

UNIVERSITY OF KWAZULU-NATAL

**THE ROLE OF ENTREPRENEURIAL EDUCATION IN FOSTERING
STUDENT ENTREPRENEURSHIP**

By

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DECLARATION

I declare that this dissertation I hereby submit for the degree: Masters of Commerce in Entrepreneurship at the University of KwaZulu-Natal, is my own work; and that the work included from the previous studies conducted by other authors has been acknowledged in the form of references.

Nompumelelo S. Nqoko

10 January 2021

DEDICATION

*I dedicate this dissertation to my late beloved best friend and Sister,
Sindisiwe Anne-Rose Memela,
May her soul rest in eternal peace.*

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I should like to extend my greatest gratitude firstly to God, for giving me another chance to complete this dissertation: it took me years to complete. I had given up, but God gave me strength to carry on.

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ABSTRACT

Entrepreneurship preparation has been generally recognised as important to leading to economic growth. Graduates may have different qualifications, but they still find themselves without a career. However, graduates are also hesitant to see entrepreneurship as a feasible career choice, even in times of high unemployment. University degrees and qualifications no longer carry the guarantee of availability of jobs for pupils, since hundreds of thousands of graduates cannot afford to do so. After acquiring degrees, graduates rarely consider entrepreneurship as a good and sustainable career option.

This research was an exploratory study that adopted a mixed-method research approach for data collection and interpretation. This method allows both quantitative and qualitative data to be obtained in one analysis, it further offers more enhanced insight into the research problem and questions presented. The adoption of a mixed method allows for comparison and corroboration of research findings for a fuller understanding of the research problem. The mixed method was therefore, adopted to gather data from both third-year and postgraduate students in the discipline of management and entrepreneurship. Where self-administered questionnaires were adopted for quantitative which were administered to both third year (undergraduate) and honours students. Qualitative data was collected from postgraduate students to gather information about their entrepreneurial intentions. SPSS version 21 was used to include quantitative data with informative and inferential statistics; and NVivo (version 11) was utilised to analyse qualitative data. There was also a need to apportion the methods equally to each strand of the quantitative and qualitative data.

Purposive sampling was utilised to elicit both quantitative and qualitative data from the respondents who were in the best position to engender such information. The sample for this study included the third- and fourth-year students enrolled in the School of Management, Information Technology and Governance, in the discipline of Management and Entrepreneurship at the University of KwaZulu-Natal. This included three UKZN campuses, namely, the Westville Campus, and Howard College campus located in Durban, and the UKZN campus located in Pietermaritzburg. The sample for the study was drawn from students who had studied entrepreneurship modules during their programme, and had been exposed to entrepreneurial education for a minimum of a year.

The overall enrolment of all students when the study was conducted was 330, composed of 233 third year students and 97 honorary students. The study used Krejcie and Morgan (1970) statistical table, to determine the sample size for quantitative data which was estimated at 180. The total number of questionnaires returned for quantitative was 169. The study achieved a response rate of 93%. 42% of the respondents were male and 58% were female. It was found that 72% of the respondents were pursuing an undergraduate bachelor's degree, 28% were enrolled in a postgraduate honours degree. From the 169 questionnaires that were returned, twenty students were purposively selected to form a focus group for the qualitative data; however, only fifteen were available to participate in the focus-group discussion.

The findings revealed that the university offered entrepreneurship modules as an elective. It is those students in small business management that had high entrepreneurial intentions. Students who took entrepreneurship modules as an elective plan to start their business five years after they complete their studies, and that entrepreneurship will be an option should they not find employment. The results also showed that entrepreneurial education does develop entrepreneurial intentions among the students if the curriculum is well structured. Furthermore, reflect that individuals with high entrepreneurial intentions are fully capable of taking entrepreneurial action. The research further confirmed that individuals with a high entrepreneurial mentality are more likely to have entrepreneurial ambitions and a deep desire to start a business. These studies have shown that entrepreneurial education has had a positive effect on the entrepreneurial attitude of students and their intentions towards entrepreneurship, their employability and their position in society and the economy as a whole. There has been a growing consensus among scholars that allowing students to work in interdisciplinary teams and engage with actual entrepreneurs is an especially effective way to cultivate entrepreneurial ambitions among students.

The study highlighted the importance of entrepreneurial education in fostering student entrepreneurship, and also discovered that entrepreneurial intention and entrepreneurial action scores are higher if students are considered to have a need to research entrepreneurship at the university. Hence entrepreneurial education should strictly focus on influencing students' mind-set towards entrepreneurship, as a possible career. Furthermore, entrepreneurial education can make students experience more fulfilling by being explored to both theory and practice.

The results of entrepreneurial education are focused on the belief that being an entrepreneur is a deliberately orchestrated action. The relation between expectations, actions and action is used on

the basis of the "Theory of Planned Behavior" (TPB). If students' attitudes towards entrepreneurship are favourably affected by entrepreneurship education, their entrepreneurship intentions will or may be improved. Therefore, the present study applied TBP, this theory clearly explains human behaviour using three major variables, perceived behavioural control, attitude and subjective norms.

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CHAPTER ONE: GENERAL INTRODUCTION

1.1 Introduction

Entrepreneurship for college students, as well as many other jobs and career opportunities, often relies on a variety of factors. Developing an interest in entrepreneurship as a profession appears to be growing now that entrepreneurship education is popular with universities worldwide (Saeed, Yousafzai, Yani De-Soriano and Muffatto, 2015). This is owing to entrepreneurs creating jobs and driving economic development for the nation.

According to Bester (2017), universities have the potential to promote student entrepreneurship in many ways. However, it is imperative to evaluate the awareness and support of students in order to consider the degree and effect of such support on students. This is an empirical study exploring the role of entrepreneurial education in fostering student entrepreneurship from the perspective of students at the University of KwaZulu-Natal, who are representatives of our youth. The study has attempted to investigate the aspects that encourage students to take entrepreneurial studies.

According to Musengi-Ajulu (2013), entrepreneurship falls amongst the fields in business management that has attracted much attention over the past decades. Universities are considered as agents of social transformation; and are therefore encouraged to spearhead this kind of partnership. In addition, Saeed et al. (2015) argue that the growth of entrepreneurship skills and programs has become a major concern for higher education, with a view to promoting the employability of graduates who would be called upon as job makers, not job seekers. Bux (2017) postulates that entrepreneurship education has been generally accepted as having a major role to play in leading to economic development; however, nothing can be known about its application until the curriculum has been completed. It is for this purpose that the thesis was conducted in order to determine the role of entrepreneurial education in the development of student entrepreneurship, in the understanding of the entrepreneurial intentions of students. The importance of entrepreneurial education, according to Sikalieh and Otieno (2010), cannot be overemphasised. Entrepreneurial education is seen as a means to re-create welfare and develop and sustain alliances between the public and business sectors by combining the dynamism of

markets with a public interest emphasis. The writers also point out that entrepreneurship is seen as a solution to the global crisis by growing youth unemployment; and as a recipe for economic growth. There is also a need to expand the availability and promotion of entrepreneurial talent to students in order to develop new enterprises that can help create jobs and thus create income for the local economy (Keeton, 2014).

Studies undertaken by Sikalieh and Otieno (2010) find that university-based entrepreneurship studies are structured to identify and promote entrepreneurship, creativity and abilities; and to facilitate the development of independent behavior that will build an understanding of business start-ups as well as student management skills. These scholars also suggest that it is important for entrepreneurship lecturers to consider what should be learned in entrepreneurship curricula: they must have a good idea of how an entrepreneur should work. It is beneficial to recognize who, by studying, has the ability to become an entrepreneur while enrolling students in entrepreneurship preparation. Sikalieh and Otieno (2010) further show that students are not taught enough to become entrepreneurs, but rather to reach the job force as workers.

As a developing country, South Africa is faced with several socio-economic challenges, such as high unemployment levels, inequality and poverty. Therefore the government and higher education institutions need to emphasise the importance of entrepreneurship (Keeton, 2014). Researchers and policymakers have agreed on the significance of entrepreneurship and its impact on sustainable economic development and growth (Kroon, 2012; Meyer, 2017). This statement is supported by the research conducted by Nwanko (2005), who states that policymakers agree that additional entrepreneurship initiatives are needed to achieve higher levels of economic innovation and development. Nwanko (2005) further points out that improved levels of entrepreneurship can be strengthened by education, especially in entrepreneurship training. It is well known that such schooling can be promoted and incorporated in curricula at a variety of South African universities.

According to the OECD (2017), South Africa is the world's lowest youth unemployment figure in 2016, with 53.3 per cent of participating youth staff unemployed. Stats SA (2017) confirmed that this number had risen to 56.4 per cent in the second quarter of 2017. In light of this, the purpose of this research is to establish the status of entrepreneurial education in the field of

student entrepreneurship, which will also include factors influencing the entrepreneurial choice of university students at UKZN.

1.2 Background to the Study

According to Hughes and Schachtebeck (2017), entrepreneurship has been viewed as the driver of the economy, and a solution to the unemployment rate of graduates of South Africa. City Press (2013) reported that university degrees and qualifications no longer carry the guarantee of availability of jobs for students, as hundreds of thousands of graduates are unable to do so. Graduates may have various skills, nonetheless they find themselves without a job. Mihindou (2014) is of the opinion that the students are developing a new channel for their engagement when it comes to choosing a career. The new route is entrepreneurship; for many people, the appeal of making it on their own is understandable. This is owing to South Africa being challenged by a socio-economic climate characterised by low economic growth, leading to destitution and unemployment among young people. Entrepreneurship is also perceived to be a better solution to these problems (Hughes & Schachtebeck, 2017).

Youth engagement in entrepreneurship plays an important socio-economic role. Young people are considered very mobile, responding rapidly to volatility and price fluctuations, which have a positive impact on the economy as well as on the economy as a whole. In addition, the employment of young people in their own enterprises contributes to the development of new jobs and decreases unemployment (Lez'er1, Semerianova, Kopytova and Truntsevsky, 2019). Currently, the penetration of the workforce by graduates of the vocational school system raises the likelihood of becoming unemployed. The purpose of the study is to analyse the role of entrepreneurial education in fostering student entrepreneurship. The study hope that with is research, the problem of adjusting young people to entrepreneurship practices will become important, which will decrease the unemployment rate and ensure the likelihood of self-employment, thus ensuring the creation of a generation of young entrepreneurs (Lez'er1 *et al.*, 2019:135).

The DTI (2013) notes that entrepreneurship is not the most preferred path for many young people, as experience and education are necessary if one wants to be a good entrepreneur. Moreover, the apartheid regime has diminished the nation's culture of entrepreneurship, which

means that young people are unlikely to have an entrepreneurial mentality; growing up in households without a mentor is not conducive to its growth.

1.3 The Problem Statement

Entrepreneurship education has been accepted as essential to economic growth in the field of contributing. However, graduates are also hesitant to take entrepreneurship as a feasible career choice, even in times of high unemployment. After acquiring degrees, graduates rarely consider entrepreneurship as a good and sustainable career option (Ebewo, Shambare and Rugimbana, 2017). In addition to the traditional economic growth and employment-related motives for encouraging entrepreneurial education, there is also a less common but growing focus on the influence that entrepreneurial practices can have on students and employees' perceived relevancy, dedication and enthusiasm in both education and work life, (Hughes and Schactebeck, 2017). However, there is currently a decline in students' interest to engage in business events, which has decided the validity of this study, which was to discover the role of entrepreneurial education on student's entrepreneurship.

According to the DTI (2013) Entrepreneurship is one of the most promising areas for the growth of the state economy, but it is not successfully applied. Entrepreneurial education is most also seen as a solution to the highly globalized, chaotic and dynamic world in which we live, needing both individuals and organisations in society to be increasingly prepared with entrepreneurship competencies. Indeed, the heavy focus on economic success and job development has caused entrepreneurial education to take a leading role at higher education level, but not as an integrated pedagogical method for all students at all ages. So far, the main emphasis has been on elective courses and services for a few university students who already have a degree of entrepreneurial passion and are thus self-selective in entrepreneurial education (Kroon, 2012 and Meyer, 2017).

1.4 Research Questions

1. What role does entrepreneurial education play in fostering student entrepreneurship?
2. How does entrepreneurial education influence students' entrepreneurial intention?
3. Does entrepreneurial education foster entrepreneurial mindset?

4. To what extent does an entrepreneurial mindset influence students' entrepreneurial intentions?
5. Is there a relationship between entrepreneurial intentions and students' entrepreneurial actions?

1.5 Research Objectives

1. To examine the role of entrepreneurial education in fostering student entrepreneurship.
2. To establish the influence of entrepreneurial education on students' entrepreneurial intention.
3. To identify the influence of entrepreneurial education on students' entrepreneurial mindset.
4. To examine the influence of entrepreneurial mindset on students' entrepreneurial intentions.
5. To identify if there is a relationship between student's entrepreneurial intention and students' entrepreneurial action, if such exists.

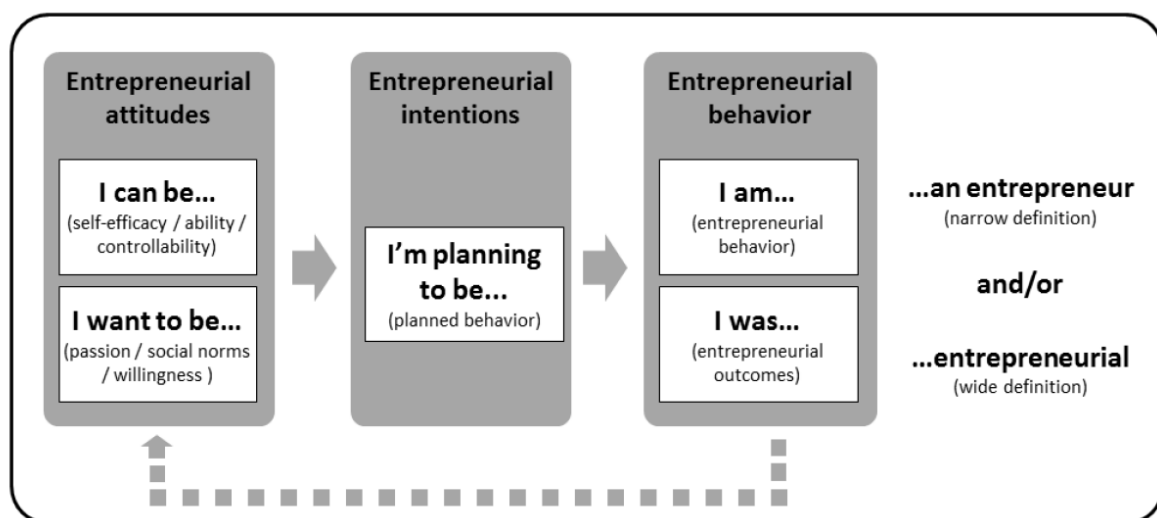
1.6 Theoretical Framework

A theoretical framework is a rationally developed and connected set of concepts and premises developed from one or more theories that a researcher creates to scaffold a study (Varpio, Paradis & Uijtdehaage, 2020). The author's further postulate that that, to create a theoretical framework the researcher must outline concepts and theories that will provide the grounding of the research at hand, unite them through logical connections, and relate these concepts to the study that is being carried out. Studies by (Streule and Craig, 2016), state that theories provide opportunity for meaningful practical experience and promote effective learning afforded by no other educational vehicle in the subject.

