvement in the study. There were no experiments carried out, only a pure discourse between the researcher and the participants through a self-administered questionnaire.

### **3.10.3 Confidentiality and Anonymity**

The identity of the respondents was never revealed. The participants were not requested to enter their names when responding to the questionnaire. During data processing, no data was traced back to the individuals. To safeguard the privacy of the respondents, the responses were coded using pseudonyms.

### **3.10.4 Permission to Conduct the Study**

The researcher applied to the University of KwaZulu Natal for authorisation to conduct the study, and permission was granted. Before the start of the data collection, all participants' consent was obtained.

## **3.11 Conclusion**

This chapter provided a detailed discussion of the research methodology that guided this study. In order to lay a solid foundation for the study, the research philosophy, research approach, and research design encompassing descriptive, causal, experimental, and exploratory research were presented. In this regard, the study adopted a descriptive and quantitative approach. The study further discussed the sampling design with specific reference to the target population, sampling techniques, and sample size. In addition, the study discussed the tools for data collection, the data analysis process, structural equation model, reliability and validity, and the ethical considerations that were followed. The following chapter presents the analysis and discussion of findings guided by the research methodology presented in Chapter 3.





## CHAPTER 4

### ANALYSIS AND DISCUSSION OF FINDINGS

#### 4.1 Introduction

The previous chapter discussed the methodology of this study. This chapter discusses the analysis and findings of the study guided by the methodology. The data used in this study was collected from 332 out of the envisaged 400 respondents as indicated in the sample size, thereby representing an 83% response rate, which is deemed as an acceptable threshold. According to Fincham (2008: 1), survey response rates are now expected to be higher. Researchers should aim for response rates of approximately 60% for most studies. A response rate  $\geq 80\%$  is acceptable for survey research that is meant to represent all schools and colleges. Tables were used to present information. The data was analysed using the partial least square and structural equation model by means of the AMOS and SmartPLS3 statistical package. Descriptive and inferential statistics were used to analyse the data.

#### 4.2 Socio-Demographic Characteristics

The socio-demographic characteristics of the respondents in terms of their age, gender, race, academic discipline, level of study, and nationality were analysed using descriptive statistics and are presented in this section.

##### 4.2.1 Gender

The data in Table 4.1 shows that 50.9% of the respondents were female while 49.1% were male. From the data, the ratio of males to females is approximately the same.

**Table 4.1:** Respondents' gender

		Frequency	Percent
Gender	Male	163	49.1
	Female	169	50.9
	Total	332	100.0

#### 4.2.2 Age Distribution

As presented in Table 4.2, more than half of the respondents, 51.2%, were below 24 years, 38.3% were between 25 and 29 years, 9.6% were between 30 and 34 years, and three were 35 years and above. From the analysis, it can be seen that the majority (89.5%) of the respondents were young adults (from below 24 to 29 years).

**Table 4.2:** Respondents' age distribution

		Frequency	Percent
Age group	Below 24	170	51.2
	25–29	127	38.3
	30–34	32	9.6
	35 and above	3	.9
	Total	332	100.0

#### 4.2.3 Academic Discipline

According to the data in Table 4.3, the majority of the respondents (52.7%) were studying commercial subjects, followed by those studying science subjects (27.1%) and humanities subjects (20.2%).

**Table 4.3:** Respondents' academic discipline

		Frequency	Percent
Discipline	Science subjects	90	27.1
	Commercial subjects	175	52.7
	Humanities subjects	67	20.2
	Total	332	100.0

#### 4.2.4 Level of Study

The data in Table 4.4 shows that 29.2% of the respondents were in their second year, 28.9% in their third year, 25.3% in their first year, and 16.6% in their fourth year. The analysis suggests that the respondents in the second year slightly dominated the sample frame.

**Table 4.4:** Respondents' level of study

		Frequency	Percent
Level	1st Year	84	25.3
	2nd Year	97	29.2
	3rd Year	96	28.9
	4th Year	55	16.6
	Total	332	100.0

#### 4.2.5 Race

According to the data in Table 4.5, the overwhelming majority (91%) of the respondents were African, 4.8% were Indian, 3.6% were Coloured, and Whites formed only 0.6% of the respondents.

**Table 4.5:** Respondents' race

		Frequency	Percent
Race	African	302	91.0
	Coloured	12	3.6
	Indian	16	4.8
	White	2	.6
	Total	332	100.0

#### 4.2.6 Nationality

As indicated in Table 4.6, the overwhelming majority (99.4%) of the respondents were South African citizens while only 0.6% were Zimbabwean. This is expected given the few foreign nationals in South African higher education institutions.

**Table 4.6:** Respondents' nationality

		<b>Nationality</b>			
		Frequency	Percent	Valid Percent	Cumulative Percent
Nationality	South African	330	99.4	99.4	99.4
	Zimbabwean	2	.6	.6	100.0
	Total	332	100.0	100.0	

### **4.3 Reliability and Validity**

Reliability and validity are the two most important constructs to measure the integrity of the research process. Reliability is computed by taking several items on the same constructs. As a general rule, reliability with a coefficient alpha score above 0.7 is considered acceptable (Schrepp, 2020: 250). In this study, the reliability was assessed using Cronbach's alpha. The validity, on the other hand, determines if the items measure the same constructs. In this study, the validity was a measure of the convergent and discriminant values (Zinbarg *et al.*, 2018: 745).

#### **4.3.1 Factor Analysis**

EFA was conducted to assess if the items had been loaded in the same defined constructs. According to the data in Table 4.7, all the items loaded strongly in their various hypothesised latent constructs, which suggests that the constructs were valid.

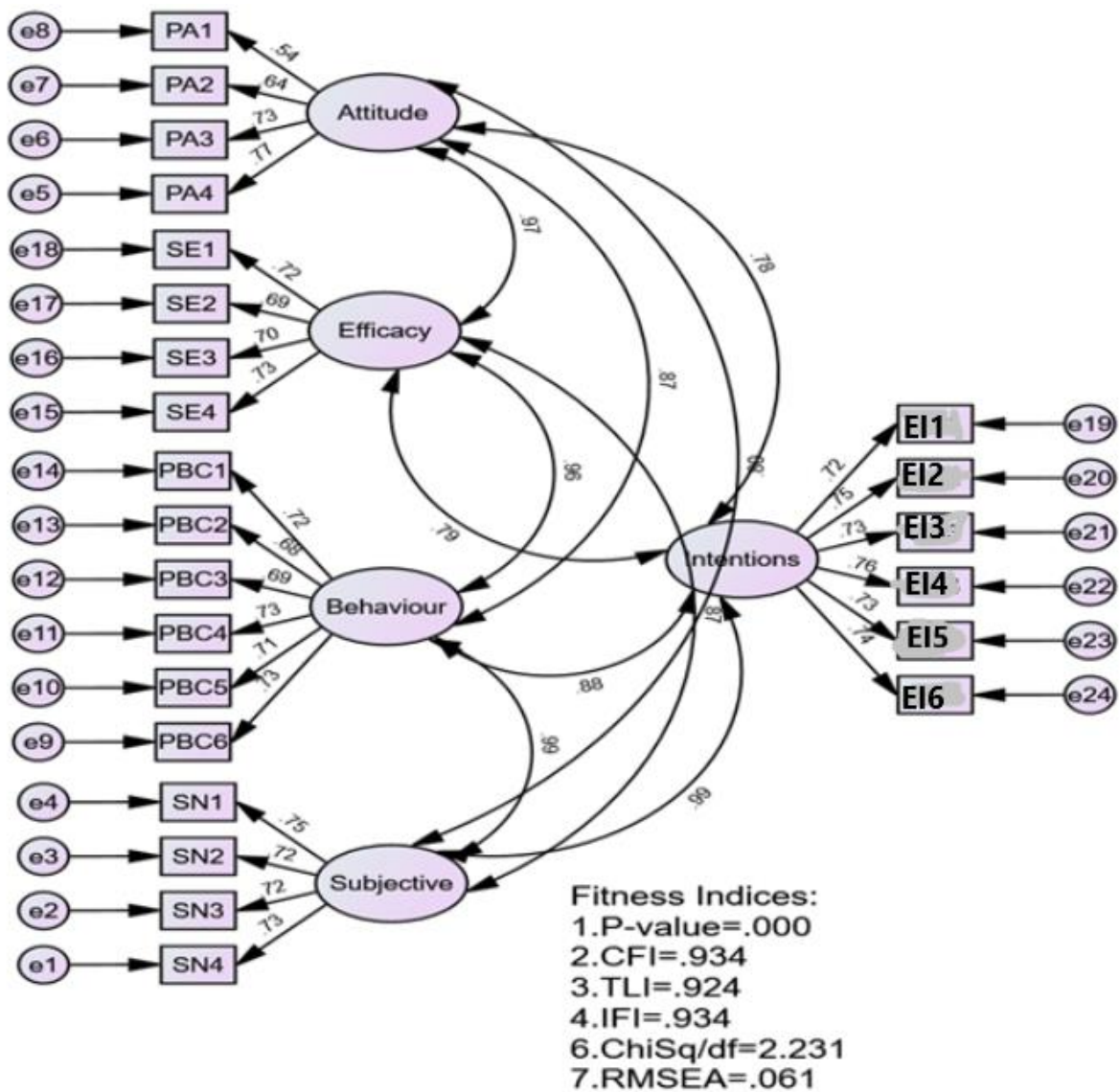
**Table 4.7:** Factor loading

Constructs	Codes	EI	PA	PBC	SE	SN
Entrepreneurial intention	EI1	0.817				
	EI2	0.772				
	EI3	0.798				
	EI4	0.781				
	EI5	0.770				
	EI6	0.780				
Perceived attitude	PA1		0.767			
	PA2		0.666			
	PA3		0.813			
	PA4		0.814			
Perceived behaviour	PBC1			0.745		
	PBC2			0.764		
	PBC3			0.760		
	PBC4			0.776		
	PBC5			0.770		
	PBC6			0.774		
Self-efficacy	SE1				0.774	
	SE2				0.811	
	SE3				0.811	
	SE4				0.774	
Subjective norms	SN1					0.804
	SN2					0.809
	SN3					0.791
	SN4					0.821