Theory plays a crucial role in all social research and helps understand the rationale behind a study. These theories are also helpful in anticipating trends or events before they happen. Theory is also important in finding answers to questions such as why, who, how, where and when (Anyim *et al.*, 2012 and Anyim, 2020). The theory of planned behaviour model has achieved a considerable reputation for predicting and explaining human behavior intention. According to TPB model, individual's behavioral intentions are explained as a consequence of attitudes, subjective norm and perceived behavioral control (Jing *et al.*, 2019).

1.6.1 The rationale for adopting the theory of planned behaviour (TPB)

Figure 1: The theory of planned behavior (TPB)



Adapted: (Ajzen, 1991, Bandura, 1997, Krueger *et al.*, 2000; Schjoedt, L., 2018).

The research followed Ajzen's Theory of Expected Actions, (TPB). This hypothesis suggests that entrepreneurial activity (EB) is a building block of entrepreneurial intentions (EI) and can be seen as: attitudes = motivation = intentions = behaviour (EA). This model notes that entrepreneurial actions can be influenced by backgrounds, behaviors and motives that can encourage, motivate and stimulate entrepreneurial actions. The goal of this research is to discover the role of entrepreneurial education in the promotion of student entrepreneurship at UKZN, as it relates to the creation of a specific mentality among students. This is an antecedent of entrepreneurial education, entrepreneurial mindset, entrepreneurial intention and entrepreneurial activity as desired outcomes.

The theory of planned behaviour is generally accepted in the interpretation of behavior in applied social psychology; TPB is often known to be the most strong and accurate mechanism for the prediction of human behaviour (Ajzen, 1991; Ajzen, 2020). The study adopted this theory to understand, to explore, and describe the role of entrepreneurial education in fostering student entrepreneurship. Figure 1 shows a connection between attitudes, intentions and behavior used, based on the studies of the “Theory of Planned Behavior” by (Bandura, 1997; Krueger *et al.*, 2000; Ajzen, 2020). If students' attitudes towards entrepreneurship are strongly affected by entrepreneurship education, their entrepreneurial intentions could change, and this could contribute to the desired entrepreneurial behaviour.

1.7 Significance of the Study

This study offers further insights into the existing literature on entrepreneurial education by establishing the interplay between entrepreneurial education, entrepreneurial mindset, entrepreneurial intention, and entrepreneurial action. It also positions entrepreneurial education as a mechanism for employment generation. The framework was empirically tested, which provided direction in inculcating the entrepreneurial mindset of university students. This was achieved by applying the TPB to investigate the role of entrepreneurial education in fostering students' entrepreneurship development.

This research will enrich the body of knowledge and will also initiate an interdisciplinary dialogue between work, entrepreneurship and education. In addition, the results of this study are likely to provide useful insights into entrepreneurship education and the climate for universities whose purpose is to promote the role of entrepreneurial education in the promotion of entrepreneurship among students in general.

1.8 Justification for the Study

This study is necessary in addressing the role that entrepreneurial education plays in fostering student entrepreneurship; and also in discovering the students' entrepreneurial intentions. Furthermore, this study will contribute to the quality of entrepreneurship education that should be taught at the universities. Such education will enable the students with entrepreneurial intentions to start a successful career in entrepreneurship and create employment opportunities for other youth. Additionally, it will indicate the gap that needs to be addressed in entrepreneurship studies syllabuses. The results of this study may serve as a basis for additional work in the field of student entrepreneurship and entrepreneurial education at universities.

1.9 Research Methodology

Research methodology, according to (Bhattacharjee, 2012), offers a blueprint on how data for a study will be collected and analysed (Serakan & Bougie, 2016). The research methodology section offers an overview of the research design, research approaches, sample location, target audience, data collection processes, assessments, data quality management and data interpretation.

1.9.1 Research design

A research design is a comprehensive method or scheme for the processing and analysis of data in scientific science (Bhattacharjee, 2012). In other words, a research design showcases the process involved in conducting a piece of research (Abiwu, 2016). Research design is a foundation for the research work in outlining the approaches that will be employed in the study in solving the research problem. There are different kinds of research design. Each design is used differently depending on the nature of the investigation, namely: exploratory, descriptive, causal, experimental, evaluation, intervention, and participatory action research.

The study adopted an explanatory research design. The reason for adopting this design was to explain the role of entrepreneurial education in fostering student entrepreneurship, with reference to UKZN. There is also limited research on the association between entrepreneurial education and student entrepreneurship. The chosen design allowed the researcher to carry out a detailed investigation establishing the role of entrepreneurial education in fostering student entrepreneurship, using students of UKZN as a point of reference.

1.9.2 Research approaches

Creswell (2014) refers to research approaches as specific plans, measures, and procedures for collecting, analysing, and interpreting data. When conducting research, there are three methods of research approach from which a researcher can choose. These are qualitative, quantitative, and mixed methods. The researcher is expected to use the most effective approach to solve the research dilemma, to address research questions and to produce relatively stable outcomes. The research followed a mixed-method approach. This method allows both quantitative and qualitative data to be obtained in one analysis (Bishop & Holmes, 2013; Ponterotto, Matthew & Raughley, 2013). Mixed methods offers more enhanced insight into the research problem and questions (Serakan & Bougie, 2016).

The purpose of adopting the mixed research method, was to interpret the quantitative findings with corresponding qualitative results. Therefore; quantitative data was collected from third-year and postgraduate students in the discipline of management and entrepreneurship at the UKZN. The reason of collecting quantitative data from both groups was to discover the student's reasoning of studying entrepreneurial studies, and their view on the curriculum used by the university to lecture entrepreneurship studies. In order to understand if the curriculum played a role in influencing students entrepreneurial intentions. Qualitative data was only collected from postgraduate students to gather information about their entrepreneurial intentions upon graduation. The adoption of mixed method allows for comparison and corroboration of research findings for a fuller understanding of the research problem. Therefore, findings obtained from quantitative data, and qualitative data were corroborated, to observe the requirement of either convergence or divergence of results. This method is found to be appropriate in investigating the role of entrepreneurial education in fostering student entrepreneurship.

1.9.2.1 The explanatory mixed method

Explanatory mixed method seeks to clarify quantitative result findings with the qualitative findings. In this type of mixed method, the quantitative data is first collected; and then qualitative questions are phrased either in the form of an interview or a focus group discussion, with the results of quantitative and qualitative data composed subsequently (Creswell & Clark, 2011; Creswell & Clark, 2018). The rationale for the explanatory mixed method is the enabling of the qualitative findings to explain the quantitative findings (Wilson, 2010).

The exploratory sequential mixed method was not adopted for this study, this study adopted the explanatory mixed method. Exploratory sequential mixed methods is an approach that combines qualitative and quantitative data collection and analysis in a sequence of phases (Creswell & Clark, 2018).

1.9.3 Study site and target population

The study was conducted at UKZN at the School of Management, IT and Governance in the discipline of Management and Entrepreneurship. This included three UKZN campuses, namely, the Westville Campus, and Howard College campus located in Durban, and the UKZN campus located in Pietermaritzburg. These three campuses are situated in the KwaZulu-Natal province. According to Salaria (2012), a population is a group of people with similar or several characteristics in common that the researcher decides to study. The population for this research included the third-year and honours students studying entrepreneurship modules in the discipline of management and entrepreneurship at UKZN.

1.9.4 The Population of the Study

The overall enrolment of all students was 330, composed of 233 third year students and 97 honorary students. Using the Krejcie and Morgan (1970) statistical table, the sample size for quantitative data was estimated at 180. The total number of questionnaires returned was 169. All returned questionnaires were completed, the researcher monitoring the students during data collection. The Krejcie and Morgan (1970) statistics were calculated based on a 95% level of significance. Twenty students were purposively selected to form a focus group for the qualitative data; however, only fifteen were available to participate in the focus-group discussion. The sampling techniques employed to select samples for the quantitative and qualitative data collection are explained below.

1.9.5 Sampling strategies

Purposive sampling is one of the non-probability sampling techniques applied to chosen subjects for both qualitative and quantitative data collection. The reason for introducing impartial sampling was to encourage the researcher to make use of his or her own discretion in consciously gathering samples from the subject population with sufficient knowledge of the study issues, in order to provide answers to research questions (Wilson, 2014; Leedy & Ormrod, 2014).

1.9.6 Data-collection methods

Quantitative and qualitative data were employed for this research. The questionnaire measured entrepreneurial constructs using a Likert scale. Qualitative data was collected via a focus group discussion. The focus group was carefully selected among the honours students in the discipline of management and entrepreneurship.

According to Serakan and Bougie (2016), questionnaires are designed to elicit relevant and appropriated data from study respondents. In order to gather quantitative data, questionnaires in the form of surveys were provided to both third-and fourth-year students; questionnaires composed of closed questions. Serakan and Bougie (2016) state that administering questionnaires to a pool of participants reduces expenses and consumes less time than the interview method. This was the rationale for adopting questionnaires as the ideal instrument for collecting quantitative data for this study.

The study adopted focus groups for collecting qualitative data. Serakan and Bougie (2016) explain that focus groups involve bringing individuals with similar experiences together to freely discuss a topic being investigated. In this case, the researcher is a moderator who sets the tone for the discussion, and allows the discussants to freely express their views. The aim of a focus group is to enable the research to obtain appropriate information in the course of the discussion. The researcher selected fifteen (15) honours students, and created two groups to form two focus-group discussions.

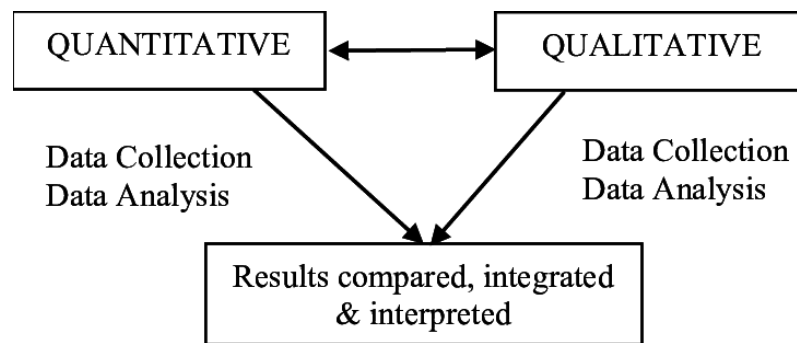
The questionnaire of this study was adapted from the theory of planned behaviour. Six questions on the questionnaire were adapted from the study conducted by Bux (2017), the topic of the research was *“the effect of entrepreneurship education programmes on the mind-set of South African youth”* where entrepreneurship education programmes was the independent variable. Self-efficacy, inner locus of control, the need for achievement, entrepreneurial intention and entrepreneurial activity were the dependent variables of that study.

1.9.7 Triangulation

Triangulation is necessary in social research when data is collected from more than one source. Triangulation helps to reduce the level of bias synonymous with a single source of data collection. Data triangulation helps to strengthen research findings. Both qualitative and quantitative data were gathered and analyzed in a triangulation analysis to assess the various aspects of the research results (Ghrayeb, Damodaran & Vohra, 2011).

Figure 2 below provides an illustration of the simultaneous triangulation technique used in this analysis. It also displays quantitative and qualitative data in higher case. According to research conducted by Morse (2003) on the system of representation of mixed-method methods, capitalization reveals that the priority of both methods is equal.

Figure 2: A Diagram of the Mixed-Methods Concurrent Triangulation Strategy



Adapted: Creswell and Clark, 2007; Johnson and Christensen, 2004; Johnson and Onwuegbuzie, 2004).

Researchers use this methodology for the following reasons: it has the benefit of being able to offer responses to a broader and more detailed variety of analysis questions; mixed methods have been shown to help solve shortcomings by leveraging the benefits of each approach; using a mixed-method approach will further increase perspective and interpretation of the evidence presented. Integrating both qualitative and quantitative data will provide good support for the conclusion of the study; and triangulation of data from various approaches does improve the quality of the analysis and the outcomes of the report (Sekaran and Bougie, 2016).

1.9.8 Validity and reliability for quantitative data

Validity and reliability were the main instruments of measuring data quality in this study; both validity and reliability were ensured. Reliability is the degree to which data collection strategies yield reliable results (Sekaran and Bougie, 2016). To establish the reliability of the research instrument, a pilot study was conducted. A pilot test was conducted with participants who were excluded from the research but had characteristics comparable with the selected sample. The aim of the pilot study was to test the adequacy of the measuring instrument and to assess the degree of simplicity of the questionnaires and the accuracy of the answers. In addition, conducting a pilot study helps to ascertain the consistency of items in the instrument, and if there would be a need for adjustment of the scales used (Sekaran and Bougie, 2016).

Validity refers to the accuracy of research in measuring what it sets out to measure (Lameck, 2013). According to Sekaran and Bougie (2016), validity refers to whether a data-collection instrument is able to measure the construct that it is actually meant to check. There are two types of validity here. These two types are equally applicable to any study design and instrument, namely external validity and internal or construct validity. These types of validity rely on the originality of the cause-and-effect relationship (construct validity) and on the representativeness of the external world (external validity).

Construct validity is important in a quantitative study; it concerns whether the re-search instrument is capable of evaluating the definition as reflected in the theory (Sekaran & Bougie, 2009). Construct validity for this research was assured by the use of subscales in the sample that were pre-tested during the pilot-study phase of the data-collection project, which further ensured the validity of the construction. Kimberlin and Winterstein (2008) define external validity as the degree to which findings can be extended within the sample included in that particular analysis. This usually depends on the extent to which the sample represents the population. Author states that the poor external validity of the analysis suggests that the findings can only be attributed to the participant classes. The researcher mitigated this by means of an impartial sampling to ensure that the survey group nominated for this analysis had comparable skills, attributes, behaviors and beliefs to the population.

According to (Sekaran & Bougie, 2016) the efficiency and relevance of qualitative analysis have different definitions when opposed to quantitative research. The authors note that the reliability of the qualitative data collection is type and inter-judgment reliability. The reliability of the category relates to the degree to which judges can use the meanings of the category to define qualitative data. Well-defined categories usually result in higher category reliability and, ultimately, higher interjudge reliability. Interjudge reliability, on the other hand, refers to the degree of accuracy between coders processing the same results. Sekaran & Bougie, 2016 further state that triangulation, is also a technique linked to reliability and validity in qualitative analysis, triangulation has been used in this study to achieve feasibility and validity of qualitative results.

1.9.9 Measure of trustworthiness for qualitative data

According to Lemon and Hayes (2020) trustworthiness criteria is the most essential means to evaluate qualitative research. The authors asserted that using the same criteria for judging

quantitative research with qualitative research was not appropriate as the epistemological underpinnings of both approaches tend to vary. Therefore, Healy and Perry (2017) affirms that the quality of a study in each paradigm should be determined by its own paradigm's terms. While the terms reliability and validity are vital criterion for quality in quantitative paradigms, in qualitative paradigms the terms credibility, confirmability, dependability and transferability are identified to be the most essential criteria for measuring quality for qualitative research.

Dependability: Dependability refers to the constancy of the data over similar conditions (Polit & Beck, 2016; Tobin & Begley, 2017). Through the researcher's process and descriptions, a study would be deemed dependable if the study findings were replicated with similar participants in similar conditions (Koch, 2016). To achieve dependability for this study, the researcher carefully selected postgrad students to participate in the qualitative research. These were students of the same generation, doing the same qualification at the same university and had similar experience with the curriculum used by the university to lecture entrepreneurial studies. They all had undertaken a common undergraduate entrepreneurship module at UKZN. The results obtained from both focus group were much comparable.