As shown in Table 4.8, Cronbach's alpha scores for all the constructs were above the recommended value of 0.70. More so, the composite reliability measured for all the constructs were above the recommended value of 0.70, as suggested by Viladrich, Angulo-Brunet and Doval (2017: 756). This suggests that the constructs have good reliability. CFA was further used to validate the EFA, as shown in Figure 4.1, and the results show that the CFA model had a good fit. It is worth mentioning that the standardised factor loading with a value of 0.50 or higher provides strong evidence of convergent validity (Hair *et al.* 2010). The AVE for all the constructs have values above the recommended value, which suggests adequate convergent validity. According to Gu *et al.* (2019: 7), convergent validity is deemed to be adequate if the latent variables have values above 0.5.

**Table 4.8:** Construct reliability and validity

Codes	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
EI	0.877	0.877	0.907	0.619
PA	0.767	0.783	0.851	0.589
PBC	0.858	0.859	0.894	0.585
SE	0.803	0.803	0.871	0.628
SN	0.820	0.820	0.881	0.650



**Figure 4.1:** CFA fitness model (Source: author's construct)

### 4.3.2 Discriminant Validity

Discriminant validity measures the degree to which measures of various constructs diverge or have a minimal association with one another (Engellant, Holland and Piper, 2016: 39). Because the square root of the AVE values on the diagonal are higher than the values below, all the constructs met the Fornell–Larker criterion for discriminant validity. Table 4.9 further shows that the correlations among latent constructs were more than the square root of the average variances retrieved. As a result, this indicates that sufficient discriminant validity had been obtained.

**Table 4.9:** Discriminant Validity (Fornell–Larcker Criterion)

	EI	PA	PBC	SE	SN
EI	<b>0.787</b>				
PA	0.644	<b>0.767</b>			
PBC	0.766	0.708	<b>0.765</b>		
SE	0.664	0.767	0.746	<b>0.793</b>	
SN	0.637	0.642	0.724	0.707	<b>0.806</b>

*Note:* The diagonals represent the square root of the AVE, whereas the other entries reflect the squared correlation.

## 4.4 Perceived Attitude Towards Entrepreneurship

This section analyses the perceived attitude of students towards entrepreneurship. Respondents were asked to indicate the level of their agreement to the statements highlighted in Table 4.10. Positive statements (strongly agree and agree) were interpreted as agreement while negative statements (disagree and strongly disagree) were interpreted as disagreement. The mean value was used to show the levels of agreement and disagreement. A value less than 2.5 is considered to be disagreement while a value greater than 3.5 is considered to be agreement. A neutral value lies in the range from 2.5 to 3.49 (Wekeza and Sibanda, 2019: 11).

According to the data in Table 4.10, a significant number (83.8%) of the respondents were in agreement (agree=278) that being an entrepreneur implied more advantages than disadvantages to themselves, yielding a mean result of  $M=4.19\pm 0.939$ ;  $p<0.001$ . Similarly, a significant number (75.9%) were in agreement (agree=252) that a career as an entrepreneur is attractive, with the result given as  $M=4.00\pm 1.124$ ;  $p<0.001$ . There was significant agreement (agree=240) among respondents (72.2%) stating



that if they had the opportunity and resources, they would like to start a firm, with the mean value given as  $M=3.87\pm 1.185$ ;  $p<0.001$ . Equally, 74.1% of the respondents were in agreement (agree=246) that being an entrepreneur would entail great satisfaction, with the result given as  $M=3.99\pm 1.117$ ;  $p<0.001$ . According to Hassan, Sade and Rahman (2020: 246), as one of the primary objectives of the entrepreneurship course, further practical exposure should be fostered as momentum to shape entrepreneurial mentality by pushing students to develop not only a proposal but also a prototype and to implement the concept. A knowledge-sharing session between students and successful businesses would be even more effective as a motivator. Although certain schools and postsecondary institutions have adopted these programmes, they have never been made necessary for all students, particularly at the tertiary level. Overall, it is sufficient to state that the respondents had a positive attitude towards entrepreneurship. It was found that the first statement, referring to being an entrepreneur implying more advantages than disadvantages for oneself, was a core influence towards entrepreneurship.

**Table 4.10:** Frequency distribution of perceived attitude towards entrepreneurship

		Disagree	Uncertain	Agree	Mean	Std	P-value
<b>A.</b>	<b>Personal Attitude</b>						
1.	Being an entrepreneur implies more advantages than disadvantages to me.	21 (6.3%)	33 (9.9%)	278 (83.8%)	4.19	0.939	0.000
2.	A career as an entrepreneur is attractive to me.	42 (12.6%)	38 (11.4%)	252 (75.9%)	4.00	1.124	0.000
3.	If I had the opportunity and resources, I'd like to start a firm.	55 (16.5%)	37 (11.1%)	240 (72.2%)	3.87	1.185	0.000
4.	Being an entrepreneur would entail great satisfaction for me.	43 (12.9%)	43 (13%)	246 (74.1%)	3.99	1.117	0.000

#### Socio-Demographic Characteristics and Perceived Attitude Towards Entrepreneurship

The mean and standard deviation of respondents' socio-demographic characteristics (gender, age group, level of study, discipline, race, and nationality) and the perceived attitude towards entrepreneurship are given in Table 4.11. According to the data, there was no significant difference among the respondents in terms of gender, race, age group, level of study, academic discipline, and perceived attitude towards entrepreneurship ( $P>0.05$ ). This suggests that the attitudes towards entrepreneurship based on the aforementioned socio-demographic characteristics are more or less the

same. In contrast, the data indicates that there was a statistically significant difference between the respondents' nationality and the perceived attitude towards entrepreneurship ( $p < 0.001$ ). The mean for South African citizens ( $M = 4.03$ ) was higher when compared to that found for the Zimbabweans ( $M = 1.75$ ). This implies that South African citizens have a more favourable attitude towards entrepreneurship as compared to the Zimbabweans.

**Table 4.11:** ANOVA test of socio-demographics and the perceived attitude towards entrepreneurship

		N (332)	Mean	Std. Deviation	P value
Gender	Male	163	4.0138	.85538	0.991*
	Female	169	4.0148	.82902	
Age group	Below 24	170	4.0985	.77703	0.091*
	25–29	127	3.8720	.93905	
	30–34	32	4.1484	.69229	
	35 and above	3	3.8333	.87797	
Level of study	1st Year	84	4.0565	.78613	0.358*
	2nd Year	97	4.1108	.83539	
	3rd Year	96	3.9505	.83163	
	4th Year	55	3.8909	.94006	
Academic discipline	Science subjects	90	3.8917	.91955	0.071*
	Commercial subjects	175	4.1143	.74650	
	Humanities subjects	67	3.9179	.93783	
Race	African	302	4.0323	.84096	0.409
	Coloured	12	3.8125	.93617	
	Indian	16	3.7656	.78776	
	White	2	4.5000	.35355	
Nationality	South African	330	4.0280	.82431	0.000**
	Zimbabwean	2	1.7500	.35355	
P* >5% P** <5% P*** <1%					

#### 4.5 Perception of Self-Efficacy Towards Entrepreneurship

This section analyses the perceived attitude of students towards entrepreneurship. The respondents were asked to indicate the level of their agreement with the

statements highlighted in Table 4.12. Positive statements (strongly agree and agree) were interpreted as agreement while negative statements (disagree and strongly disagree) were interpreted as disagreement. The mean value was used to show the levels of agreement and disagreement. A value less than 2.5 is considered to be disagreement while a value greater than 3.5 is considered to be agreement. A neutral value lies in the range from 2.5 to 3.49 (Wekeza and Sibanda, 2019: 11). According to the data in Table 4.12, a significant number (66.9%) of the respondents were in agreement (agree=222) that they thought they had the skills to detect business opportunities in the market, yielding a mean result of  $M=3.73\pm 1.142$ ;  $p<0.001$ . A significant number (73.4%) were in agreement (agree=244) that professionally, they considered themselves much more persistent than others, with the result given as  $M=3.94\pm 1.074$ ;  $p<0.001$ . According to Purwati, Hamzah and Suhermini (2020: 11), the entrepreneurial learning design of higher education must be established in order to attain entrepreneurship education that can enhance students' self-efficacy. Because learning is an interaction that occurs when an individual interacts with the environment and that results in a learning experience that changes the person's behaviour, the goal is not only to equip students with entrepreneurial skills but also to construct students' entrepreneurship behaviour.