Credibility: Credibility is the replacement for internal validity and is rooted in the truth value, which asks whether the researcher has developed and articulated a certain level of confidence in the findings based on the phenomenon under investigation (Younes, 2020). In other words, truth derives from the participant's lived experiences, which does not necessarily lead to universal truths, but rather an in-depth understanding of that person's unique reality. The questions in the interview were open-ended, which allowed the respondents to share their stories without limits. The respondents were able to explain how their entrepreneurial intentions developed and how that experience influenced their career choices. For respondents that did not have entrepreneurial intentions, they were able to share what influenced their decisions in studying entrepreneurial studies and what they intended to do with their qualification after they graduate. The questions were much related to both past and present experiences as well as their and future plans, where most of the responses were very similar.

Transferability: Transferability replaces the concept of external validity and generalizability, and thus, is concerned with the extent to which the findings from the study can be applied to other settings or groups. Researchers should provide sufficient information on the informants and the research context to enable the reader to assess the findings' capability of being "fit" or transferable (Houghton, Casey, Shaw, & Murphy, 2017; Polit & Beck, 2016). The aim of this

study was to discover the role of entrepreneurial education in fostering student entrepreneurship. Therefore; the respondents that participated in the focus group discussion were Bachelor of Commerce honours students in the discipline of Management and Entrepreneurship at the University of KwaZulu-Natal. All the respondents have been exposed to the undergraduate entrepreneurship modules.

Confirmability: confirmability gets to the objectivity of the phenomenon under investigation and addresses whether the interpretations and findings are from the participants lived experiences and do not include the researcher's biases (Koch, 2016). The findings of the study was based on the information received from the respondents. The researcher audio recorded both interviewees to ensure that the correct information was recorded and analysed. According to (Younes, 2020) it is imperative that the researcher demonstrate confirmability by describing how conclusions and interpretations were established, and exemplifying that the findings were derived directly from the data. Therefore, NVivo (version 11) was utilised to analyse qualitative data, to ensure that the responses of the participants was professionally captured in order to draw accurate findings for this study.

1.9.10 Data analysis

The Statistical Package for Social Sciences (SPSS 21), a statistical method for quantitative data processing (Green & Salkind, 2011), was used to analyze the quantitative data of the sample. The data collected was encoded in the Excel spreadsheet and subsequently imported into the SPSS 21 program for various analyzes that are relevant to the analysis questions and objectives of the report. The demographic portion of the questionnaire was evaluated using statistical statistics such as frequency distribution, bar charts, pie charts and mean and standard deviations (Sekaran & Bougie, 2016). Inferential statistics, using the Pearson Moment Correlation Coefficient and Regression Analysis, were used to determine the causal relationship between the variables. However, NVivo (ver.11) qualitative analytical tools was used to define and structure recurrent patterns from focus-group transcripts to identify relevant themes.

1.9.11 Ethical Issues

One main ethical issue when collecting data is anonymity, several precautions must be taken to ensure anonymity of respondents were respected (Francis, 2009; Reynolds and Sariola, 2018). According to Clark-Kazak (2017) all research respondents must voluntarily and formally consent

to participate in research after having been informed of the potential risks and benefits of their participation and they must be able to withdraw from the research at any time.

The Ethical clearance was granted by the University of KwaZulu-Natal, and the approval letter is provided in appendix A of this study.

1.10 Limitations of the Study

The research was focused on the experiences of students at KwaZulu-Natal University. In most university graduates, the culture of entrepreneurship is also absent – but this can be further discussed in future research. The population of this study was restricted to students that had studied entrepreneurship modules during their program at the university. This study excluded all students not in connection with entrepreneurship studies who could have added more value on this research.

1.11 Conclusion

This chapter laid out the background to entrepreneurial education, outlining the background to the research, the relevance, weakness, lessons and reasoning of the study. It identified the research challenge, articulated the research problems and the research objectives. It also outlined the methods used in the study, the analytical context and the philosophical structures that directed the study. The following chapter will discuss the latest literature on entrepreneurial education and the growth of entrepreneurial mindset. Such a mindset may possibly create and foster entrepreneurial intentions that may lead to entrepreneurial actions of the students.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This section provides a thorough overview of relevant literature on the topic, often focusing on other related fields of entrepreneurship. This is necessary to support the argument around the importance of entrepreneurial education and its role in student entrepreneurship. The views of scholars and experts on entrepreneurial education and student entrepreneurship are considered important in achieving the key objective of the research, which is to investigate the role of entrepreneurial education in the development of student entrepreneurship, is considered to be significant.

Related literature on the development of entrepreneurship, relevant theories associated with entrepreneurship education, entrepreneurial intentions, students' entrepreneurial mindset, and student entrepreneurial action will be reviewed. The literature review will be further guided by the theoretical and conceptual framework helping to structure this chapter, and will include the role of entrepreneurship in fostering entrepreneurship among students, the connection between entrepreneurial education (EE) and entrepreneurial intention among students (EI), the impact of (EE) on entrepreneurial mindset among students (EM), the relationship between entrepreneurial mindset and entrepreneurial intention among students, and the relationship between entrepreneurial intentions and entrepreneurial actions among students.

2.2 Background to the Development of Entrepreneurship

According to (Radipere, 2012 and Ndofirepi, 2020), entrepreneur and entrepreneurship are two terms which are related and frequently viewed in different ways. An entrepreneur is also referred to as a person with certain behaviours, attributes and talents, whereas entrepreneurship refers to a process of mind involving particular consequences linked to the implementation of new economic activity. Nwanko (2017) suggests that entrepreneurship is one of the areas of business administration studies that has attracted tremendous attention in the last few years, not just in South Africa, but also around the world.

Fayolle and Gailly (2015) argue that entrepreneurship is about the discovery of opportunities, business advancement, self-employment, the formation of new projects and progress. This position is consistent with the wide definition of entrepreneurship of personal development and creativity, i.e., becoming entrepreneurial (Chang & Wyszomirski, 2015; Dees, 2017). Entrepreneurship as a discipline is largely established within the academic array of core subjects. Despite its academic acceptance, entrepreneurship is still young but it continues to be characterized by its rapid development especially with regard to research topics, but also with reference to the methods explaining entrepreneurial phenomena (Kuckertz & Prochotta, 2018).

The development of entrepreneurial competence is one of the main objectives for the progress of a society and improves the employability of citizens. Despite this interest, research has not yet found an entrepreneurial personality profile that includes both the stable and the malleable characteristics of the individual (Obschonka & Stuetzer, 2017). However, some scholars claim that entrepreneurs are born and not raised, and that it is beyond the ability of universities and business schools to train students to develop entrepreneurial skills (Johannison, 2010; Obschonka & Stuetzer, 2017). This argument is contradicted by a study carried out by Bester (2017) that entrepreneurship can be taught and improved by education in entrepreneurship. Uzunidis et al., (2014) suggest that the possible resources of an entrepreneur can be divided into three groups: first, expertise, including schooling, secondary education, higher education, further education, and technical experience; second, financial resources, such as personal investments, bank loans, investment capital, and different types of public support; and third, connections with families, associates, professional peers and organisations are also possible opportunities for an entrepreneur.

2.3 Youth Entrepreneurship

Entrepreneurship is perceived to be one of the job choices for young people and graduates. This is attributed to the rise in youth unemployment in South Africa, where entrepreneurship is now seen as an option, should young people become unemployed after finishing their studies Sharma & Madan (2014; Dzomonda & Fatoki, 2019). Governments and local governments around the world have therefore acknowledged that youth entrepreneurship is essential to creating stability and fostering regional development within themselves. Promoting youth entrepreneurship will help to reduce rising unemployment in South Africa, thus leading to economic development and job development (Herrington *et al.*, 2015). Entrepreneurship has evolved exponentially over the

last 20 years. This evidence is related to the growing number of schools at different stages of entrepreneurship education (Küttim *et al.*, 2014; Fayolle & Gailly, 2015). In addition, the number of trained entrepreneurs has also risen to 20% of young and more educated entrepreneurs (Herrington *et al.*, 2015). This statistic indicates a consistent change in the young generation's orientation towards entrepreneurship. In the other hand, the Minister for Economic Affairs has noted the insignificant number of entrepreneurs in South Africa (Basuki, 2015). From the above, entrepreneurship in South Africa has a low level of youth entrepreneurial activity and a high level of so-called 'forced entrepreneurship,' a mechanism in which young people start a company born out of a lack of other ways to earn money (Zemcov *et al.*, 2009 & Sharma, 2018). Such a condition of the entrepreneurship field in the economy greatly restricts the scope of socio-economic growth and the transition of the natural resource economy into a knowledge economy. This situation, according to (Willias & Kluev, 2014; Bamkole & Ibeku, 2020), creates unfavourable conditions for addressing the goals of forming an innovations-focused economy, as well as resolving issues of unemployment, social stability, and of improving the quality of life.

The current state of entrepreneurship in the world provokes the quest for institutional strategies to build entrepreneurial environments, addressing obstacles to 'anti-entrepreneur' lifestyle choices by young people (Willias & Kluev, 2014; Bamkole & Ibeku, 2020). Kluev *et al.*, (2017) hypothesised that entrepreneurship among young people and students is of paramount technological interest. Morris, Webb, Fu and Singhai (2015) have echoed this sentiment, adding that there is a strong connection between entrepreneurship education initiatives and the growth of entrepreneurship skills in higher learning institutions. The teaching-learning process provides for a mixture of knowledge development and capabilities that are of the highest significance for the successful incorporation of young people into society. The position and importance of entrepreneurship education in the academic sphere, thus, becomes important in terms of fostering skills growth, a mechanism that can better train students for careers in entrepreneurship (Kluev *et al.*, 2017).

The World Economic Forum (WEF) Global Education Initiative research conducted by Bux (2017) revealed that education alone has the ability to build latent skills for young people, which could contribute to the generation of creative thought, while training and positioning them to solve complex challenges in the near future. Moreover, education is undeniably a crucial mechanism for ensuring sustained economic growth and social progress. Therefore, the world is

in need of not just competent and effective global leaders, but also a supportive educational system that can rouse the youth for future entrepreneurship opportunities, with skills needed to succeed in this changing global economy (Bux, 2017). It is for this purpose that this thesis explored the role of entrepreneurial education in promoting student entrepreneurship, taking into account entrepreneurial intentions, entrepreneurial mindset and entrepreneurial action.

2.3.1 Youth Entrepreneurship Support Systems

The South African Government has dedicated itself to promoting youth entrepreneurship, as young entrepreneurs do not have the resources to start a business. It has been observed that most young entrepreneurs are not aware of these government programs. They are not fully open to them, and there are difficulties in obtaining financial resources expressly intended to benefit them (Malebana, 2017). There is no detail about the forms of financial assistance provided to young entrepreneurs, as well as the process to qualify for this support. As a result, young people are more or less discouraged from being entrepreneurs.

The importance of entrepreneurship, especially in youth unemployment and economic development, is recognised all over the world (Malabana, 2014 & Malebana, 2017). The South African government, as with any other country, has introduced several support measures. Such includes the YEDS to assist individuals who are interested in starting new businesses, as well as existing entrepreneurs who want to grow their businesses (Malebana, 2014 & Malebana, 2017). However, it is not known to what extent these support measures have an effect on students who have studied entrepreneurial education; and their entrepreneurial intention to start a business after they complete their studies as a pathway to increasing youth-owned businesses. In their study, Malabana (2017) discovered that entrepreneurship encouragement is a behavioral tool that can help both future and current entrepreneurs resolve the challenges they face and promote their attempts to set up and develop their own companies. Entrepreneurial support is an act of providing an entrepreneur with access to the valued resource needed for a business (Hanlon & Saunders, 2012; Malebana, 2017). For the sake of this research, the concept of entrepreneurial support is defined as the provision of knowledge, financing, training, tools and educational programs, infrastructure facilities, counselling and mentoring services required by entrepreneurs to launch, develop and manage their companies effectively (Malebana, 2014 & Malebana, 2017). Awareness of the role of entrepreneurial support in shaping entrepreneurial ambitions is critical

in evaluating the efficacy of government policies and strategies in promoting young people to start their own enterprises in South Africa.

Entrepreneurial support plays a crucial role in the growth of entrepreneurship among students, by providing a positive impact on the entrepreneurial aspirations of students and on their attitudes towards entrepreneurship. This support increases students' trust in their own abilities to start a business (Saeed *et al.*, 2015 & Malebane, 2017). Government initiatives, in alliance with higher education institutions aimed at growing awareness of entrepreneurial funding, can also improve subjective standards. This can be accomplished by developing social understanding about entrepreneurship and by emphasizing the importance of entrepreneurship in society (North & Smallbone, 2016). Previous research has demonstrated that entrepreneurial support is capable of promoting self-employment (Kim & Cho 2009; Urban & Chantson, 2019), increasing the number of start-ups and supporting the development of small businesses (Zanakis *et al.*, 2012; Malebana, 2017). Analysis conducted by the (DTI, 2014; Pratono, Ratih & Arshad, 2018) showed that despite government funding, the institutions that have been set up and the steps that have been placed in place in South Africa, the country's overall early-stage entrepreneurial activity rates and youth entrepreneurial intentions are still decreasing (Kelley, Singer & Herrington, 2016).

2.4 Student Entrepreneurship

According to Haeruddin and Azis (2018), student entrepreneurship as a program or practice that takes students through the learning process the skills needed to become a good entrepreneur or to run a company. Starting from a school-to-work angle, this training also teaches students to consider all facets of running a company and think about being self-employed. Student entrepreneurship often entails the type of school-based companies that students are helping to start up and operate. The program leads students through the process of designing and drawing up business strategies, partnering closely with local entrepreneurs and other community partners to plan and manage these companies, or some other mixture of these tasks. Entrepreneurship therefore provides students an interdisciplinary forum to understand all the specifics of a small business, especially those conducted in or outside the school setting.

Entrepreneurship is conceived as a catalyst of global prosperity and one of the most significant drivers of competitiveness (Valerio *et al.*, 2014 and Masunda *et al.*, 2018). In an environment of rapid transition, this mechanism is related to the capacity of individuals to effectively respond to

a gradual and continuous economic transition. It is therefore important to encourage and enhance entrepreneurship among students and to cultivate an entrepreneurial culture within universities. Such would be with a view not only to provoking entrepreneurship intention, but more importantly to promoting entrepreneurship behaviour (Kluev *et al.*, 2017). In a related study (Beliaeva, Laskovaia & Shirokova, 2017) affirmed that the role and influence of national culture on the development of student entrepreneurship, and the relationship between a university's entrepreneurial activities and the level of development of student entrepreneurship within it, can possibly lead to developing students' entrepreneurial intention and entrepreneurial action.

Studies conducted by (Raposo & Do Paco, 2013; Paço, Ferreira & Raposo, 2017) postulate that the government will affect the rate of entrepreneurship not just through regulation, but also through thorough supervision and assessment of the curricula of education systems. Education is important in motivating and driving entrepreneurship. It offers students the wisdom of self-sufficiency, independence and self-confidence, by encouraging students to be aware of alternative career choices that they can make (Bux, 2017). It also broadens the student horizons, making students more prepared to spot opportunities, and offers information that can be used by individuals to improve entrepreneurial opportunities (Bux, 2017).

2.5 Entrepreneurial education

Entrepreneurial education has been generally recognized as having significance to contributing to economic growth worldwide; nothing can be known about its application after the training has been completed by university students (Radipere, 2012 & Ndofirepi, 2020). The value of entrepreneurial education cannot be overemphasized. Entrepreneurial education is seen as a means to reconstruct welfare, to create alliances between the public and corporate sectors by harnessing the dynamism of economies of public interest (Sikalieh & Otieno, 2011; Otieno, Linge & Sikalieh, 2019). Universities are therefore seen as instruments of social change, and this kind of relationship should be spearheaded. The authors further suggests that the development of entrepreneurial skills and programs at universities should be a major concern to promote the employability of graduates who would be called upon, not as job-seekers but as job-creators, thereby reducing the high rate of youth unemployment.

According to studies conducted by (Lackeus, 2015; Liguori, Corbin, Lackeus & Solomon, 2019), there are two concepts that are commonly used in the area of entrepreneurship, namely enterprise education and entrepreneurship education. The word 'enterprise education' is widely used in the

United Kingdom and has been identified as concentrating more generally on personal advancement, thought, skills and abilities; while the term 'entrepreneurship education' has been described as focusing more on the particular sense of opportunity recognition, business development, self-employment, venture formation and growth (Fayolle & Gailly, 2008; QAA, 2012; Mahieu, 2006; Ndou, Mele & Vecchio, 2019). Enterprise and entrepreneurship education are normally referred to by one term only: entrepreneurial education, which encompasses both enterprise and entrepreneurial education (Erkkilä, 2000; Lackeus, 2015; Kuckertz & Prochotta, 2018).

Empirical studies reveal that the description of entrepreneurship education in entrepreneurship research is unclear (Kailer, 2007; Weber, 2012; Galvão, Ferreira & Marques, 2018). The term entrepreneurial education is frequently used with reference to the considered transmission of entrepreneurial understanding. Such entrepreneurship understanding incorporates beliefs, abilities and mentalities that are relevant to the formation and persistence of new businesses. Entrepreneurial education as an instructional programme or process that aims to instil entrepreneurial attitudes and skills (Fayolle and Gailly, 2015). Thus, entrepreneurial education is not only about building entrepreneurship aptitude, but also pursues attendant mindset like self-confidence, tolerance of ambiguity, and dissatisfaction with current status.

In recent research, the need for entrepreneurial education has been well founded. However, there is a debate about how entrepreneurship education can be offered, on student expectations and intentions of entrepreneurship education, and on the role of universities in their contribution to entrepreneurial education (Bae, Qian, Miao & Fiet, 2014; Zhang, Duysters & Cloudt, 2013; Barba-Sánchez & Atienza-Sahuquillo 2018). It is argued that the traditional education system would not encourage the qualities and abilities needed to create entrepreneurs. Previous research by Lobler, 2006; Gurel, Altinay & Daniele; 2010; Yusuff, 2019), have shown that entrepreneurial education cannot be taught using conventional approaches. In view of this, (Owusu-Ansah and Flemin, 2012; Yusuff, 2019) postulate that conventional education trains and prepares students to be employed; whereas entrepreneurship allows students to make their own decisions and to build their own employment, which cannot be taught by traditional teaching.

According to a study conducted by (Ediagbonya, 2013; Jena, 2020), entrepreneurial education is a form of education taught to people with a view to improving entrepreneurial qualities in an effective manner, offering support resources for a smooth start-up and efficient running of the

company. Entrepreneurial education, therefore, aims to provide students, particularly those in tertiary institutions, with the right awareness and the right skills and encouragement to promote entrepreneurial studies in a diversified environment. Schools that teach entrepreneurship are an essential link between theoretical awareness and realistic business participation. This justifies entrepreneurial education as an integral part of many universities' education curricula, globally (Ismail *et al.*, 2009; Elliott, Mavriplis & Anis, 2020).

Studies by (Ediagbonya, 2013; Jena, 2020) claimed that, provided that potential entrepreneurs are among those students currently undergoing educational growth at universities, entrepreneurship education can therefore be used as one of the most powerful resources for facilitating the transfer of graduates to the field of entrepreneurship. Entrepreneurship programs have broadened the subjective norms and intentions of students for entrepreneurship by encouraging them to choose entrepreneurship (Souitaris *et al.*, 2007; Ahmed, Chandran & Klobas, 2017). Consistent with this claim was (Basu & Virick, 2008; Elliott, Mavriplis & Anis, 2020) who suggested that early exposure to entrepreneurship education has a favourable impact on student attitudes towards entrepreneurship and perceived behavioral influence or entrepreneurial self-efficacy.

Entrepreneurial attitudes are not only compulsory in the context of a classic entrepreneurial career, but are also in high demand and entrepreneurship education further implies that young people should be accountable, while at the same time contributing to economic growth and healthy societies (Raposo and Do Paco, 2013; Paço, Ferreira and Raposo, 2017). Entrepreneurial education is aimed at increasing the entrepreneurial attitude, spirit and culture of young people and the society in general. Entrepreneurial education is therefore related to the identification of opportunities, the development of new projects and progress, while at the same time offering entrepreneurial skills to individuals. (Fayolle & Gailly, 2015; Mwasalwiba, 2010; Piperopoulos & Dimov, 2015).

According to (Gibb, 2005; Elliott, Mavriplis & Anis, 2020), entrepreneurial education should not be confused with the teaching of general business and management studies as taught at universities, because the goal of entrepreneurial education is to promote creativity, innovation, self-management, and self-employment. However, other scholars have indicated that the propensity to be entrepreneurial is not limited to some individuals, but could be more freely seen

by others, although different persons may exhibit a different combination of entrepreneurial talents, skills and qualities (Fayolle & Gailly, 2015; Raposo & Do Paco, 2013; McMullen, Ingram & Adams, 2020). Elliott *et al.*, 2020 acknowledges that running one's own business and working within an entrepreneurially designed organisation stimulates an individual to practise, develop, and learn entrepreneurial mindsets. This strategic thinking and scenario planning equips students to use limited information to make decisions – decisions which are often intuitive in nature in real life. Strategic thinking is therefore aimed at inspiring empathy with entrepreneurial values that emphasise a completely novel approach to ways of thinking and doing within a context of uncertainty and complexity.

2.5.1 The significance of entrepreneurial education

Researchers' commitment to entrepreneurial education has arisen from the belief that entrepreneurship is a significant driver for economic development and job creation internationally (Wong *et al.*, 2005; Elliott *et al.*, 2020). Moreover, education is also interpreted as a reaction to the increasingly globalized and diverse world in which we live. Education has called for citizens and policymakers to be increasingly armed for entrepreneurial capabilities (Gibb, 2018). Apart from the traditional economic-development and job-creation-related explanations for encouraging entrepreneurial education. Studies conducted by (Surlemont, 2007; Jones, Pickernell, Fisher & Netana, 2017) argues that there is also a growing interest in the influence that entrepreneurial practices can have on pupils, as well as the perceived value, dedication and encouragement of workers in working life (Amabile & Kramer, 2011; Rehan, Block & Fisch, 2019). Entrepreneurial education is used as a way of inspiring individuals and companies to generate social good for the public (Austin *et al.*, 2006; Rae 2010; Volkmann *et al.*, 2009; Gibb, 2018).

The value of entrepreneurial education is reinforced by the argument in the European Commission's report (2014), which postulates that entrepreneurial education has a positive effect on the entrepreneurial mentality of students and their intentions towards entrepreneurship, employability and their position in society and the economy as a whole. Based on the results of the European Commission report (2014), there is a need to promote the entrepreneurial thought of young people in general because entrepreneurial education has a prominent role to play in achieving this growth (Strachan, 2018).

Turner and Gianiodis (2018) report that entrepreneurial education is a set of training courses intended to teach students the fundamentals of business training and growth models. Shepherd

(2015) claims that the inability to pursue entrepreneurship as a profession can be avoided by entrepreneurial education. Raposo & Do Paco (2013) suggest that the central knowledge of entrepreneurship education should also include the ability to recognize and cultivate innovative thinking; the ability to think creatively; and the ability to initiate and run new businesses from the ground up. The acceptance of entrepreneurial education as a way of achieving greater excitement, pleasure, dedication and innovation among students may be a more feasible starting point in education (Lackéus, 2013 & Gibb, 2018).

Student participation in social entrepreneurship alone is a positive starting point for entrepreneurial education. There is a strong degree of curiosity among young people in tackling social issues (Yusuff, 2019). Entrepreneurship should also be positioned as a tool for young people to aspire to serve as social historians (Spinosa *et al.*, 2013 & Yusuff, 2019). If such a curiosity can be mobilized as part of the program, it can promote deep learning and bring theoretical knowledge into realistic work in concrete ways for students. A synergy between universities and companies may be developed to make the curricula of entrepreneurial education more realistic. The normal result of an education initiative in entrepreneurship is to build the minds of young people to start enterprises and to decrease the unemployment rate (Spinosa *et al.*, 2013; Skarzauskiene & Šimanauskienė, 2017).

2.5.2 Entrepreneurial education at higher institutions

Higher education institutions in South Africa (SA) are judged by the manner in which they respond to the social and economic needs of society, their networks and activities that improve graduate employability. They are also judged on the ways in which they are stimulating innovation and the development of new enterprises, and on their contributions to local and national economic growth (Bester, 2017). Since innovation is regarded as an outcome of entrepreneurial and enterprising ways of doing, universities and universities of technology are increasingly under pressure to advance graduates who are entrepreneurially minded (Bester, 2017).

In addition to the two conventional research and teaching missions, universities are also required to conduct a 'third mission (Etzkowitz, Webster, Gebhardt & Terra, 2012; Degl'Innocenti, Matousek & Tzeremes, 2019). This third mission is more connected to economic development and knowledge transfer to society; and it is closely linked to innovation and entrepreneurship

(Breznitz, O'Shea & Allen, 2008; Degl'Innocenti *et al.*, 2019). Most researchers talk about entrepreneurial universities which, according to Skarzauskiene & Šimanauskienė (2017), are defined as important players in a triple helix. Such a helix takes on a vital role in innovation development; and is considered a pillar of a knowledge-based economy. Entrepreneurship education is therefore increasingly central to the curricula of higher education institutions (HEIs) (Skarzauskiene & Šimanauskienė, 2017).

Universities play important roles in training and educating entrepreneurs. This is because universities provide higher knowledge with a high level of information, increase the capacity of individuals to participate in entrepreneurial practices and build entrepreneurial attitudes (Barahona, Cruz & Escudero, 2006; Bester, 2017). Students with experience in entrepreneurship at the university level had higher entrepreneurial intentions than those without experience in entrepreneurship (Taatila & Down, 2012; Strachan, 2018). Further research undertaken by the Consortium for Entrepreneurship Education (2013) indicate that, through entrepreneurship education, students can be allowed to launch their own business with an innovative spirit and imaginative thinking. Entrepreneurship education is seen as a tool for building entrepreneurial awareness, thought and skills through educational methods. Entrepreneurship curriculum can also be used to empower students with entrepreneurship skills and to train them to pursue an entrepreneurial career. In addition, students are cultivated to develop new talents, a sense of creativity and practical experience and skills.

Entrepreneurial education enhances the entrepreneurial effectiveness of students through the provision of moral suasion and encouragement through engaging them in hands-on learning experiences, the creation of a business strategy and the management of a genuinely small business (Fiet, 2014; Segal, Borgia & Schoenfeld, 2014; Strachan, 2018). Entrepreneurial education offered by universities plays a key role in improving the entrepreneurial efficacy of students by motivating and encouraging them to set up their own businesses (Segal, Borgia & Schoenfeld, 2014; Strachan, 2018). Teaching methods need to be applied in order to boost the entrepreneurial intention of university students and their entrepreneurial mindset (Akmaliah & Pihie 2013; Wahid, Ibrahim & Hashim, 2016). University policymakers should bring more value to their graduates by integrating elements that promote the growth of entrepreneurial intention and entrepreneurial mindset in management and financial and marketing skills as a foundation for entrepreneurship as a career option.

Entrepreneurial education increases the entrepreneurial performance of students through the acquisition of knowledge and skills to deal with the dynamics of entrepreneurial activities, such as the quest for opportunities and the gathering of capital (Akmaliah and Pihie, 2009; Furdui, Lupu-Dima & Edelhauser, 2021). Improving the entrepreneurial aim of students often encourages them to make more commitment over a longer span of time, to keep up with the challenges and to build plans and methods to achieve higher entrepreneurial objectives (Shane, Locke & Collins, 2014; Yimamu, 2018). Entrepreneurial education should not only concentrate on the technological aspects of entrepreneurship, but should also boost the confidence of students to become entrepreneurs by exposure to a range of learning opportunities. In recent years, researchers have explained the influence of academic experiences at higher education institutions on various aspects of vocational development, using the social cognitive theory (Costa-Lobo, 2011; Costa-Lobo & Ferreira, 2017). It is argued that academic experience is fundamentally a source of relevant knowledge in the process of creating sense, assessment, success and merit, leading to the growth of the vocational desires and values of entrepreneurship of higher education students. This is clear from the recent explosion in the number of papers on entrepreneurship teaching in HEI (Sousa *et al.*, 2017). Fayolle (2016) contends that there is no consensus on the most appropriate teaching models for entrepreneurship, or ways to assess the role of entrepreneurship courses being taught at the universities. There is also a need for further research into the role of entrepreneurial education in student entrepreneurship and how it can be successfully promoted.

A comprehensive analysis of the literature on entrepreneurship education indicates an increased propensity for students to undertake entrepreneurship-related practices. However, it is not clear to what extent this enhanced tendency is translated into real behaviour (Pittaway & Cope, 2007; Yimamu, 2018). There has been a discussion and lack of consensus on the dichotomy of entrepreneurship or business education philosophy and experience. Entrepreneurial education does also not result in overt entrepreneurial action (for example, a new start-up of businesses), however it may increase the employability of students of current companies (Pittaway & Cope, 2007; Badri & Hachicha, 2019).

The National Council of Graduate Entrepreneurship Reports revealed that “graduates who have formal entrepreneurship training are more likely to display entrepreneurial skills that can drive

innovation and change in a business environment" and that "entrepreneurship training offers a wide range of skills that are able to add value in a modern competitive global environment." The report affirms that the broader the benefits to businesses for students with good understanding of, participation in, and being knowledgeable about entrepreneurship education, the better the chances of developing entrepreneurial intentions (Ekos, 2010; El-Gohary, Selim & Eid, 2016). The 2016 report of the Council for Industry and Higher Education (CIHE) and the National Council for Graduate Entrepreneurship (NGCE) stressed that entrepreneurship does not only catapult students into the corporate world – it also has a tremendous capacity for social progress (Herrmann, 2008; Badri & Hachicha, 2019). The study also demonstrated the future advantages for society through the different fields of the creation of entrepreneurial graduates who can contribute to growth, imagination, teamwork and risk-taking in both the private and public sectors.