There was significant agreement (agree=243) among respondents (73.2%) stating that they always find creative solutions to the problems that they encounter, with the mean value given as  $M=3.85\pm 1.086$ ;  $p<0.001$ . Equally, 70.7% of the respondents were in agreement (agree=235) that they performed duties properly, respecting the deadlines set, with the result given as  $M=3.90\pm 1.098$ ;  $p<0.001$ . Wijangga and Sanjaya (2019: 23) argued that there is a need to develop entrepreneurship skills programmes for university students in order to increase students' entrepreneurial self-efficacy, thereby enhancing their desire to start their own firms. Thus, by having entrepreneurial goals, university students will have displayed entrepreneurial behaviour to satisfy the country's expectations after graduating later or while still in college.

The analysis of the attitudes indicates that the respondents viewed themselves as having self-efficacy towards entrepreneurship. It was found that the second statement, "Professionally, I consider myself much more persistent than others", had the most support for self-efficacy towards entrepreneurship.

**Table 4.12:** Frequency distribution of perceived self-efficacy towards entrepreneurship

		Disagree	Uncertain	Agree	Mean	Std	P-value
<b>B.</b>	<b>Self-Efficacy</b>						
1.	I think I have the skills to detect business opportunities in the market.	56 (16.8%)	54 (16.3%)	222 (66.9%)	3.73	1.142	0.000
2.	Professionally, I consider myself much more persistent than others.	45 (13.5%)	43 (13%)	244 (73.4%)	3.94	1.074	0.000
3.	I always find creative solutions to the problems I encounter.	51 (15.3%)	38 (11.4%)	243 (73.2%)	3.85	1.086	0.000
4.	I perform my duties properly, respecting the deadlines set.	45 (13.5%)	52 (15.7%)	235 (70.7%)	3.90	1.098	0.000

### Socio-Demographic Characteristics and Perceived Self-Efficacy Towards Entrepreneurship

The mean and standard deviation of respondents' socio-demographic characteristics (gender, age group, level of study, discipline, race, and nationality) and the perceived self-efficacy towards entrepreneurship are given in Table 4.13. According to the data, there was no significant difference among the respondents in terms of gender, race, and perceived self-efficacy towards entrepreneurship ( $P > 0.05$ ). In contrast, the data indicates that there was a statistically significant difference between the respondents' age group ( $P = 0.021$ ), the level of study ( $P = 0.036$ ), academic discipline ( $P = 0.001$ ), and nationality ( $P = 0.009$ ) and the perceived self-efficacy towards entrepreneurship.

In terms of age groups, the mean measured for respondents below 24 was the highest ( $M = 3.96$ ) while that measured for those 35 and above was the lowest ( $M = 2.83$ ). This implies that younger respondents have more favourable self-efficacy towards entrepreneurship when compared to older ones. In terms of the level of study, the mean value measured for respondents in their first year was the highest ( $M = 4.04$ ) while that found for those in their fourth year was the lowest ( $M = 3.62$ ). This implies that respondents at the lowest level of study had favourable self-efficacy when compared to those at the highest level. Regarding academic discipline, its mean value ( $M = 4.02$ ) suggests that offering commercial subjects had favourable self-efficacy when compared against offering humanities subjects ( $M = 3.62$ ). In terms of nationality, the mean value for South African citizens ( $M = 3.86$ ) was higher when compared to that found for the Zimbabweans ( $M = 2.25$ ). This implies that South African citizens have

more favourable self-efficacy towards entrepreneurship when compared to the Zimbabweans.

**Table 4.13:** ANOVA test of socio-demographics and perceived self-efficacy towards entrepreneurship

		N (332)	Mean	Std. Deviation	P value
Gender	Male	163	3.8298	.93447	0.610*
	Female	169	3.8787	.80968	
Age group	Below 24	170	3.9574	.83339	0.021**
	25–29	127	3.7224	.93075	
	30–34	32	3.9297	.74659	
	35 and above	3	2.8333	.57735	
Level of study	1st Year	84	4.0357	.81139	0.036**
	2nd Year	97	3.9021	.81853	
	3rd Year	96	3.7813	.90992	
	4th Year	55	3.6227	.94019	
Academic discipline	Science subjects	90	3.7139	.92981	0.001*
	Commercial subjects	175	4.0171	.75028	
	Humanities subjects	67	3.6194	1.00600	
Race	African	302	3.8742	.87574	0.449*
	Coloured	12	3.6250	1.00849	
	Indian	16	3.6094	.71279	
	White	2	4.2500	.35355	
Nationality	South African	330	3.8644	.86558	0.009**
	Zimbabwean	2	2.2500	.35355	
P* >5% P** <5% P*** <1%					

#### 4.6 Perception of Perceived Behaviour Control Towards Entrepreneurship

This section analyses the PBC of students towards entrepreneurship. The respondents were asked to indicate the level of their agreement with the statements highlighted in Table 4.14. Positive statements (strongly agree and agree) were interpreted as agreement while negative statements (disagree and strongly disagree) were interpreted as disagreement. The mean value was used to show the levels of

agreement and disagreement. A value less than 2.5 is considered to be disagreement while a value greater than 3.5 is considered to be agreement. A neutral value lies in the range from 2.5 to 3.49 (Wekeza and Sibanda, 2019: 11).

According to the data in Table 4.14, a significant number (72.2%) of the respondents were in agreement (agree=240) that to start a firm and keep it working would be easy for them, yielding a mean result of  $M=3.92\pm 1.113$ ;  $p<0.001$ . There was significant agreement (agree=239) among the respondents (71.9%) that they were prepared to start a viable firm, with the result given as  $M=3.91\pm 1.090$ ;  $p<0.001$ . There was significant agreement (agree=227) among the respondents (68.4%) that they could control the creation process of a new firm, with the mean value given as  $M=3.81\pm 1.095$ ;  $p<0.001$ . Human behaviours and intents to start a business are all part of entrepreneurship. This is because businesses do not merely appear without action; they must be the result of the efforts of a single person. This person or individual must first believe that the formation of the new endeavour is personally desirable for them (attitudes), socially desirable and acceptable to those around them, feasible, and within their ability – PBC (Taha, Ramlan and Noor, 2017: 190). According to Ndovela and Chinyamurindi (2021: 157), past experiences will always influence one's behaviour; as a result, lecturers must delve deep to uncover students' entrepreneurship experiences or perspectives and then support them. Students will be able to focus on the future rather than the past if they develop an entrepreneurial mindset.

In terms of the statement "I know the necessary practical details to start a firm", a significant majority (72.9%) of the respondents were in agreement (agree=242) that they knew the necessary practical details to start a firm, with the result given as  $M=3.93\pm 1.112$ ;  $p<0.001$ . Nevertheless, only 67.4% believed (agree=224) that they knew how to develop an entrepreneurial project, yielding a result of  $M=3.80\pm 1.114$ ;  $p<0.001$ . In addition, 70.1% were in agreement (agree=233) that if they tried to start a firm, they would have a high probability of succeeding. According to Mwiya *et al.*, (2017: 597), a person will choose to engage in a particular behaviour if they believe that not only is the consequence of those activities desirable (i.e. valence), but also that those actions will result in a specific outcome (i.e. expectation). This is comparable

to an economics concept that humans are rational and want to spend resources or engage in conduct that maximises their utility or benefits.

The analysis of PBC indicates that the respondents held a positive behaviour towards entrepreneurship. It was found that the fourth statement, “I know the necessary practical details to start a firm”, had the most support towards entrepreneurship.

**Table 4.14:** Frequency distribution of perceived behaviour control towards entrepreneurship

		Disagree	Uncertain	Agree	Mean	Std	P-value
<b>C</b>	<b>Perceived Behaviour Control</b>						
1	To start a firm and keep it working would be easy for me.	47 (14.1%)	45 (13.6%)	240 (72.2%)	3.92	1.113	0.000
2	I am prepared to start a viable firm.	45 (13.5%)	48 (14.5%)	239 (71.9%)	3.91	1.090	0.000
3	I can control the creation process of a new firm.	49 (14.7%)	56 (16.9%)	227 (68.4%)	3.81	1.095	0.000
4	I know the necessary practical details to start a firm.	50 (15%)	40 (12%)	242 (72.9%)	3.93	1.112	0.000
5	I know how to develop an entrepreneurial project.	46 (13.8%)	62 (18.7%)	224 (67.4%)	3.80	1.114	0.000
6	If I tried to start a firm, I would have a high probability of succeeding.	52 (15.7%)	47 (14.2%)	233 (70.1%)	3.86	1.102	0.000

### Socio-Demographic Characteristics and Perceived Behaviour Control Towards Entrepreneurship

The mean and standard deviation of respondents’ socio-demographic characteristics (gender, age group, level of study, discipline, race, and nationality) and the PBC towards entrepreneurship are given in Table 4.15. According to the data, there was no significant difference among the respondents in terms of gender, race, nationality, and PBC towards entrepreneurship ( $P > 0.05$ ). In contrast, the data indicates that there was a statistically significant difference between the respondents’ age group ( $P = 0.026$ ), the level of study ( $P = 0.025$ ), and academic discipline ( $p < 0.001$ ) and the PBC towards entrepreneurship.