The role in entrepreneurship education for students can also be of great benefit to the public sector, social enterprises and companies (El-Gohary, O'Leary & Radway, 2016). Any associated learning environment must be relevant to the student's basic degree and must be encouraging and empowering (Rae, 2007; Masunda, Chitumba, Mushayavanhu & Simuka, 2018). The authors also suggests that the focus should be put on the growth of entrepreneurial characteristics rather than on the formation of entrepreneurs. This statement emphasizes the point that the possible advantage of entrepreneurship education lies in the growth of entrepreneurship among university students, rather than in the overt implementation of encouraging students to start their own businesses (El-Gohary, O'Leary & Radway, 2016).

In the study conducted (Al-Harrasi and Al-Salti, 2014; Solórzano-García, Navio-Marco & Lagua, 2020) which among others claim that university students typically have low entrepreneurial intentions; the authors argue that the key driving factors that affect their intention to be entrepreneurs include wealth, independence and job versatility. The authors affirm that the lack of entrepreneurship education courses at some universities impacts negatively on students' entrepreneurial intention. The authors further reveal that students are not well educated about government and private sector funding services for entrepreneurial students. The goal of this study is therefore to add to established knowledge in the field of entrepreneurship by examining the role of entrepreneurship education in promoting student entrepreneurship at the University of KwaZulu-Natal. The interplay between entrepreneurship education and students' entrepreneurial intention will also be established in this study.

2.5.3 Academic and educational institutions

Global Education Monitoring (GEM) (2017), in its report, revealed that the entrepreneurship programmes at both the secondary and post-secondary levels of education must be improved on, making the following recommendations:

- Develop new training programs/internship programs that engage students in the entrepreneurial practices of the program of study.
- Enhance each of the conventional learning disciplines with a compulsory minor specialization in digital and digital platform-creation skills.
- Fund research in the fields of creativity, creativity, organizational regeneration and market development.
- Establish social entrepreneurial services for adolescents, at school level, mentoring teachers, corporate leaders, and university students. This plans should be a year-long, standardized curriculum emulation of a true-to-life organizational modus operandi, including the issuance of securities, managerial appointments, and the assignment of roles and the review of the company performance by a trained executive council.

The study also suggested that the majority of students do not want to take formal education at university level. Students would choose to learn the skills required to launch their own projects and become prosperous entrepreneurs, operate profitable business ventures, particularly export-oriented and high-growth companies. The GEM (2017) study points out that educational institutions and colleges should consider offering a Lifelong Learning (LLL) program that should be open to those who need it.

2.5.4 Entrepreneurship programmes at higher education institutions of learning

The Mwasalwiba Entrepreneurship Program Wakkee, Hoestenberghé & Mwasalwiba (2018) observed that the heavy focus on both economic success and job development has, however, caused entrepreneurial education to take a prominent role at higher education level, but not as an integrated learning solution for all students at all levels (Ndou, Mele & Del Vecchio, 2019). The primary emphasis of entrepreneurial education has taken the form of elective modules for university students who already have a degree of entrepreneurial passion and are thus self-selecting entrepreneurial education (Mwasalwiba, 2010 & Yimamu, 2018). The expectation that all people need to become more entrepreneurial due to globalization and growing instability in

the global labor market has stimulated considerable political action, but has not yet been converted into universal recognition by teachers at all levels of education. The authors propose that university students should be granted opportunities to study entrepreneurial skills, such as product creation, competition research, market positioning, finance and money management, and company management, in order to encourage entrepreneurs and reduce the risk of failure. Universities can also create and finance entrepreneurship initiatives as a method of fostering and improving the entrepreneurial thinking of students.

Curriculum preparation, course content, instructional tools and study and advancement, the acquisition and compilation of practical teaching materials and the implementation of mentors should also be used to enhance the entrepreneurial intentions and skills of learners (Chen & Sung, 2011; Yimamu, 2018). Entrepreneurship education could help stem the tide of business failure and enhanced business survival. Studies by (Chen & Sung, 2011; Hsiung, 2018) suggest that universities should provide students with intensive entrepreneurship education before entering the workplace.

2.5.5 University entrepreneurship support programmes

Research has shown that universities play a critical role in defining and fostering entrepreneurial actions and attitudes among students by motivating them to launch their own business (Debackere & Veugelers, 2005; Solórzano-García, Navio-Marco & Laguia, 2020). It is therefore necessary for universities to position themselves for the exploration of new ventures by fostering an entrepreneurial atmosphere and thereby making a significant contribution to the economy and society (Gnyawali & Fogel, 2012; Badri & Hachicha, 2019). Previous Entrepreneurship Research (Saeed *et al.*, 2015) agree that entrepreneurial preparation is essential to student entrepreneurship; and universities are capable of promoting entrepreneurship in many respects. While universities should promote entrepreneurship in order to consider the implications of such initiatives, it was imperative to determine the degree to which they could have an impact on students. This can be accomplished by evaluating students' expectations of the university service they get (Kraaijenbrink, Groen & Bos, 2014; Oftedal, Iakovleva & Foss, 2018).

Founded on the point that entrepreneurship can be taught and trained, Yusoff, Ahmad and Halim (2016) discovered in their studies that entrepreneurship education enables students to develop the skills required for good results in the entrepreneurial process. These skills will promote potential entrepreneurs and enable entrepreneurship to be attractive and viable, thus increasing the establishment of the plan to become self-employed (Peterman & Kennedy, 2013; Azis,

Haeruddin & Azis, 2018). The existing literature defines educational funding as a series of activities intended to enhance national economic growth through sustained improvement in the standard of entrepreneurial education (Mwoma & Pillay, 2016; Hsiung, 2018). From a survey of technology students conducted by Autio, Keeley, Klofsten & Ulfstedt (2014) from four different countries, the findings suggest that the career preferences and entrepreneurial values of the sampled students are influenced by the portrayal of entrepreneurship as a career direction and the encouragement they obtain from the university community.

Entrepreneurial intention of university students therefore affects the entrepreneurial action of students. Gelard and Saleh (2013) revealed that entrepreneurial characteristics can be positively affected by educational programmes. The authors have found that there is a correlation between entrepreneurial education and entrepreneurial behaviour. It is also apparent that schooling and entrepreneurship preparation contribute to the growth of future entrepreneurs (Galloway & Brown, 2012; Azis, Haeruddin & Azis, 2018). Today's colleges are investing in entrepreneurship training programs with the goal of fostering entrepreneurship among their students (Gelaidan & Abdullateef, 2017). Entrepreneurship workshops and courses are an incentive to experience good role models, thereby offering a possibility for vicariate learning to occur (Zhao, Seibert & Hills, 2015). Apart from acquiring the requisite information about how to run a business, educational funding often helps students to pursue business success in a dynamic industry (Gelaidan & Abdullateef, 2017).

It can also be argued that successful entrepreneurial education can be an encouragement for students to take on entrepreneurship by enriching their sense of self-confidence. In favor of this debate, other findings have shown that entrepreneurial education increases the degree of self-efficacy and encourages students to express further plans to launch their own companies (Wilson *et al.*, 2016). With adequate entrepreneurial education, students will gain the requisite self-confidence to join their own enterprises before, before and after their higher education programs (Gelaidan & Abdullateef, 2017). Moreover, education itself plays a key role in improving the entrepreneurial efficacy of students by engaging them in different entrepreneurial practices. The attraction to set up one's own company is broadened by highlighting the benefits and encouraging them to set up their own companies (Pihie & Akmaliah, 2009; Carbone, Rouquet & Roussat, 2017).

2.6 Entrepreneurship as a career

The choice of a person to pursue a specific career path is affected by his or her attitude towards that career, which in turn is influenced by his or her values and expectations as to whether an experience will be beneficial if he or she pursued that particular career. One's understanding of an entrepreneurial profession affects one's decision to embark on that career path (Farrington, Gray & Sharp, 2011; Carbone *et al.*, 2017). A study by Turker and Selcuk (2015) on education have showed that education at all stages plays a complex role in the growth of an entrepreneurial society. Since the curriculum provided by universities has a huge effect on the job choice of students, universities should be seen as possible sources of future entrepreneurs.

Studies conducted by Kim-soon, Ahmad and Ibrahim (2018) have shown that higher education institutions are dynamically fostering entrepreneurship as an enticing and worthwhile career choice for graduate students. This statement is further supported by Beeka and Rimmington (2016), who affirm that entrepreneurship offers graduate students self-employment opportunities. It is therefore a preferred career choice for the graduates because it has been proven to ameliorate social ills, and to improve employability for the youth. Public officials have since promoted and encouraged alumni from higher learning institutions to pursue entrepreneurship as a profession to help solve employability (Brachet *et al.*, 2018). Research conducted by Maleban and Zindiye (2017) has shown that entrepreneurship is rapidly becoming a lucrative career choice for unemployed graduates in South Africa and for stimulating sluggish economies. High levels of youth unemployment are pushing them to see entrepreneurship as a realistic path to jobs. Malebana and Zindiye (2017) claim that choosing an entrepreneurial career, much as any other activity that needs commitment and persistence, depends on the individual's confidence in his or her own self-efficacy and entrepreneurship. Consistent with this argument, is (Auken, 2013; Jena, 2020) suggests that one of the aims of entrepreneurship education is to inspire students to pursue an entrepreneurial path, thus providing more possibilities for jobs. In their research, (Zimmerman and Chu, 2013; Bui, Kuan, and Chu, 2018) confirmed that one recurrent field of concern in the study of entrepreneurship is what drives individuals to take entrepreneurship as their chosen career option. Kirkwood (2013) suggests that people have varying reasons to become an entrepreneur, which include: “(1) desire for independence, (2) monetary motivation (3) motivation related to work such as unemployment, redundancy, a lack of job or career prospect and (4) family related motivations”. In the same context, (Robichaud,

McGraw and Roger, 2010; Bui, Kuan, and Chu, 2018) add that the inspiration of the entrepreneurs breaks further into four main groups, namely: “(1) Extrinsic rewards (2) independence/autonomy (3) intrinsic rewards and (4) family security”.

Owners of small and medium-sized enterprises (SMEs) are more inspired by challenge and success than by the desire for job and economic stability (Swierczek and Ha (2012; Majukwa, and Dwyer, 2020). Chu, Benzing and McGee (2017) also revealed that, for entrepreneurs, growing their profits and generating jobs for themselves are crucial factors that inspire them to become company owners.

2.7 Graduate entrepreneurs

Student participation in entrepreneurial practices, described as a mixture of time and energy invested by students on various entrepreneurship-related topics, may appear to be affected by the context in which the student is involved. Student Entrepreneurship Research conducted by Sieger et al., 2016) reveals that more than 5 per cent of students are going to launch their own company right after their studies, and 30 per cent are preparing to become entrepreneurs within five years of their studies. And still, as university programs and social priorities for entrepreneurship have grown in recent years, has there been an accompanying rise in graduate start-up activities? The thesis was conducted in response to this question; the research aims to discover the role of entrepreneurial education in promoting student entrepreneurship.

There is no question that the discourse of entrepreneurship enjoys a growth in the popularity of both university students and graduates. Empirical research has demonstrated that the majority of young people between the ages of 18 and 34 choose to start their own business (Kirkwood, 2013; Goetz, Fleming & Rupasingha, 2012; Bui, Kuan, and Chu, 2018). However, studies conducted within the South African context have produced a contrary opinion. For instance, (Rungani & Fatoki, 2015; Dzomonda & Fatoki, 2019) study highlighted that the entrepreneurial intentions of graduates are extremely low in South Africa compared to other countries. Particularly, they found that entrepreneurial education requires addressing gaps in business, management, and entrepreneurial skills.

Exposure of students to entrepreneurial education over a span of four years could foster entrepreneurial purpose and an entrepreneurial mindset by guiding student attitudes and actions

towards entrepreneurial intent (Okafor, 2014 and Ndofirepi, 2016). Studies conducted by (Basu and Virick, 2008; Vodă, and Florea, 2019) agree that careers in entrepreneurship provide a tremendous opportunity for graduates to gain financial freedom by making a significant contribution to job growth and creativity. However; self-employment also has major positive economic effects, not only on wage and wage employment, but also on per capita income growth and poverty elimination (Goetz *et al.*, 2012 and Ndofirepi, 2016). Furthermore, contextualising the role of government in ensuring a drastic reduction of unemployment rate through the development of entrepreneurship intentions, in 2013, the South African Chamber of Commerce and Industry affirmed that the government had surpassed the private sector as the primary employer of labor in South Africa (Shambare and Rugimbana, 2017). However, it is not far-fetched to accept that this growth is unsustainable, as the public sector wage bill is eventually paid for by taxes created by the private sector. The government should also be responsible for creating and growing entrepreneurship between graduates and unemployed citizens, where more private organizations can be set up and more jobs can be developed.

According to Ebewo, Shambare and Rugimbana (2017), the transition of university graduates into self-sustaining entrepreneurs is more urgent than ever. It is therefore necessary to know the role of entrepreneurial education in student entrepreneurship, particularly from a university perspective. Studies by El-Gohary, O'Leary & Radway (2016) point out that entrepreneurs will stimulate a significant shift in their market climate. In the field of industrial development, for example, entrepreneurs eager to reinvent and build new projects to promote economic growth are becoming attractive. The government has encouraged higher education institutions to cultivate skilled graduates with a wide spectrum of entrepreneurship education and creativity skills that can be used to set up their own companies. It is imperative to examine the role of entrepreneurial education, entrepreneurship in business and economics at universities, and the effect of this education on the intention of students to start their own companies (Fatoki, 2015; Dzomonda, and Fatoki, 2019). These authors recognize that self-employment through entrepreneurship gives university graduates opportunities to build jobs for themselves and others. Again, in different reports, by (Beeka *et al.*, 2011; Ataei, Karimi, Ghadermarzi, and Norouzi, 2020) say that entrepreneurship is one of the job choices for young people and graduates. Entrepreneurship is considered, in fact, to be one of the most promising solutions for reducing the unemployment rate and other social issues associated with youth unemployment. Making sense from the above, policymakers are undoubtedly constricted by the challenges of economic

development responsibilities. Thus, policymakers have recognized that entrepreneurship is the path to more innovative projects and job growth prospects.

In addition, Mwasalwiba (2010) and Fatoki (2019) clarified that students were faced with the challenge of labor market versatility, which needs more graduates either to bid for a few but difficult vacancies, or to opt for self-employment, as the case may be. However, this should not mean that companies also have a preference for graduates who are entrepreneurially minded. The growth of creative thought and entrepreneurial skills is a road to the development of employability graduates. Employers are searching for graduates with skills that will allow them to work in an entrepreneurial manner, so that they can cope and succeed in a competitive business climate (Lourenco, Jones & Jayawarna, 2013; Urban & Chantson, 2019).

Fatoki (2015) confirms that it is important to consider the conditions that influence the entrepreneurial intentions of a graduate to start a company in the future. There are a variety of reasons that drive a person's decision to become an entrepreneur. These factors are typically classified as social indicators, behaviors, beliefs and psychological factors. Demographic factors impacting entrepreneurship, such as age, gender, schooling, job experience and role models, may have an effect on entrepreneurship (Cotleur et al., 2009 and Kluev et al., 2017). The results of the study conducted by Sousa et al. (2017) indicate that job expectations and entrepreneurial conviction are affected by the portrayal of entrepreneurship as a career option and the encouragement it gets from the university community.

2.8 Entrepreneurial Intentions

Driven by the theory of planned behaviour, this segment of the thesis examines the cumulative effect of entrepreneurial education on student entrepreneurship. The study examines the role of entrepreneurial education in fostering student entrepreneurship. The study views students' entrepreneurial intentions, entrepreneurial mindset, and exposure to entrepreneurial education; and how these will shape their entrepreneurship careers in the near future. Entrepreneurial intentions refer to the propensity to participate in the development of entrepreneurial actions and the desire to establish an entrepreneurial career as the first steps in the sometimes long phase of venture growth (Ajzen, 2012 and Ajzen, 2020). According to Kibler, Fink, Lang and Munoz (2013) entrepreneurship intentions are alluded to as motivations for investing in a new business enterprise that can be used as a guide to this kind of behaviour. De Jorge-Moreno *et al.* (2012) suggest that the individual's entrepreneurial intention is determined by the features of his

personality and his personal history. This opinion is reinforced by Solesvik *et al.* (2014), who argue that the individual's personal climate, opportunities and procedures have a strong impact on their decision to follow an entrepreneurial career path.

Qian and Ma (2017) indicate that entrepreneurial intentions, growth intentions, and entrepreneurial self-efficacy are vital for the emergence and performance of new ventures. Awareness of variables that affect entrepreneurial purpose and entrepreneurial self-efficacy is therefore critical to the design and execution of initiatives that could promote entrepreneurial operation. The goal of this thesis is to examine the role of entrepreneurial education in promoting student entrepreneurship, taking into account the entrepreneurial intentions of students. This research further tests the relationship between entrepreneurial education, entrepreneurial intentions, entrepreneurial mindset, and entrepreneurial action of students.

Entrepreneurial intent has three main factors: individual attitudes, subjective norms and perceived behavioral influence. Individual attitudes refer to the individual's perception of a given idea at hand. Second, subjective norms apply to the social atmosphere of the person, as well as to the effect of that environment on the entrepreneurial judgment of the individual. Third, perceived behavioral control, also referred to as self-efficacy, is characterized as an individual's faith and confidence in his or her ability to accomplish a certain goal and ability to affect his or her chances of achievement (Kibler *et al.*, 2013; Ajzen, 2005; Ajzen, 2020). Study conducted by Remeikiene *et al.* (2013) established several related variables as self-efficacy, risk-taking bias, need to be done, and internal regulation, behavioral control, and personal attitudes. Rambe, Ndofirepi and Dzansi (2017) assert that the need to shape the intentions of students originates from the flexibility of intentions, and the strong predictive link between intention and behaviour. It was argued that studying the context of entrepreneurial purpose helps lecturers, advisors, mentors and decision makers to get a better view of how objectives are formed; and how the future entrepreneur's values, expectations and motivations have an effect on the intent to launch a business (Mbuya & Schachtebeck, 2016). Exploring the reasons that push graduate students towards entrepreneurship is very interesting considering the relevance of entrepreneurship to job development and economic growth. Several other studies have also established substantially low entrepreneurial intentions, concentrating primarily on tertiary and university students around the world, indicating that these students choose wage-earning jobs rather than risk developing their

own business venture (Fatoki & Chindoga, 2011; Pendame, 2014; Ataei, Karimi, Ghadermarzi & Norouzi, 2020).

Most studies have postulated that it is primarily the individual's personal characteristics that affect entrepreneurial intent (Grassl & Jones, 2015; Vodă & Florea, 2019). Other research have showed that the immediate atmosphere and self-confidence are variables that influence entrepreneurial intent (Ramos, 2014; Ndofirepi, 2016). Denanyoh *et al.* (2015) are of the opinion that an individual's immediate social climate, such as friends and family, offers much-needed emotional help for an entrepreneurial intention to thrive; whereas Nafukho and Muyia (2015) are of the opinion that early exposure to entrepreneurship plays an important role in fostering an individual's entrepreneurial purpose, especially am. It is also necessary to introduce students to successfully organized entrepreneurial education programs, as this affects entrepreneurship (Mbuya & Schachtebeck, 2016).

2.8.1 Previous entrepreneurial experience and students' entrepreneurial intention

Entrepreneurship has shown that previous experience of a person has a major effect on their decision-making and market results (McStay, 2008; Yang & Gabrielsson, 2017). Previous market exposure, role models, and networks are perceived to be essential factors for individuals wanting to become entrepreneurs. Peterman and Kennedy (2013) argue that a favorable association between prior job experiences in a business atmosphere has an effect on an individual's appetite for entrepreneurship. What is more, entrepreneurial intentions are malleable when exposed to external influences like observing practising entrepreneurs, practical work experience and exposure to relevant education and training (Tkachev & Kolvereid, 1999; Ndofirepi, 2020). Also, the manifestation of other visible indicators of the impact of entrepreneurship education is delayed and therefore cannot be assessed during and immediately after the students complete the course. In other words, observable influence measures emerge well after the students have completed their courses of study (Galvão, Ferreira & Marques, 2018).

Students with prior experience in entrepreneurial activities tend to have a higher entrepreneurial purpose than those with no previous experience (Kolvereid, 2000; Ndofirepi, 2020). Prior work experience have an impact on entrepreneurial intent. Students with entrepreneurial experience, be it self-experience, family experience or previous job experience, are more inspired to pursue an entrepreneurial career (Mazzarol, Volery, Doss & Thein, 2011; Asandimitra & Kautsar,

2017). Taken together, this can be due to the diligence of labor market practices and their awareness of the evolving patterns of the labor market in general (Ahmed, Naweiz, Ahmad, Shaukat, Rehman and Ahmed, 2010; Ndofirepi, 2020).

Entrepreneurial intention, among other considerations, is a central theme in the literature on entrepreneurship (Kuehn, 2008; Millman, Li, Matlay and Wong, 2010; Yang and Gabrielsson, 2017). Furthermore, as Kanonuhwa and Chimucheka (2016) have pointed out, it is difficult to predict with confidence the number of students who will potentially foray into entrepreneurship in the future. This is due to the unpredictable existence of what lies ahead; thus the need to research the intentions and the obstacles that students might see in the future (Kuehn, 2008; Vodă, and Florea, 2019). Furthermore, as Kanonuhwa and Chimucheka (2016) have pointed out, it is difficult to predict with confidence the number of students who will potentially foray into entrepreneurship in the future. This is due to the unpredictable existence of what lies ahead; thus the need to research the intentions and the obstacles that students might see in the future.

Intentional entrepreneurs are seen as those individuals who hope to be interested in the start-up of new projects in the next three to five years (Singer, Amoros & Arreola, 2014; Van Vuuren & Alemayehu, 2018). Intention refers to a person engaging in a particular behaviour, this leaning is influenced by factors both within and external to an individual (Pendame, 2014; Vodă & Florea, 2019). The perception of intention is significant to the development of future entrepreneurs, given the strong belief among researchers that the bulk of entrepreneurial education is deliberate and considered (Lourenco *et al.*, 2013; Turton & Herrington, 2013; Hughes & Schachtebeck, 2017).

This research examines academic studies that have exposed the viewpoints of numerous scholars on a variety of factors impacting the entrepreneurial intent of young people. The understanding of entrepreneurship, from the point of view of the individual youth, has a strong impact on the entrepreneurial intent of the youth (Hughes & Schachtebeck, 2017). Youth perception, according to Hughes and Schachtebeck (2017), refers to the opinion, regard and comprehension that students have of entrepreneurship. A positive understanding of entrepreneurship suggests a greater entrepreneurial intention. Correspondingly, role models, whether or not they have an entrepreneurial relationship, nor have a clear impact on the human understanding of entrepreneurship, also influence entrepreneurship. The lack of role models has been found to have a negative effect on entrepreneurial intent (Hughes & Schachtebeck, 2017). Students who are creative, and who have a desire for personal independence, have an entrepreneurial intention.

Students who have had exposure and access to entrepreneurship training programs, seminars and workshops, also display higher levels of entrepreneurial intent (Hughes & Schachtebeck, 2017).

Research has demonstrated that acts are guided by intentions; thus, it is reasonable to investigate the reasons that drive their improvement (Kuehn, 2008; Fatoki, 2010; Dzomonda, and Fatoki, 2019). The authors further indicates that reflecting on factors that affect the intention of graduates to start a business, sheds light on the idea that motives are essential to understanding behaviour. However, considering the goal to be a consistent indicator of actual behavior, the resulting actual behavior could vary from the expected behavior (Kuehn, 2008; Dzomonda, and Fatoki, 2019) and can thus only be used as a predictive measure.

2.9 Entrepreneurial mindset as a driver of development of entrepreneurial intention

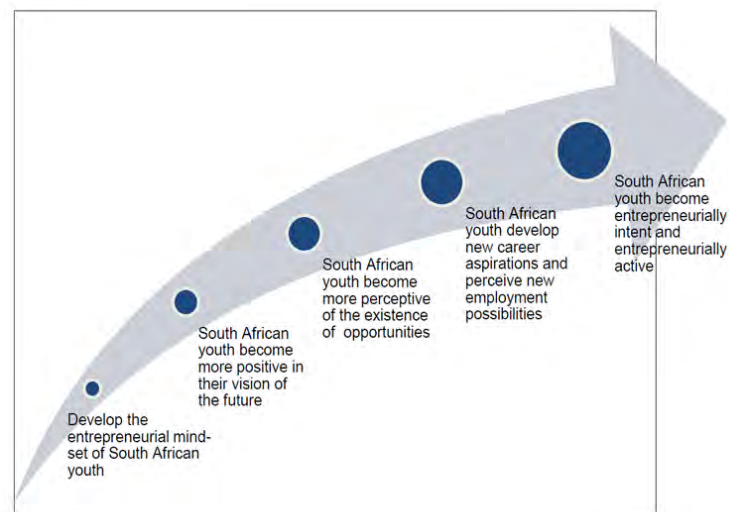
Ireland, Hitt and Sirmon (2014) define entrepreneurial mindset as a growth-oriented viewpoint thorough which individuals endorse flexibility, creativity, continuous innovation, and renewal. Under the cape of uncertainty, the entrepreneurially-minded individual is able to identify and spot new opportunities because they have the reasoning abilities that allow them to draw meaning from ambiguous and disjointed situations. Sajdak (2017) adds that the mechanisms of an entrepreneurial mindset include recognising entrepreneurial opportunities. The prospective entrepreneur has entrepreneurial alertness, finding real options, an entrepreneurial framework, and an opportunity register. The author further states that these components are considered the most important elements to support entrepreneurial thinking; and are therefore necessary in ensuring the adaptation of businesses to the ever-changing environmental conditions.

According to Lynch *et al.* (2017), the idea of entrepreneurial mindset has been widely common in the area of entrepreneurship, as it directs human action towards entrepreneurial practices and performance. Bux (2017) postulates that thought will allow students to think differently, innovately and creatively; to improve expectations of job opportunities. This can contribute to increased expectations of their entrepreneurial intent or increase their perceptions of entrepreneurial activity. Results can also contribute to entrepreneurial intervention. The emphasis of this thesis is on exploring and discovering the role of entrepreneurial education in

promoting student entrepreneurship, in which student entrepreneurship will contribute to entrepreneurial activity.

Norris (2018) recent research on entrepreneurial intentions explains that the importance and significance of graduates, especially in business management classes, is improved when students are prepared for ongoing developments in the dynamic global marketplace. Some of the most sought-after features by business professionals include entrepreneurial thought, entrepreneurial intent, analytical thinking, and reflective skills. Individuals with an entrepreneurial approach use methods of self-leadership; they are imaginative and exhibit improvisational skill. Norris (2018) also points out that graduates with entrepreneurial orientation and entrepreneurial intentions are creative and constructive and are not risk-averse. Their critical thinking skills, along with their potential for critical thought, enable individuals to make successful choices, evaluate the implications of their behaviors and behavior, and make improvements to their pathways of re-establishment for effective success. Business acumen gleaned from learning experiences reflected in the company program can provide business management learners with the ability to build certain abilities and competencies and thereby prepare them for entrepreneurial professions and service with organizations throughout the foreseeable future (Norris, 2018).

Figure 3: The continuum of outcomes of developing the entrepreneurial mindset



Adapted from: Bux, S., 2017. The effect of entrepreneurship education programs on the mind-set of South African youth.

Studies conducted by Bux (2017) stated that, in South Africa, there are numerous gaps in the youth entrepreneurial infrastructure. Attaining an entrepreneurial mindset could lead to one outcome or a combination of many results, as portrayed in Figure 3. The entrepreneurial mindset can further be described as a state of mind that demonstrates how an individual should attempt to conduct thought processes towards entrepreneurial actions (Kurato & Hodgetts, 2007; O'Shea, Buckley and Halbesleben, 2017). This sort of mindset, according to Van Aardt *et al.*, (2014), typically leads towards individuals comprehending opportunities and being innovative with new value creation. The entrepreneurial mindset theory, combined with the entrepreneurial education theory, offers a base expressing how potential entrepreneurs should think, plan, and act, in order to start a successful business. Therefore, this provides a framework on how students should be educated in entrepreneurial education; and the skills they should develop in order to promote entrepreneurial action. Universities can implement these theories into their entrepreneurial education systems to create more entrepreneurially focused students (Wilkison, 2017). When considering the possible results of an entrepreneurial mindset on students, Bux (2017) recommends that the value of mentorship must be recognised in entrepreneurial education to achieve an entrepreneurial mindset.

2.9.1 Entrepreneurial mindset of the university students

The entrepreneurial mindset can be described as an outgoing personality that pursues opportunities, imbibes consistency, is self-motivated, explores opportunities, is agile and self-regulating in personal thinking, given vibrant and unpredictable job environments (Baron, 2013; McGrath & MacMillan, 2011; Vodă & Florea, 2019). This research confirms the features of entrepreneurial mindset, as quoted by Baron (2013) and McGrath and MacMillan (2011), and the potential contribution that operational entrepreneurial thinking can bring to the current alleviation of South African youth unemployment. As a result, it is important to decide how the growth of entrepreneurial mindset can be effectively encouraged among students.

The study conducted by Bux (2017) proposes that entrepreneurial thinking is the capability of thinking exceptionally, visualising new developments and taking on astounding amounts of work. This is a skill set that is closely related to job formation. Similarly, with an entrepreneurial mentality, a person must consider and welcome opportunities. Enthusiasm for taking risks and taking responsibility is important to the growth of entrepreneurial communities. Entrepreneurial education, with the existing correlation between education and economic growth, will also mean the creation of personal values as well as structured expertise, abilities, personal qualities and

attitudes, which would increase the possibility that an individual would react to opportunities by acting on them.

Kumar and Abirami (2014) suggest that education and learning are essential factors that students require to develop their entrepreneurial mindset. This is critical because entrepreneurship leads to economic growth, job development and personal fulfilment. It is also important for students to have an optimistic outlook towards entrepreneurship, an intense desire to attain success, well-defined strategies on how to succeed, a commitment to take suitable action, strategies, determination and a lack of willingness to quit.

2.9.2 Students' entrepreneurial self-efficacy

Entrepreneurship self-efficacy is conceived as an important principle in entrepreneurship research due to its progressive effect on an individual's entrepreneurial desire to start a business (Pfeifer et al., 2016; Liang & Liang, 2015). Self-efficacy is characterized as an individual's conscientious confidence in his or her own abilities and ability to accomplish a specific role to the point that the individual feels he or she has the ability to succeed in beginning a new company (Brice & Spencer, 2007; Norris, 2018).