In terms of age groups, the mean measured for respondents below 24 was the highest ( $M = 3.96$ ) while that measured for those 35 and above was the lowest ( $M = 2.67$ ). This implies that younger respondents have more favourable PBC towards entrepreneurship when compared to older ones. In terms of the level of study, the

mean value measured for respondents in their first year was the highest (M=4.04) while that found for those in their fourth year was the lowest (M=3.61). This implies that respondents at the lowest level of study had more favourable PBC when compared to those at the highest level. Regarding academic discipline, the mean value (M=4.05) suggests that offering commercial subjects had more favourable PBC when compared to offering humanities subjects (M=3.55).

**Table 4.15:** ANOVA test of socio-demographics and perceived behaviour control towards entrepreneurship

		N (332)	Mean	Std. Deviation	P value
Gender	Male	163	3.8405	.85774	0.499*
	Female	169	3.9034	.83325	
Age group	Below 24	170	3.9618	.80576	0.026**
	25–29	127	3.7992	.88649	
	30–34	32	3.8021	.79924	
	35 and above	3	2.6667	.72648	
Level of study	1st Year	84	4.0397	.70740	0.025**
	2nd Year	97	3.9210	.78877	
	3rd Year	96	3.8299	.89866	
	4th Year	55	3.6061	.97677	
Academic discipline	Science subjects	90	3.7630	.88368	0.000***
	Commercial subjects	175	4.0514	.71957	
	Humanities subjects	67	3.5522	.97710	
Race	African	302	3.8924	.83765	0.233*
	Coloured	12	3.4583	.99525	
	Indian	16	3.7396	.85628	
	White	2	4.4167	.11785	
Nationality	South African	330	3.8793	.83702	0.059*
	Zimbabwean	2	2.7500	1.76777	
P* >5% P** <5% P*** <1%					

#### 4.7 Perception of Subjective Norms Towards Entrepreneurship

This section analyses the influence of subjective norms on entrepreneurship. The respondents were asked to indicate the level of their agreement with the statements



highlighted in Table 4.16. Positive statements (strongly agree and agree) were interpreted as agreement while negative statements (disagree and strongly disagree) were interpreted as disagreement. The mean value was used to show the levels of agreement and disagreement. A value less than 2.5 is considered to be disagreement while a value greater than 3.5 is considered to be agreement. A neutral value lies in the range from 2.5 to 3.49 (Wekeza and Sibanda, 2019: 11).

According to the data in Table 4.16, a significant number (70.6%) of the respondents were in agreement (agree=234) that they believed that their closest family thought they should be self-employed, yielding a mean result of  $M=3.89\pm 1.158$ ;  $p<0.001$ . There was significant agreement (agree=247) among the respondents (74.4%) that they believed that their closest friends thought that they should be self-employed, with the result given as  $M=3.96\pm 1.090$ ;  $p<0.001$ . Thus, some measures that families, friends, and other close or important people surrounding the students can take to enhance the degree of a subjective norm among students in the institution include the following: to persuade children that their families, friends, and other important people in their lives urge them to pursue an entrepreneurial career; to persuade pupils that their parents are supportive of their future entrepreneurial endeavours; and to persuade pupils that entrepreneurship is a viable option for them among their peers (Saraih *et al.*, 2018: 5).

There was significant agreement (agree=241) among the respondents (72.5%) that they believed that their closest colleagues and course mates thought that they should be self-employed, with the mean value given as  $M=3.90\pm 1.132$ ;  $p<0.001$ . There was significant agreement (agree=240) among the respondents (72.3%) that they believed that people who were important to them thought that they should be self-employed, with the mean value given as  $M=3.95\pm 1.088$ ;  $p<0.001$ . Respect for the opinions of elders and individuals in one's immediate circle is an important value in society. Thus, family, community, and religious leaders are thought to be a storehouse of vast knowledge and wisdom, and their advice is generally highly valued. As a result, if family members encourage the respondents to start a business, they are more likely to accept such advice (Asiedu and Donkor, 2018).

The analysis of the influence of subjective norms revealed that they had a positive influence towards entrepreneurship. It was found that the second statement, "I believe that my closest friends think I should be self-employed", had the most subjective norm influence. People are influenced by norms as they travel through and interact with others around them in social situations. The extent to which people are confronted with promoting or opposing standards impacts on whether they will take action (Utami, 2017).

**Table 4.16:** Frequency distribution of perceived subjective norms on entrepreneurship

		Disagree	Uncertain	Agree	Mean	Std	P-value
<b>D.</b>	<b>Subjective Norms</b>						
1.	I believe that my closest family think I should be self-employed.	53 (15.9%)	45 (13.6%)	234 (70.6%)	3.89	1.158	0.000
2.	I believe that my closest friends think I should be self-employed.	47 (14.1%)	38 (11.4%)	247 (74.4%)	3.96	1.090	0.000
3.	I believe that my closest colleague and coursemates think I should be self-employed.	56 (13.8%)	45 (13.6%)	241 (72.5%)	3.90	1.132	0.000
4.	I believe people who are important to me think I should be self-employed.	43 (12.9%)	49 (14.8%)	240 (72.3%)	3.95	1.088	0.000

#### Socio-Demographic Characteristics and Perceived Subjective Norms Towards Entrepreneurship

The mean and standard deviation of respondents' socio-demographic characteristics (gender, age group, level of study, discipline, race, and nationality) and the perceived subjective norms towards entrepreneurship are given in Table 4.17. According to the data, there was no significant difference among the respondents in terms of gender, race, level of study, and the perceived influence of subjective norms towards entrepreneurship ( $P > 0.05$ ). In contrast, the data indicates that there was a statistically significant difference between the respondents' age group ( $P = 0.029$ ), academic discipline ( $p < 0.001$ ), and nationality ( $P = 0.041$ ) and the perceived influence of subjective norms towards entrepreneurship.

In terms of age groups, the mean measured for respondents below 24 was the highest ( $M = 4.05$ ) while that measured for those 35 and above was the lowest ( $M = 3.08$ ). This implies that younger respondents have a more favourable subjective norm influence towards entrepreneurship when compared to older ones. Regarding academic discipline, the mean value ( $M = 4.12$ ) suggests that respondents offering commercial

subjects had a more favourable subjective norm influence when compared to those offering humanities subjects (M=3.68). In terms of nationality, the mean value measured for South African citizens (M=3.93) was higher when compared to the Zimbabweans (M=2.63). This implies that South Africans were influenced favourably towards entrepreneurship by subjective norms when compared to the Zimbabweans, who were more neutral.

**Table 4.17:** ANOVA test of socio-demographics and perceived subjective norms towards entrepreneurship

		N (332)	Mean	Std. Deviation	P value
Gender	Male	163	3.9218	.91731	0.966*
	Female	169	3.9260	.88666	
Age group	Below 24	170	4.0515	.82037	0.029**
	25–29	127	3.8150	.97142	
	30–34	32	3.7578	.93646	
	35 and above	3	3.0833	.80364	
Level of study	1st Year	84	4.0536	.81963	0.083*
	2nd Year	97	4.0103	.79297	
	3rd Year	96	3.8516	1.00169	
	4th Year	55	3.7000	.97705	
Academic discipline	Science subjects	90	3.7472	.95289	0.000***
	Commercial subjects	175	4.1071	.75498	
	Humanities subjects	67	3.6828	1.07183	
Race	African	302	3.9437	.90938	0.306*
	Coloured	12	3.5417	.81766	
	Indian	16	3.7656	.77711	
	White	2	4.5000	.35355	
Nationality	South African	330	3.9318	.89488	0.041**
	Zimbabwean	2	2.6250	1.23744	
P* >5% P** <5% P*** <1%					

## 4.8 Perception of Entrepreneurship Intention

This section analyses the EI of the respondents. The respondents were asked to indicate the level of their agreement with the statements highlighted in Table 4.18.

Positive statements (strongly agree and agree) were interpreted as agreement while negative statements (disagree and strongly disagree) were interpreted as disagreement. The mean value was used to show the levels of agreement and disagreement. A value less than 2.5 is considered to be disagreement while a value greater than 3.5 is considered to be agreement. A neutral value lies in the range from 2.5 to 3.49 (Wekeza and Sibanda, 2019: 11).

According to the data in Table 4.18, a significant number (73.2%) of the respondents were in agreement (agree=243) that they were ready to do anything to be an entrepreneur, yielding a mean result of  $M=3.96\pm 1.079$ ;  $p<0.001$ . There was significant agreement (agree=237) among the respondents (71.4%) that their professional goal was to become an entrepreneur, with the result given as  $M=3.89\pm 1.086$ ;  $p<0.001$ . Thus, courses in entrepreneurship specialisation should be added to the curriculum of higher education institutions. This feature will not only raise entrepreneurship awareness but also encourage students to start their businesses. An entrepreneurship environment in higher education, such as the presence of a company incubation facility, could help students secure seed investment. This may encourage students to believe that starting a new business is a viable option (Prajapati, 2019: 64).

There was significant agreement (agree=246) among the respondents (74.1%) that they would make every effort to start and run a firm, with the mean value given as  $M=3.94\pm 1.096$ ;  $p<0.001$ . There was significant agreement (agree=250) among the respondents (75.3%) that they were determined to create a firm in the future, with the mean value given as  $M=4.04\pm 1.059$ ;  $p<0.001$ . According to Luc (2018: 64), the ambition to start a business in the future is referred to as EI. It denotes a person's ability to recognise opportunities, pursue them, and create new value. In essence, EI is a person's motivation and commitment to launching a new business. Furthermore, there was significant agreement (agree=246) among the respondents (74.1%) that they had very seriously thought of starting a firm, with the mean value given as  $M=3.94\pm 1.064$ ;  $p<0.001$ . More so, a significant number (76.2%) of the respondents were in agreement (agree=253) that they had the firm intention to start a firm someday, with the mean value given as  $M=3.97\pm 1.061$ ;  $p<0.001$ . Higher education should strive to improve entrepreneurship education for all students, particularly those studying technological disciplines. The education sector can assist aspiring entrepreneurs in

recognising opportunities and searching for resources by giving adequate and appropriate education. The higher education industry must comprehend the factors that have acted as roadblocks in the path of young people, preventing them from acquiring an entrepreneurial mindset and intention (Bhasin and Gupta, 2017: 32). The analysis of EI revealed that the respondents held a positive intention towards entrepreneurship. It was found that the fourth statement, “I am determined to create a firm in the future”, was the strongest motive for the respondents’ EI.

**Table 4.18:** Frequency distribution of entrepreneurship intention

		Disagree	Uncertain	Agree	Mean	Std	P-value
<b>E.</b>	<b>Entrepreneurship Intention</b>						
1	I am ready to do anything to be an entrepreneur.	42 (12.6%)	47 (14.2%)	243 (73.2%)	3.96	1.079	0.000
2	My professional goal is to become an entrepreneur.	50 (15%)	45 (13.6%)	237 (71.4%)	3.89	1.086	0.000
3	I will make every effort to start and run my firm.	57 (17.2%)	29 (11.7%)	246 (74.1%)	3.94	1.096	0.000
4	I am determined to create a firm in the future.	43 (13%)	39 (11.7%)	250 (75.3%)	4.04	1.059	0.000
5	I have very seriously thought of starting a firm.	37 (11.1%)	49 (14.8%)	246 (74.1%)	3.94	1.064	0.000
6	I have the firm intention to start a firm someday.	41 (12.3%)	38 (11.4%)	253 (76.2%)	3.97	1.061	0.000

### Socio-Demographic Characteristics and Entrepreneurship Intentions

The mean and standard deviation of respondents’ socio-demographic characteristics (gender, age group, level of study, discipline, race, and nationality) and perceived EI are given in Table 4.19. According to the data, there was no significant difference among the respondents in terms of gender, age group, race, and perceived EI ( $P > 0.05$ ). In contrast, the data indicates that there was a statistically significant difference between the respondents’ level of study ( $P = 0.022$ ), academic discipline ( $p < 0.001$ ), and nationality ( $p < 0.001$ ) and perceived entrepreneurship intentions.

In terms of the level of study, the mean measured for respondents in their first year was the highest ( $M = 4.12$ ) while that measured for those in their fourth year was the lowest ( $M = 3.72$ ). This implies that younger respondents have more favourable entrepreneurship intentions when compared to older ones. Regarding academic discipline, the mean value ( $M = 4.15$ ) suggests that respondents offering commercial subjects had a more favourable EI when compared to those offering, for example, humanities subjects ( $M = 3.71$ ). In terms of nationality, the mean value measured for

South African citizens (M=3.98) was higher when compared to the Zimbabweans (M=1.67). This implies that South Africans have more favourable entrepreneurship intentions when compared to Zimbabweans.

**Table 4.19:** ANOVA test of socio-demographics and perceived entrepreneurship intention

		N (332)	Mean	Std. Deviation	P value
Gender	Male	163	3.9540	.83422	0.843*
	Female	169	3.9724	.85714	
Age group	Below 24	170	4.0627	.79837	0.085*
	25–29	127	3.8950	.90091	
	30–34	32	3.7656	.81524	
	35 and above	3	3.3333	.66667	
Level of study	1 <sup>st</sup> Year	84	4.1091	.75760	0.022**
	2 <sup>nd</sup> Year	97	4.0619	.76917	
	3 <sup>rd</sup> Year	96	3.8785	.91909	
	4 <sup>th</sup> Year	55	3.7152	.90986	
Academic discipline	Science subjects	90	3.7981	.92964	0.000***
	Commercial subjects	175	4.1457	.69311	
	Humanities subjects	67	3.7090	.97759	
Race	African	302	3.9967	.84395	0.099*
	Coloured	12	3.4722	.87569	
	Indian	16	3.6875	.76467	
	White	2	4.0833	.35355	
Nationality	South African	330	3.9773	.82794	0.000***
	Zimbabwean	2	1.6667	.23570	
P* >5% P** <5% P*** <1%					

## 4.9 Regression Analysis

Before performing the regression analysis, the necessary checks for the normality of the residuals, linearity, and/or multicollinearity were carried out. The collinearity values indicated that all tolerance coefficients were above the recommended value of 0.10. The yielded Variance inflation factor (VIF) values also showed that all the variables were below 10.0, which suggests that the multicollinearity assumption was not violated

(Table 4.20). According to the data in Table 4.20, the regression coefficient ( $r=0.853$ ;  $p<0.001$ ) suggests that there was a causal relationship in the predicted model. The beta coefficients for perceived attitude ( $\beta=0.134$ ), PBC ( $\beta=0.167$ ), and subjective norms ( $\beta=0.622$ ) were positive and significant ( $p<0.001$ ). In contrast, the value measured for self-efficacy was negative and not significant ( $\beta=-0.011$ ). The  $R^2$  value measured suggests that there was a strong explanatory power (72.7%).  $R^2$  is a measure of explanatory power that spans from 0 to 1, with higher values indicating more explanatory power.  $R^2$  values of 0.75, 0.50, and 0.25 are regarded as significant, moderate, and weak, respectively (Henseler *et al.*, 2009; Hair *et al.* 2011). Overall, subjective norms constituted the strongest predictor of entrepreneurship intentions.

**Table 4.20:** Regression analysis showing the predictors of entrepreneurship intention

Entrepreneurship intention	F	Sig.	R	R square	Standardised Coefficients	t	Sig.	Collinearity Statistics	
					Beta			Tolerance	VIF
Perceived attitude					.134	2.890	.004	.391	2.555
Self-efficacy	217.518	0.000	0.853	0.727	-.011	-.200	.841	.284	3.525
Perceived behaviour control					.167	2.755	.006	.227	4.406
Subjective norms					.622	12.063	.000	.314	3.186

## 4.10 Structural Equation Modelling

According to Pavlov, Maydeu-Olivares and Shi (2020), SEM is a popular technique for modelling multivariate data because it provides a comprehensive framework for fitting theoretical models. In this study, SEM was also used to test fit the proposed model. Both SmartPLS3 and AMOS were employed as the statistical analysis tools in identifying the unknown parameters (e.g., factor loadings, error terms, path weights, and shared variance) in the structural equation model.

### 4.10.1 SmartPLS3

Asparouhov and Muthen (2018) revealed that a model is approximately well-fitting if the estimated and observed correlations are less than 0.08 apart. The SRMR value measured (0.059) was less than 0.08, which suggests that the model was a good fit (Table 4.21) whereas Figure 4.2 shows the results of the structural model assessment

and the corresponding relationship, the results of which are further discussed in Section 4.10.2 and tabulated in Table 4.22. The normed fit index (NFI) for the model was 0.817. According to Akkus (2019: 713) and Byrne and Campbell (1999: 570), an NFI value of more than 0.80 indicates a good fit, and more than 0.95 indicates an excellent fit.