Previous research has demonstrated that entrepreneurial self-efficacy has the potential to encourage entrepreneurial intent (Sequeira, Mueller & McGee, 2007; Yimamu, 2018) and the ability to improve the possibility of new business innovations being exploited (Osmonalieva, 2013). Perceived entrepreneurial self-efficacy impacts individuals' beliefs on the likely outcomes they would achieve from entrepreneurship, and the likelihood of becoming an entrepreneur (Vanevenhoven & Liguori, 2013; Malebana, 2017). One's ability to act entrepreneurially has a great effect on creating a start-up business plan for the initiation of their own business. Self-efficacy values have an effect on courses of action that students want to undertake, how much commitment they make, how long they persevere in the face of challenges, their resistance to adversity, and the level of achievement they know (Malebana & Zindiye, 2017).

Entrepreneurial self-efficacy has also been shown to be one of the main determinants of student entrepreneurship purpose and behaviour. As a result, concerted attempts have been made to recognize the determinants of entrepreneurial self-efficacy and entrepreneurial intent among researchers (Malebana & Zindiye, 2017). Prior research has also shown that entrepreneurial

education associated with entrepreneurial support such as incubators and workshops offered by universities, can stimulate entrepreneurial intention, and improve the self-efficacy beliefs of students (Oyugi, 2015; Malebana & Swanepoel, 2017). On the contrary, Lima, Lopes, Nassif and da Silva (2015) reported that entrepreneurial education has a negative effect on entrepreneurial intention and self-efficacy.

However, Zhao *et al.* (2015) welcome the fact that students can build the tools of self-efficacy through entrepreneurial education. Previous research has shown that student entrepreneurial preparation and previous entrepreneurial exposure have a substantial influence on entrepreneurial intent, and that students feel their own entrepreneurial self-efficacy during and after graduation. The goal of this research is to explore the relationship between entrepreneurial education and student entrepreneurship, taking into account student entrepreneurship intentions, entrepreneurial mindset and entrepreneurial action.

2.10 Students' Entrepreneurial Actions

Entrepreneurial action involves the creation of new opportunities and businesses, which happens over a period of time (McMullen & Dimov, 2013; Venkataraman, Sarasvathy, Dew & Forster, 2012; Ajzen, 2020). Previous research undertaken by Ajzen (2020) note that, technically, the plan to start a company is the closest predictor of action (i.e., start-up) and can forecast the behavior. However, relatively few studies have demonstrated a direct connection between entrepreneurial goals and entrepreneurial behavior. Miao, Qian and Ma (2017) reported that, of all those who plan to start a company, only 18% are likely to take action within a four-year period. These situations could simply be clarified by a lack of market opportunity, and the person could not put intention into effect. Business development is, of course, focused on the discovery and exploiting of business opportunities identified by a person employed in a given business setting (Shane & Venkataraman 2015; Shane 2014). It is through market potential that the entrepreneurial goal can be converted into effect and ultimately contribute to the development of a business.

The current research focuses on the exploration of the role of entrepreneurial education in promoting student entrepreneurship, and on deciding if these positions influence students to be entrepreneurial, and on pursuing business opportunities. Such metrics may be of great value, because they are tangible and embedded in action, and would theoretically encourage the researcher to link the purpose to development. Opportunity manipulation is, in reality, directly

connected to the process of production, and is of greater importance, both in practice and in theory, than mere entrepreneurial intentions (Shane 2014; Shane & Venkataraman 2015).

Studies have also shown that opportunities can emerge from any changes in the world in which individuals work. Recognizing these opportunities can give rise to optimistic and desirable conditions that may lead to entrepreneurial action (Santos, Marques & Ferreira, 2017). Thus, Alvarez and Barney (2007) and Malebana (2017) defined entrepreneurial activity as a process involving objective cognitive and behavioral activities of individuals to engage perceived confusion, thus generating new entrepreneurial projects. Van der Westhuizen (2016) suggests entrepreneurial action as individuals' aspirations and vision that drives the purpose of their actions to become more entrepreneurial. Entrepreneurial action as a process innate to an individual's being, which involves entrepreneurial self-efficacy, individual entrepreneurial orientation, and entrepreneurial intentions (Scharmer & Kaufer, 2013; Miao, Qian & Ma, 2017).

Going on, Venkataraman (2015), in his research, argues that entrepreneurial action includes the efforts of individuals under uncertainty to be engaged in processes that define, establish and undertake different practices, such as the potential launch of new products and services, the entrance into the new market and the development of new projects. This mechanisms do not arise instantaneously; thus, entrepreneurial activity cannot be conceived as a single act, but as a mechanism containing a series of acts taking place over time (Shepherd, 2015).

2.11 Theoretical Framework

Sekaran and Bougie (2016) note that a theoretical framework is a researcher's belief in how certain variables or principles are related to each other, providing a reason for the researcher's belief that these variables are related to each other (a theory). Both the model and the theory flow logically from the documentation of prior studies in the problem field. Integrating the reasoning of the researcher into published study, taking into account the limits and restrictions of the case, is essential to the creation of a theoretical foundation for the investigation of the research issue. The method of constructing a theoretical framework shall include:

- Introduction of meanings of terms or variables in the model.
- Create a conceptual model that includes a descriptive representation of the theory.
- Establishing a hypothesis or proposition that gives a justification for the interaction between

the variables in the model.

Many theories have been employed to explain the linkage between entrepreneurial education and student entrepreneurship. This section presents the theoretical framework underpinning this study. Theories are very relevant in providing meanings or understanding of phenomena and problems in the real or practical world (Ikemefuna & Ekwoaba, 2012; Fletcher, 2017). Theories are often effective in anticipating events or phenomena before they occur. There is a desire for theories to find solutions to questions such as how, why, when, where and who.

2.11.1 Theory of Planned Behaviour

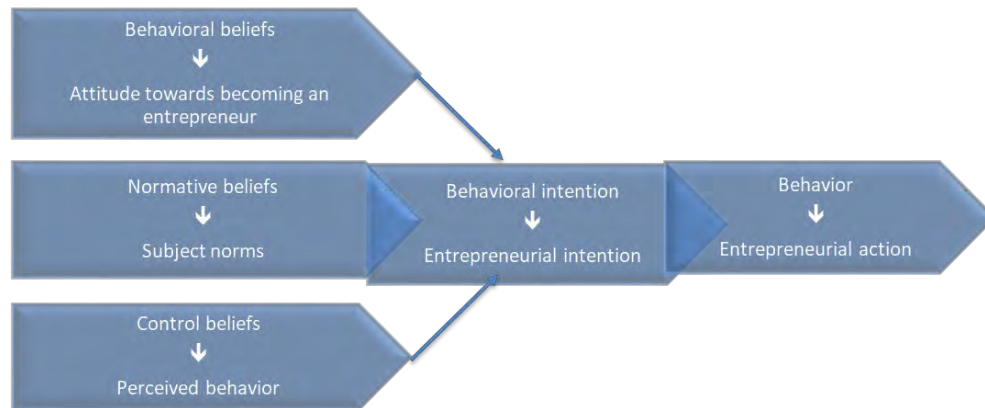
Theory of Planned Actions (TPB), is to ascertain the role of entrepreneurial education in promoting student entrepreneurship and to understand the degree to which university students wish to participate in entrepreneurship as a profession (Ajzen, 1991; Ajzen, 2015; Jing *et al.*, 2019). More importantly, the study sought to establish the collective influence of the entrepreneurial education, entrepreneurial intentions, entrepreneurial mindset, and entrepreneurial action of these students. The study has used the application of the TPB by assessing the impact of entrepreneurial education on student entrepreneurship.

The TPB is of the view that motives are the immediate antecedent of behavior. This intentions are defined by three variables: attitudes about the particular action (only specific behavioral attitudes may be assumed to predict that behavior); social expectations (beliefs on how persons, the decision-maker, cares for or considers the behavior in question); and perceived behavioral influence (this applies to people's impressions of their capacity to perform the behavior in question); (Ajzen, 2011; Ajzen, 2012; Kolvereid, 2000; Ajzen, 2015).

The theory of planned behavior (TPB) has been used successfully to explain and predict behavior in a multitude of behavioral domains (Ajzen, 2015). The immediate antecedent of behavior in the TPB is the intention to perform the behavior in question; the stronger the intention, the more likely it is that the behavior will follow. According to the TPB, behavioral intentions are determined by three factors: attitude toward the behavior, subjective norm concerning the behavior, and perceived behavioral control. In the current formulation of the theory, a favorable attitude and a supportive subjective norm provide the motivation to engage in the behavior but a concrete intention to do so is formed only when perceived control over the behavior is sufficiently strong (Ajzen, 2020). The theory of planned behaviour describes entrepreneurial motives and behaviors relative to subjective standards, assumed behavioral control and

behaviour (Ajzen and Cote, 2011, Jing *et al.*, 2019).

Figure 4: Entrepreneurial intention on attitude towards becoming an entrepreneur, behavioural beliefs, subjective norms, and perceived behavioural control



Source: Ajzen's Theory of Planned Behavior (Ajzen, 1999; Ajzen, 2015)

TPB is one of the most suitable theories for forecasting entrepreneurial intent. Perceptions or intellects of the personality serve as the main explanatory framework for the development of behavioral intentions or acts (Shapero and Sokol's, 1982; Ajzen, 1991, Ajzen, 2015). According to the authors the TPB has proven to be a common model of behavioral intent that accounts well for decision-making variables. In comparison to other models, there is a clear suggestion that the TPB predicts a wide variety of activities, especially in relation to entrepreneurship, as evaluated in this analysis (Iakovleva *et al.*, 2011; Anyim, 2020).

Most research on the impact of entrepreneurial education are based on the premise that being an entrepreneur is a deliberately orchestrated behavior. The relation between beliefs, intentions and actions is used on the basis of the TPB taken from the field of psychology (Ajzen, 1991; Bandura, 1997; Krueger *et al.*, 2013; Anyim, 2020). Previous research has shown that entrepreneurial education and entrepreneurial support will promote self-employment increase the amount of new start-ups thus encouraging the development of small enterprises (Bridge *et al.*, 2009; Kim & Cho, 2009; Jing *et al.*, 2019). The TPB can therefore be a powerful method for assessing the efficacy of the role of entrepreneurial education in contributing to the growth of entrepreneurial intentions and fostering entrepreneurial behavior among students (Ajzen, 2005; Ajzen, 2020).

Table 1: Ajzen’s theory of planned behaviour

Attitude towards behaviour	The first construct in the theory of expected actions; "attitudes to behavior" tests the degree to which a person feels confident about behaving as an entrepreneur (Krueger Jr <i>et al.</i> , 2000)	How desirable is it to perform this behaviour?
Subjective Norms	Subjective norms measure the respondent's interpretation of what people in his or her network would say if the respondent were to become an entrepreneur. As a consequence, subjective standards relate to the social and societal pressure to follow a particular behavior. In this respect, the aspirations of friends, family, colleagues, networks or advisors about the desirability of being an entrepreneur are of special significance.	How desirable do people close to the individual in question think it is to perform this behaviour?
Perceived behavioural control	Perceived behavioral control tests the respondent's confidence in the opportunity to behave as an entrepreneur.	Do I believe in my own ability to perform this behaviour?

Source: Adapted from (Ajzen, 1991; Ajzen, 2015)

Attitude towards the behaviors, subjective norms, and perception of behavioral control contribute to the creation of behavioral intention (Ajzen, 2005; Ajzen, 2015). For the purpose of this research, a person, in particular a student studying entrepreneurial studies, has the aim of starting a new business after completing his or her training in entrepreneurial education. The TPB further points out that, if the intention of a person towards entrepreneurship is positively affected by entrepreneurship education, their entrepreneurial intentions will also shift. This will contribute to the desired entrepreneurial behavior, which in this case will be entrepreneurial action (Ajzen, 2005; Ajzen, 2015). Using this presumed linkage, researchers performed surveys to capture the

perceived entrepreneurial attitudes and intentions of students before and after an educational experiment. Therefore, whether attitudes and/or intentions have changed in a good way afterwards, this is called an effective entrepreneurial education (Malebana, 2017).

Entrepreneurship education plays a critical role in the growth of entrepreneurship, by having a constructive impact on entrepreneurship and attitudes towards entrepreneurship in order to improve students' trust in their abilities to start a business (Malebana, 2017; Saeed *et al.*, 2015). Efforts to increase knowledge of entrepreneurial support will also improve subjective norms by establishing social understanding of entrepreneurship, emphasizing the value of entrepreneurship in society (North & Smallbone, 2006; Anyim, 2015).

2.12 Conclusion

The chapter provided the background to the growth of entrepreneurship, offering a comprehensive overview of the different concepts of entrepreneurship put forward by scholars. The relevance of entrepreneurship education, the significance of entrepreneurial education, the various entrepreneurship programmes at higher institutions, were also discussed in this chapter. The challenges of entrepreneurial education in the universities are outlined in this chapter. In addition, the chapter discusses the principle of expected actions as the analytical framework underpinning the analysis. The next chapter presents the research methodology for this study. The research design and the various statistical tools adopted to achieve the research objectives are also presented.

CHAPTER THREE: RESEARCH METHODOLOGY AND METHODS

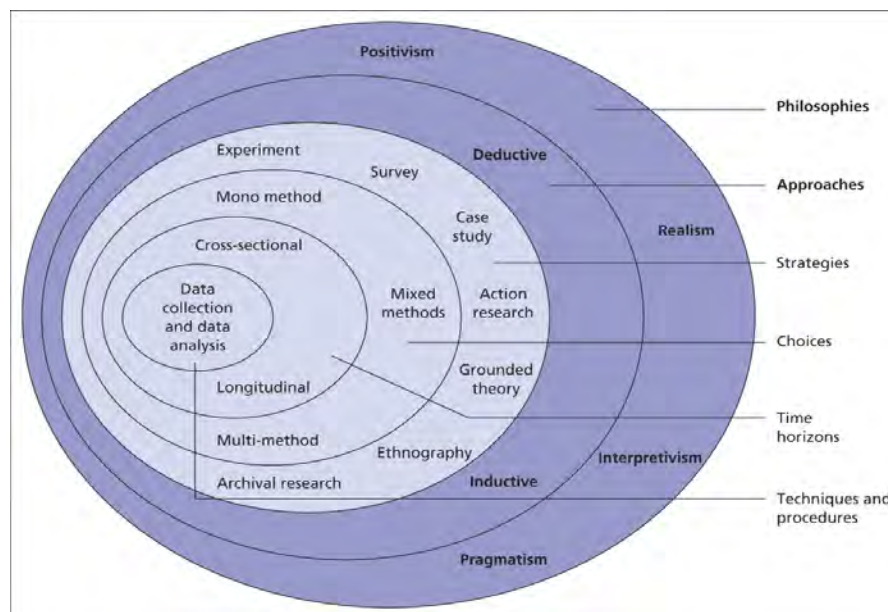
3.1 Introduction

The goal of the study was to shed light on the entrepreneurial education currently offered at the University of KwaZulu-Natal on its role in student entrepreneurship. The study involved both the undergraduate (third year) and postgraduate (fourth year) students enrolled in the School of Management, Information Technology, and Governance, in the discipline of Management and Entrepreneurship Studies at the University of KwaZulu-Natal at the Westville and Pietermaritzburg campuses who undertaken at least one entrepreneurship module in their qualification. The analysis consists of both primary and secondary results. Secondary sources of data were journal articles, periodicals, books and academic websites. Main influences include the UKZN Business and Entrepreneurship Studies program.