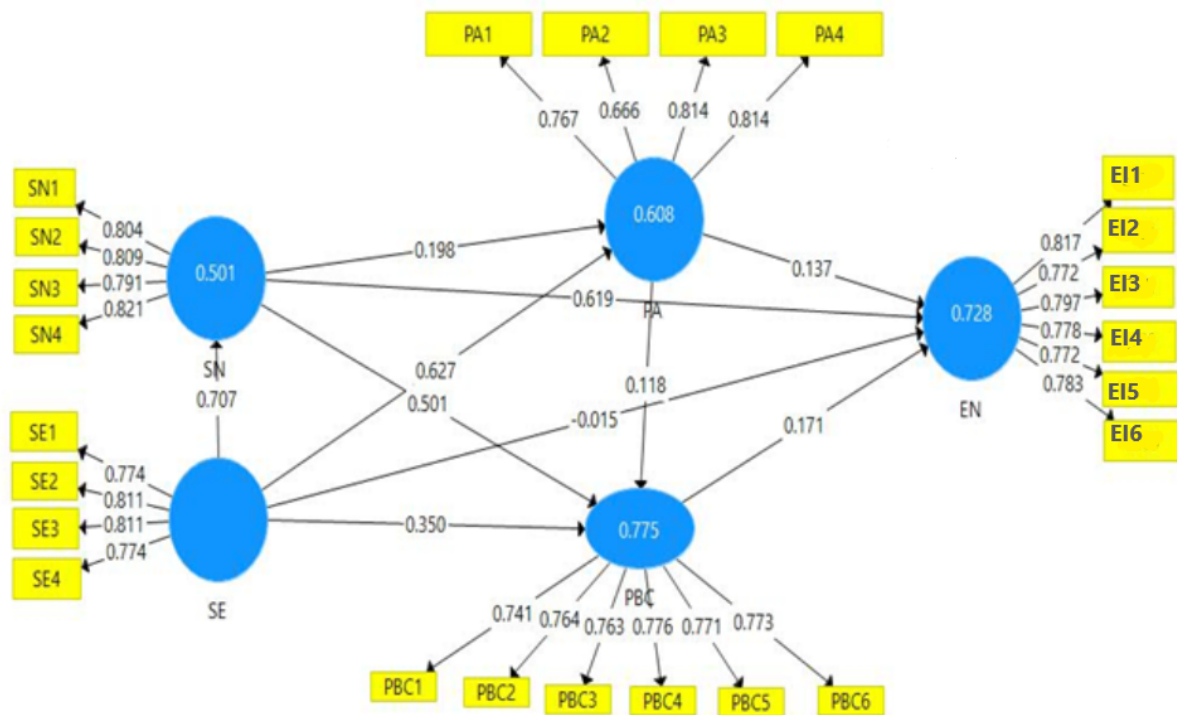


Figure 4.2: SmartPLS3 model (Source: author’s own construct)

Table 4.21: SmartPLS3 model fitness

	Saturated Model
SRMR	0.059
d_ ULS	1.057
d_ G	0.468
Chi-Square	870.190
NFI	0.817

#### 4.10.2 Relationship Between Perceived Attitude, Perceived Behaviour Control, Subjective Norm, and Self-Efficacy and Entrepreneurship Intention

According to the regression estimate data in Table 4.22, the relationship between perceived attitude (PA) and entrepreneurship intention (EI) was significant (P=0.05). Another study conducted among Master of Business Administration (MBA) students



found that attitude towards entrepreneurship influences entrepreneurial intention (Amofah *et al.*, 2020: 14). Thus, universities should focus their entrepreneurship promotion programmes on developing potential entrepreneurs' attitudes, conveying the message that, despite the challenges that accompany launching a spin-off, entrepreneurship can be an interesting alternative for academics and one that complements their teaching and research work, which can be bolstered by the experience gained (Miranda, Chammoro-Mera and Rubio, 2017: 119).

The relationship between perceived behaviour control (PBC) and entrepreneurship intention (EI) was significant ( $P=0.05$ ). The findings of this study are in sync with a study conducted on private students in Bahrain, which found a significant positive relationship between students' PBC and their EI (Al-Shammari and Waleed, 2017: 52). In addition, individuals who value the benefits and rewards of starting, managing, and growing a business are more likely to have a high EI. Individuals who believe that they are competent in carrying out the duties required to start, manage, and expand a business are also more inclined to participate in the activity (Mwiya *et al.*, 2017: 603). In the same vein, Doanh and Bernat (2019: 2450) argued that the belief in one's ability to do a task well has a substantial impact on one's intention and behaviour, while the TPB also claims that people's perceptions of behavioural control and attitudes towards behaviour are influenced by their control beliefs.

The relationship between self-efficacy (SE) and entrepreneurship intention (EI) was negative and not significant ( $P>0.835$ ), as shown in Table 4.22. Despite this finding, in a study conducted among Malaysian students, Pihie and Bagheri (2013: 397) found that SE has a positive and significant relationship with EI. Similarly, a study on the effects of SE on college students' EI in China found a significant relationship between them (Liu *et al.*, 2019: 6). Conversely, the findings of this study partially agree with the findings of Amofah *et al.*, (2020: 15), who found that the relationship is not significant, but differ with regard to the relationship being positive. To summarise, the findings of this study imply that a high level of entrepreneurial SE might not boost college students' confidence in their entrepreneurial abilities their commitment and desire to start a business.

The relationship between subjective norms (SN) and entrepreneurship intention (EI) was significant ( $p < 0.000$ ), as indicated in Table 4.22. A study conducted on the determinants of EI in Pakistan found that SN are a significant predictor of EI (Anjum *et al.*, 2018: 435). Obschonka, Goethner, Silbereisen, and Cantner (2012: 137) observed that in research on entrepreneurial intentions, it was found that SN, particularly among individuals with strong group identification, are predictors of intention, which is indicative of a collective culture (similar to the culture within which this study was based). This research implies that the social environment influences students' decisions to become entrepreneurs.

**Table 4.22:** Regression estimate as obtained from SmartPLS3

	Original Sample (O)	T Statistics ( O/STDEV )	P Values	Result
PA -> EI	0.137	1.967	<b>0.050</b>	<b>Supported</b>
PBC -> EI	0.171	1.969	<b>0.050</b>	<b>Supported</b>
SE -> EI	-0.015	0.209	<b>0.835</b>	<b>Unsupported</b>
SN -> EI	0.619	8.197	<b>0.000</b>	<b>Supported</b>

#### 4.11 Chapter Summary

This chapter provided the analysis and discussion of the findings. As per the findings, descriptive statistics were used to analyse the data, specifically the demographic variables of gender, age, level of study, academic discipline, race, and nationality. Furthermore, students' perceptions of attitude, PBC, self-efficacy, subjective norms, and EI were analysed using frequency distributions. In this regard, percentages and mean scores were used to explain the findings. Generally, the overwhelming majority of students expressed their agreement with the different statements under the aforementioned constructs. With respect to inferential statistics, the relationships between attitude, PBC, self-efficacy, and subjective norms and EI were evaluated. Based on the findings, attitude, PBC, and subjective norms have a significant and positive relationship with EI. On the other hand, the relationship between self-efficacy and EI was negative and not significant. The following chapter discusses the summary, recommendations, and conclusion of this study.

## **CHAPTER 5**

### **SUMMARY, RECOMMENDATIONS, AND CONCLUSIONS**

#### **5.1 Introduction**

The preceding chapter highlighted the analysis and discussion of the findings guided by the research methodology. Descriptive and inferential statistics were used to analyse the data. The current chapter discusses the summary of the theoretical study by providing an overview of the different schools of thought. This is followed by an evaluation of the objectives, which underlines whether the envisaged objectives have been achieved or not. The chapter further discusses the recommendations, which are derived from the empirical findings of this study. Finally, the chapter discusses the limitations of the study followed by suggestions for future research, ending with a conclusion.

#### **5.2 Summary of the Theoretical Study**

The primary objective of this study was to analyse student entrepreneurial readiness at a selected South African university. The theoretical background of the study was discussed in Chapter 2. Thus, it was noted that entrepreneurs do not only contribute to economic development but also play an important part in societal development. As a result, many governments around the world are encouraging individuals, particularly the youth, to engage in entrepreneurship such that they can contribute to society and economic development. It was further noted that EI, subjective norms, personal attitude, PBC, and self-efficacy are based on the TPB. Thus, it is critical to emphasise that there are reasons that drive an individual's inner desire to become an entrepreneur, and these should be prioritised and promoted. In terms of education, entrepreneurship education can encourage students to consider starting a company or enterprise.

The theoretical study in Chapter 2 further underlined that young people in the education sector, particularly at university level, are confronted with a dismal reality concerning their prospects following graduation. The difficulty in obtaining work

continues to be a major issue, making entrepreneurship a realistic and viable alternative for survival. South Africa is one of the continent's most powerful and emerging economies. As such, the first step towards developing a dynamic and sustainable economy is to instil EI in higher education institutions. Consequently, higher education institutional managers should channel their efforts into developing their institution's curriculum on students' entrepreneurial readiness or intentions. The following section evaluates the study's objectives.

### **5.3 Evaluating the Study Objectives**

This section addresses the evaluation of the study objectives. Specifically, the objectives are evaluated against the findings of the study as discussed in Chapter 4.

#### **5.3.1 To Analyse the Perception of Students' Readiness Towards Entrepreneurship (Personal Attitude, Perceived Behaviour Control, Self-Efficacy, and Subjective Norm and Entrepreneurship Intention)**

The first objective sought to analyse the perception of students' EI, personal attitude, PBC, self-efficacy, and subjective norms by asking students to rate relevant statements using the Likert scale (agree, neutral, and disagree). As shown in Sections 4.4 to 4.8 in Chapter 4, the majority of the students agreed with the different items and statements under the five variables (EI, personal attitude, PBC, self-efficacy, and subjective norms), and the mean scores were all above 3.5, which also shows an overwhelming agreement regarding students' intentions and readiness towards entrepreneurship. This implies that the study managed to successfully achieve the first objective, as envisaged during the study's conception.

#### **5.3.2 To Evaluate the Relationship Between Personal Attitude, Social Norms, Perceived Behaviour Control, and Self-Efficacy and Entrepreneurial Intentions**

The second objective analysed the relationship between personal attitude, self-efficacy, subjective norms, and PBC and EI. As indicated in Sections 4.9 and 4.10.2 of Chapter 4, the findings of this study showed that personal attitude, subjective norms, and PBC have a positive and significant relationship with EI. Conversely, the study also found that self-efficacy has a negative and insignificant relationship with EI. From

all the relationships analysed in this study, the results further showed that subjective norms have the strongest relationship with EI. Based on the above discussion, the second objective, as envisaged during the conception of the study, has been achieved.

### **5.3.3 To Develop a Model for Students' Readiness Towards Entrepreneurship**

To achieve this objective, a model was developed based on the relationship between personal attitude, subjective norms, PBC, and self-efficacy and EI. Based on the findings, a model was developed, as shown in Section 4.10.1 and Figure 4.2 in Chapter 4, and subsequently streamlined in Figure 5.1 (Section 5.5). The key attributes in this model are personal attitude, subjective norms, PBC, and EI. This is because the three variables have a significant relationship with EI and are, therefore, crucial to entrepreneurship readiness. It further shows that higher education institutions should focus on these attributes and not self-efficacy, which has a negative effect on EI, hence affecting student readiness towards entrepreneurship. Based on the above discussion, the third objective, as envisaged during the study's conception, has been achieved.

## **5.4 Recommendations for Practice**

Based on the findings of this study, as discussed in Chapter 4, the following recommendations are proffered.

### **5.4.1 Developing Social Networks and Mentorship**

It has been noted that subjective norms play a crucial role in developing EI. Therefore, the social environment and pressure from and the opinion of individuals, such as friends, family, and prominent business people, influence the behaviour of students such that it is recommended that higher education institutional managers find better ways of improving the social environment and also expose students to social interactions with prominent or successful business people who can be invited to educational institutions to motivate the students by sharing their experiences regarding what it entailed for them to reach where they are today. In addition, educational institutions can expose and connect students to individuals who should act as mentors.

#### **5.4.2 Mindset Change and Curriculum Development**

Naturally, there is a high predisposition of students moving towards white-collar jobs because society has traditionally conditioned students to graduate such that they can work in high-paying jobs in either the public or private sector of the economy. Therefore, in order to change this attitude and mindset of students, it is recommended that higher education institutions increase awareness among students regarding the need to embrace an entrepreneurship culture. In addition, there is a need to redesign and calibrate the curriculum to include entrepreneurship or facets of it in the curriculum that may promote the spirit of entrepreneurship as key to survival. Students should realise that entrepreneurship is an alternative to employment and that they can be equally successful and survive after graduation without white-collar jobs. Instilling this mindset will unleash the enthusiasm in students to embrace entrepreneurship as a way of life. In this regard, higher education institutions are encouraged to develop self-employment graduate programmes that incentivise or give seed money to students to develop small businesses while studying at university.

#### **5.4.3 Training and Outreach Activities**

It is recommended that higher education institutions organise outreach activities, such as entrepreneurship seminars and business incubation and training, for both students and members of the faculty in order to develop their interest in entrepreneurship. It is critical that the faculty members have an understanding of the benefits of entrepreneurship such that they can inculcate this knowledge in students and encourage them to not only be mere job seekers but also aspire to be job creators through entrepreneurship ventures.

#### **5.4.4 Information Sharing and Creating a Supporting Structure**

It is also recommended that there is a need to create a supporting structure and environment to enhance the development of entrepreneurship behaviour. This could improve individual confidence and the belief that carrying out tasks is easy and, in so doing, promote PBC. Furthermore, institutions are advised to provide resources and role models and assure students of the availability of the market for their businesses to enhance PBC. Higher education institutions should also provide more information on available entrepreneurship opportunities and start-up capital information such that

they can influence students' decisions in terms of embracing entrepreneurship or developing entrepreneurship intentions. In addition, universities should create incubation hubs to support students (Fenech, Baguant and Ivanov 2019: 9).

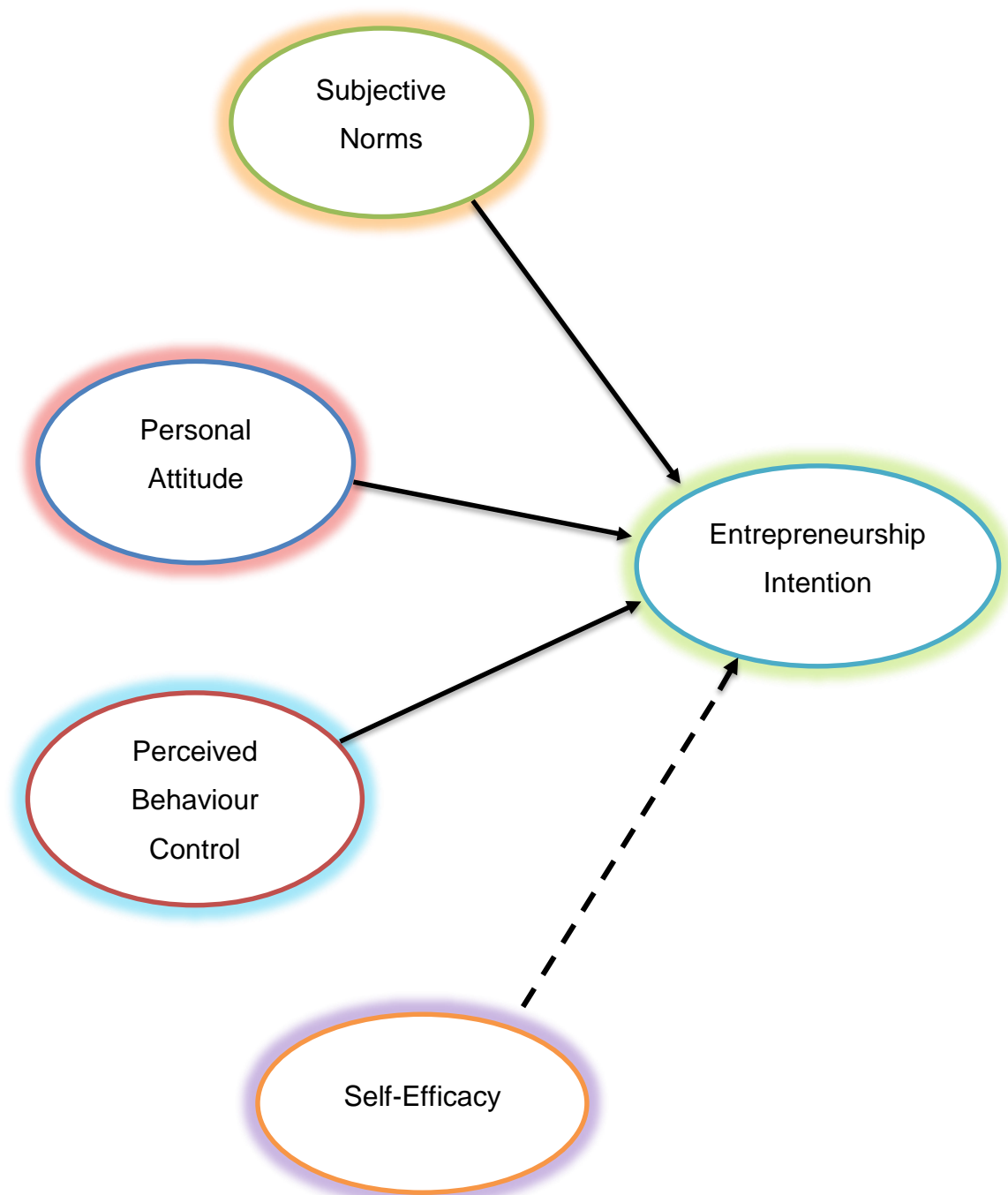
#### **5.4.5 Creating an Enabling Environment Through Government Support**

There is also a need for the government to create a favourable business climate that enables the youth, especially students, to be able to access business loans without having to face bureaucratic obstacles or "red tape", which is prevalent in most capital-lending institutions. An enabling environment will assist more students to develop entrepreneurship intentions because they will know that the playing field is fair and tolerant to young people who may not have collateral in the form of assets.

### **5.5 Contribution of the Study to the Body of Knowledge**

This study has contributed to new knowledge in many ways. Firstly, the study sought to evaluate students' entrepreneurial readiness at a selected university in South Africa. Based on the overall objective, four attributes that contribute to EI were evaluated, namely, personal attitude, subjective norms, self-efficacy, and behaviour control. As a result, a model, as shown in Figure 5.1, was developed, which shows the key attributes that have an impact on EI and that are, therefore, key to entrepreneurship readiness. Therefore, this model is a key contribution of this study as it validates the original model of the TPB (Ajzen 1991), which has three key attributes (PBC, attitude, and subjective norms) that have an impact on EI.

The findings of this study further suggest that self-efficacy is not a predictor of intention and, therefore, should not be prioritised in terms of developing students' entrepreneurship intentions, hence the dotted lines in the model. This is in sharp contrast to many studies (Saraih, Aris, Mutalib, Ahmad, Abdullah and Amlus, 2018: 4; Wijangga and Sanjaya, 2019: 21) that have validated the addition of self-efficacy to the original model of the TPB as a significant predictor of EI. Therefore, this validated model of the original TPB should serve as a guide for higher education institutions to channel resources and efforts in developing students' personal attitudes and PBC and also to encourage subjective norms because they are a significant predictor of EI, as shown in Figure 5.1.



Note: —————> significant relationship      - - - - -> insignificant relationship

**Figure 5.1:** Entrepreneurship intention model (Source: adapted from the study's findings)

Finally, this study has contributed to the literature on entrepreneurial intentions in higher education institutions with specific reference to South Africa and the developing world where various challenges affect students regarding embracing entrepreneurship



as an alternative means of survival to employment due to cultural factors, resource constraints, and societal pressures.

## **5.6 Limitations of the Study**

The study has several limitations that must be considered. The study was conducted at the University of KwaZulu Natal; therefore, the findings cannot be applied indiscriminately to other institutions in South Africa and beyond the African continent. However, the study can be used as a benchmarking tool and prove useful for other higher education institutions with similar management architectures. In addition, conducting the study and collecting data during the COVID-19 pandemic was not easy owing to the restrictions put in place by the government and subsequently adopted by higher education institutions. This made data collection a daunting and laborious task.

## **5.7 Recommendations for Further Research**

The current study has evaluated students' perception of entrepreneurship readiness at a selected university. Future research should focus on a qualitative study to evaluate students' readiness at a selected university. Specifically, a purposive sample should be used to evaluate the views of students doing minor entrepreneurship activities on campus to ascertain what it entails to start an enterprise as well as the challenges that they encounter in managing campus ventures. In addition, further research can focus on a comparative analysis by ascertaining student entrepreneurial readiness in more than one institution. This will help to ascertain the differences in terms of key attributes that students from different institutions value as antecedents of EI.

## **5.8 Conclusion**

The aim of this study was to analyse students' perception of entrepreneurial readiness at a selected university. The findings of this study showed that PBC, subjective norms, and personal attitude have a significant and positive relationship with EI. On the other hand, self-efficacy has a negative relationship with EI. As a result, higher education should focus on entrenching PBC and subjective norms and developing personal attitudes in order to prepare students for entrepreneurship. Furthermore, this study

provides guidance for higher education institutions, practitioners, policymakers in the government, and researchers to understand the key attributes for entrepreneurship readiness and, therefore, to channel resources towards developing students in the aforementioned attributes. The study further contributes to the literature on entrepreneurship from the developing world with specific reference to South Africa.

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# APPENDIX A: PERMISSION LETTER TO CONDUCT RESEARCH



2 August 2021

Steven Kayambazinthu Msosa  
Department of Applied Management  
UNISA  
Email: [Kayambazinthu@gmail.com](mailto:Kayambazinthu@gmail.com)

[RadebeS@unisa.ac.za](mailto:RadebeS@unisa.ac.za)

Dear Steven

## RE: PERMISSION TO CONDUCT RESEARCH

Gatekeeper's permission is hereby granted for you to conduct research at the University of KwaZulu-Natal (UKZN), towards your postgraduate studies, provided Ethical clearance has been obtained. We note the title of your research project is:

*"Assessing student entrepreneurial readiness as a selected South African university".*

It is noted that you will be constituting your sample as follows:

- With a request for responses on the website. The questionnaire must be placed on the notice system <http://notices.ukzn.ac.za>. A copy of this letter (Gatekeeper's approval) must be simultaneously sent to ([govenderlog@ukzn.ac.za](mailto:govenderlog@ukzn.ac.za)) or ([ramkissoob@ukzn.ac.za](mailto:ramkissoob@ukzn.ac.za)).

Please ensure that the following appears on your questionnaire/attached to your notice:

- Ethical clearance approval letter;
- Research title and details of the research, the researcher and the supervisor;
- Consent form is attached to the notice/questionnaire and to be signed by user before he/she fills in questionnaire;
- gatekeepers approval by the Registrar.

You are not authorized to contact staff and students using the 'Microsoft Outlook' address book. Identity numbers and email addresses of individuals are not a matter of public record and are protected according to Section 14 of the South African Constitution, as well as the PAIA and POPI Act. For the release of such information over to yourself for research purposes, the University of KwaZulu-Natal will need express consent from the relevant data subjects.

Data collected must be treated with due confidentiality and anonymity.

Yours sincerely

**DR KE CLELAND: REGISTRAR**

### Office of the Registrar

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Telephone: +27 (0)31 260 7971 Email: [registrar@ukzn.ac.za](mailto:registrar@ukzn.ac.za) Website: [www.ukzn.ac.za](http://www.ukzn.ac.za)

Founding Campuses: ■ Edgewood ■ Howard College ■ Medical School ■ Pietermaritzburg ■ Westville

**INSPIRING GREATNESS**

## APPENDIX B: ETHICS APPROVAL – UNISA



### UNISA DEPARTMENT APPLIED MANAGEMENT RESEARCH ETHICS REVIEW COMMITTEE (DAM-RERC)

Date: 21 July 2021

Dear Mr SK Msosa

ERC Reference # :  
2021\_CEMS\_DAM\_004  
Name: Mr SK Msosa  
Student #: 49127462  
Staff #:

**Decision: Ethics Approval from July  
2021 to July 2024**

**Researcher(s):** Mr SK Msosa  
0748761266 / [49127462@mylife.unisa.ac.za](mailto:49127462@mylife.unisa.ac.za)

**Supervisor (s):** Mrs M.S Radebe  
081582023 / [radebes@unisa.ac.za](mailto:radebes@unisa.ac.za)

**Working title of research:**  
**Assessing student entrepreneurial readiness at a selected South African  
university**

**Qualification:** MCom BMA

Thank you for the application for research ethics clearance by the Unisa DAM Ethics Review Committee for the above-mentioned research. Ethics approval is granted for three years.

*The **low risk application** was **reviewed** by the DAM Ethics Review Committee in July 2021 in compliance with the Unisa Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment. The decision was approved on the 21<sup>st</sup> of July 2021.*

The proposed research may now commence with the provisions that:

1. The researcher will ensure that the research project adheres to the relevant guidelines set out in the Unisa Covid-19 position statement on research ethics attached.



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## APPENDIX C: QUESTIONNAIRE

Please cross **X** or tick one block for each question

1. Please specify your gender.	Male	Female
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2. Please indicate your age category.	Below 24	25 – 29	30 – 34	35 Above
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3. Please indicate the level of your study	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year
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4. Please indicate the academic discipline you are registered for	Science subjects	Commercial subjects	Humanities subjects
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6. Please indicate your race	African	Coloured	Indian	White	Others
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7. Please indicate your nationality	South African	Other-specify:
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		Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
<b>A.</b>	<b>Personal Attitude</b>					
8.	Being an entrepreneur implies more advantages than disadvantages to me	1	2	3	4	5
9.	A career as an entrepreneur is attractive to me	1	2	3	4	5
10.	if I had the opportunity and resources, I'd like to start a firm	1	2	3	4	5
11.	Being an entrepreneur would entail great satisfaction for me	1	2	3	4	5
<b>B.</b>	<b>Self-Efficacy</b>					
12.	I think I have the skills to detect business opportunities in the market.	1	2	3	4	5
13.	Professionally, I consider myself much more persistent than others.	1	2	3	4	5
14.	I always find creative solutions to the problems I encounter.	1	2	3	4	5
15.	I perform my duties properly, respecting the deadlines set.	1	2	3	4	5
<b>C.</b>	<b>Perceived Behaviour Control</b>					
16.	To start a firm and keep it working would be easy for me	1	2	3	4	5
17.	I am prepared to start a viable firm	1	2	3	4	5
18.	I can control the creation process of a new firm	1	2	3	4	5
19.	I know the necessary practical details to start a firm	1	2	3	4	5
20.	I know how to develop an entrepreneurial project	1	2	3	4	5
21.	If I tried to start a firm, I would have a high probability of succeeding	1	2	3	4	5
<b>C.</b>	<b>Subjective Norms</b>					
22.	I believe that my closest family think I should be self-employed	1	2	3	4	5
23.	I believe that my closest friends think I should be self-employed	1	2	3	4	5
24.	I believe that my closest colleague and course mates think I should be self-employed	1	2	3	4	5

25.	I believe people who are important to me think I should be self-employed	1	2	3	4	5
	<b>Entrepreneurship Intention</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Uncertain</b>	<b>Agree</b>	<b>Strongly Agree</b>
26.	I am ready to do anything to be an entrepreneur	1	2	3	4	5
27.	My professional goal is to become an entrepreneur	1	2	3	4	5
28.	I will make every effort to start and run my firm	1	2	3	4	5
29.	I am determined to create a firm in the future	1	2	3	4	5
30.	I have very seriously thought of starting a firm					
31.	I have the firm intention to start a firm someday	1	2	3	4	5

# APPENDIX D: TURNITIN REPORT

## ASSESSING STUDENT ENTREPRENEURIAL READINESS AT A SELECTED SOUTH AFRICAN UNIVERSITY

### ORIGINALITY REPORT

<b>13%</b> SIMILARITY INDEX	<b>9%</b> INTERNET SOURCES	<b>5%</b> PUBLICATIONS	<b>5%</b> STUDENT PAPERS
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### PRIMARY SOURCES

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