This chapter of the dissertation explains the methodology and methods espoused in this study. While there have been varied contentions with regard to the nuance between methodology and methods within the broad discipline of management and social sciences, this chapter seeks to establish and explicate major differences between these two dissimilar but seamless concepts. This exertion is required so as to be able to find a niche in which the meaning of themes discussed in this chapter will neatly cement with the philosophical assumptions and approaches utilised in this study. Research methodology is interpreted as the comprehensive activities undertaken in the conduct of an investigation. Specifically, research methodology comprises the overall theoretical assumptions of how research should be conducted (Saunders, Lewis & Thornhill, 2016). On the other hand, research methods address the concern of procedures and techniques used in eliciting and analysing the research data (Sekeran & Bougie, 2016).

Therefore, The different topics explored in this chapter therefore include research on philosophies and approaches; research design; sampling techniques; instrumentation; data collection; data quality management and interpretation. Discussion of these different themes is borrowed from Saunders *et al.*'s research onion (2016), as shown in Figure 5 below.

Figure 5: The research onion



Source: Adapted from Saunders, Lewis and Thornhill (2016)

The research onion explicates the various steps adopted regarding issues of methodology and methods adopted in this study. It is emphasised that all the major constructs of the research onion are clearly explained in this chapter as they relate to this study.

3.2 Research Philosophies

Research philosophies are important worldviews employed for a study, which consequently inform the overall design, strategies, and analytical tools employed in the study (Saunders *et al.*, 2009 and Saunders *et al.*, 2016). Research philosophies are also construed by the knowledge of what is intended to be studied, and the process intended to be adopted to examine the issue. In other words, research philosophies lead to studying a particular research phenomenon in a specific way (Gill and Johnson, 2010; Harrison, Birks, Franklin and Mills, 2017).

The acceptance of each of the various forms of philosophic assumptions, such as realism, interpretivism, positivism and pragmatism, depends on what needs to be learned. (Saunders *et al.*, 2009 and Saunders *et al.*, 2016). To arrive at a philosophical assumption suitable for this study, the four different types of research philosophies are evaluated below.

3.2.1 Positivism

Positivism as a research philosophy is understood to be based on the presuppositions of the natural sciences (Sekeran & Bougie, 2016). Research conducted in this line of philosophical assumption, leans towards uncovering an observable causal relationship between variables through scientific procedures, so that generalisation can be made on similar phenomena (Saunders *et al.*, 2016). Therefore, the supposition of the positivist philosophical assumption is tied in with the need for the replicability of research findings and generalisation (Gay, 2013; Sekeran & Bougie, 2016). The positivist philosophical ontology validates that the scientific process is value-free, and the researcher is keenly sequestered from the research process. Particularly, the positivist philosophical inclination is a departure from other philosophical assumptions in which the beliefs and perceptions of the researcher greatly influence the research findings (Mayor and Blackmon, 2005; Spetic, Kozak & Vidal, 2016). The positivist philosophical drive is staunchly enmeshed in the measurement of constructs for objective research findings.

Furthermore, one of the popular shared distinctions between the positivist and other strands of philosophical learnings is the nuance between objectivity and subjectivity. For emphasis, the utility of the quantitative research methods appropriately fits with producing objectivity in positivism research (Bryman, 2012 & Yeomans, 2017). Hence, quantitative data are essentially elicited in a research hanging on the positivist philosophy. Therefore, with reference to the focus of this study being mixed research, in which quantitative and qualitative data are envisaged to be elicited through self-administered questionnaires and focus group discussions, the positivist philosophical assumption is not adopted. While the assumptions of the positivist fit with the collection of numeric data for this study, the philosophical assumption cannot be adopted. The focus of the study is to collect both numeric and non-numeric data to understand the role of entrepreneurial education in fostering student entrepreneurship.

3.2.2 Realism

While the positivist assumption is tied to the objective measurement of constructs, the realism philosophical assumption is entrenched in the belief of external reality and truth (Saunders, Lewis & Thornhill, 2009; Bashir, Syed, and Qureshi, 2017). In essence, realism's philosophical position refutes the assertion that phenomenon and events cannot be ascertained through objective measurement, only through in-depth understanding of reality (Bryman & Bell, 2011; Gooyert & Grobler, 2018). In contrast to the dictates of the positivist assumption, the realist is keenly

subjective. The realist philosophic premise is based on the idea that human interpretation of truth cannot be considered a valid representation of reality when actors or scholars are not interested in this research process (Saunders et al., 2016). For example, in order to provide a fuller view of the phenomena under review, the investigator must be especially interested in the whole process. Taking reality as the main supposition of the realist philosophical assumption, a critical realist argues that what we perceive to be true, is a reflection and a picture of things in the real world, and not a direct or objective measurement of events (Bell, 2011; Yeomans, 2017). Furthermore, commentators have specifically argued for the robust involvement of the investigator as the research unfolds, to yield a more comprehensive understanding of reality. Therefore, the need to understand and make accurate sense of the world specifically requires a clear interpretation of reality, and not statistical interpretation of data. However, having examined the realist philosophical position, this study does not intend to understand reality. Rather, the focus is particularly on uncovering the role of entrepreneurial education in fostering student entrepreneurship through both numeric and non-numeric data.

3.2.3 Interpretivism

The main assumption of the interpretivism philosophy is the integration of human interests into a study (Sekeran & Bougie, 2016). In so doing, interpretivists, otherwise referred to as qualitative researchers, seek to understand the subjective meaning of individual reality as the research unfolds. The interpretivists' assumptions deviate from the need to establish cause and effect relationship between constructs as advanced by positivism. However, the focus of interpretivism is centred on the assertion that a more robust understanding of issues in our everyday existence should reflect the keen participation of the researcher in the events under study. This would be particularly by showing some form of sympathy for a more comprehensive understanding of research participants in their real world. Although interpretivism is somewhat synonymous with the philosophical doctrines of positivism, it partly identifies with research in the natural sciences (Kelliher, 2011; Taylor, Burkinshaw, Kelleher, Perkins & Marsden, 2019). However, the interpretivist emphasis is on the need to lessen the contrast between the researcher and participants, advocating for a relationship between the two to engender a fuller understanding of the phenomenon under study (Creswell, 2013 & Amadi, 2021). Therefore, the goal of understanding social phenomena by entrenching the researcher in the real world of participants, neatly cements with the qualitative strand of this study. Here, the social environment of chosen undergraduates has been qualitatively discussed in terms of their understanding of the role of

entrepreneurial education in promoting student entrepreneurship. However, with the intention to integrate both quantitative and qualitative data, the interpretivism philosophical assumptions are not utilised in this study.

3.2.4 Pragmatism

While the preceding research philosophies capture one single method of studying a social phenomenon, the pragmatist philosophical approach reflects a significant departure from these connections (Leech & Zoran, 2009; Sekaran & Bougie, 2016). The pragmatist seeks to integrate both the objective and subjective meanings, in creating effective knowledge (Freshwater & Cahill, 2013; Amolo, Migiro, & Ramraj, 2018). This is sufficient to contend that the pragmatic philosophic doctrine depends strongly on the use of mixed-method analysis, in which quantitative and qualitative evidence are also required to yield more successful research findings. Therefore, to have a comprehensive understanding of events in the social world, the applicability of mixed methods becomes the most desired. Furthermore, the pragmatist conceives the universe with mixed problems, demanding a mixed pattern of solutions to all its complex problems. Advocacy for a mixed approach to the complex issues of the real world requires the use of several techniques of data collection and analysis, which can address social and administrative study problems (Leech & Zoran, 2009; Sekaran & Bougie, 2016). However, the decision to employ different types of research methods for solving research problems with varied nomenclature, does not entirely rest on the researcher's inclinations; rather, such a decision is greatly guided by the nature and context of the research questions (Saunders, Lewis & Thornhill, 2009; Syed & Qureshi, 2017).

3.2.5 Research philosophy adopted in this study, and justification

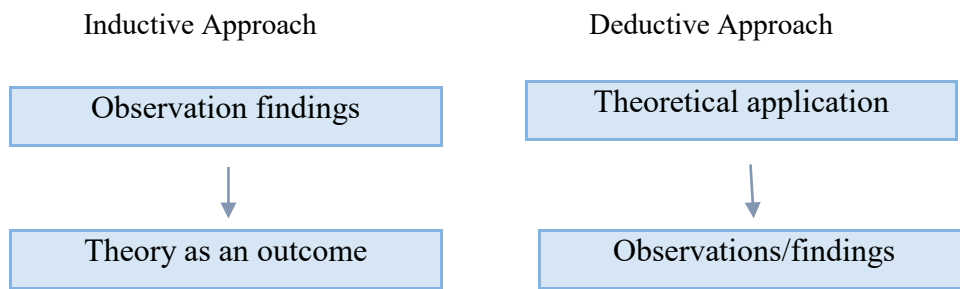
Having examined the various types of research philosophy in the preceding subsections, the pragmatist research philosophy is considered the most suitable for this study. This supports the need to efficiently explore the role of entrepreneurial education in fostering student entrepreneurship among selected students at UKZN. Therefore, in line with the pragmatist contention for the use of mixed methods for solving an identified problem, this study employed both quantitative and qualitative research methods for eliciting and analysing the research data. For instance, (Creswell, 2013 & Amadi, 2021) submits that the pragmatic worldview affords the opportunity to integrate unique judgement, methodologies, and assumptions, which will no less enhance data collection and analysis of results for a more profound research outcome. Similarly, (Johnson and Onwuegbuzie, 2004; Mentzer, 2018) rightly argue that the

incorporation of both numeric and non-numeric data provides a more refined research outlook, which is only attainable with the adoption of the pragmatist research philosophy. Therefore, the pragmatist research philosophy is justified in this study; firstly, because it quantitatively measures participants' responses on the role of entrepreneurial education in fostering student entrepreneurship through self-administered questionnaires; and secondly, it enables qualitative exploration of participant perception on the role of entrepreneurial education in fostering student entrepreneurship through focused group discussions. Combined, the pragmatist research philosophy is employed in this study not only to provide the need for a robust outcome, but more importantly, to allow for the triangulation of research findings.

3.3 Research Approaches

Research approaches raise an important question regarding the design of a piece of research. Specifically, the approach addresses whether the research should be directed by theory testing or theory development. Two types of research approach are common within the management and social sciences discipline: the deductive and inductive research approaches. The goal of the research specifically directs the most appropriate approach to adopt at any given time. The two types of approaches are explained in figure 6 below:

Figure 6: Deductive and inductive research approaches



Source: Adapted from (Wilson 2014; Zalaghi and Khazaei, 2016)

The deductive research approach is inclined towards hypothesis testing and the generalisation of research findings (Minner, Levy & Century, 2010 and Howarth, 2018). Specifically, it aims to create a relationship between two or more constructions (Saunders et al., 2009 and Saunders et al., 2016). The deductive method relies strongly on the contention of the positivist research theory, representing the doctrines of natural science (Bryman & Bell, 2011; Grix, 2018). Therefore, research in this approach depends on an objective examination of current knowledge and hypothetical observation, with the specific goal of formulating research hypotheses, data collection, and in providing appropriate data analysis tools (Sekaran & Bougie, 2009; Sekaran & Bougie, 2016).

The deductive method correctly accepts the usefulness of inferential statistics in order to create an underlying relationship between two or more variables. On the other side, the inductive study method is especially related to the interpretive research philosophy, where qualitative evidence is obtained using the associated qualitative data processing methods (Minner, Levy & Century, 2010; Howarth, 2018). Thus, the inductive research approach is predicated on an in-depth collection of qualitative data, with explicit focus on a small sample of respondents. Inductive research shows a significant departure from the doctrines of deductive research approach, in which the emphasis is on the efficacy of a large sample size (Thomas, 2006 and Howarth, 2018). However, one major weakness of the inductive approach can be conceptualised from its subjective outcomes by introducing researcher's bias. The researcher is painstakingly involved in the interpretation and discussion of the research findings (Saunders *et al.*, 2009 and Saunders et al., 2016).

One noteworthy justification for the integration of these approaches is the need to fulfil the mixed

methods requirement employed in this study. The effectiveness of the deductive research approach is appropriately employed to address the quantitative part of this study in which quantitative data were elicited through a self-administered questionnaire. The inductive research approach, on the other hand, is specifically employed to address the qualitative segment of this study, by collecting qualitative data through focus-group discussions with selected participants at UKZN.

Table 2: The Difference between Deductive and Inductive Paradigms

	Deductive	Inductive
Logic	When the premises are confirmed to be truthful, the conclusion must be truthful.	Known premises are used to produce untested conclusions.
Generalisability	Generalising from the general to the specific.	Generalising from the specific to the general.
Utilisation of data	Data collection is utilised to calculate propositions related to an existing theory.	Data collection is utilised to discover an occurrence, identify patterns and themes, and to develop a conceptual framework.
Theory	Theory verification or falsification	Theory building and generation

Source: Adapted from Saunders et al. (2016)

3.4 Research Design

Research design is interpreted as the overall procedural approach followed in the study to provide adequate answers to the related research questions (Sekaran & Bougie, 2016). Research design encompasses the strategy employed to investigate a specific research problem, by converting the methodology into approaches such as research instruments and research techniques (Creswell, 2011 and Amadi, 2021). Specifically, for different forms of research strategies, including experimentation, case study design, grounded theory, action research, ethnography, survey and archival research (Saunders et al., 2009; Sekaran & Bougie, 2016), no design is more relevant than the other, as the option of design followed in the study is dictated by the quality of the research questions (Sekaran & Bougie, 2016). For the purpose of this study, the survey and case study designs are used. The sections below describe the adopted strategy for this study and their respective justifications.

3.4.1 Survey research design

The chief assumption of survey research design clearly gels with the quantitative method of data gathering, wherein a suitable sample is drawn from a large population of study; and inferences are expressed on the population (Maylor & Blackmon, 2005; Padgett, 2016). In survey research, data collected are subjected to statistical analysis utilising both the inferential and descriptive statistics, in which conclusions and inferences are drawn. As the data produced are obtained by self-directed questionnaires, this also allows for more flexibility over the whole testing process (Maylor & Blackmon, 2005; Saunders et al., 2016). In consideration of the methodology followed by this study, the research design of the survey was used to generate numerical data from the respondents.

3.4.2 Case-study design

A case-study design is a form of research that enables an in-depth understanding of a particular phenomenon within its natural environment (Wilson, 2010; Rashid, Warraich, Sabir & Waseem, 2019). Citing Yin Sekaran and Bougie (2016) define a case study as “a research strategy that involves an empirical investigation of a particular contemporary phenomenon within its real-life context using multiple methods of data collection”. A case study, according to Dudovskiy (2016) seeks to analyse specific subjects within a specific environment, situation, or organisation. A case study goes beyond a quantitative statistical outcome; it is capable of providing an explanation of the processes and results of a phenomenon via widespread observation, reconstruction, and analysis of cases being investigated, by combining both quantitative and qualitative data (Zainal, 2007; Riffe, Lacy, Watson & Fico, 2019).

While there is no question that the importance of the case study design transcends both quantitative and qualitative testing approaches, the efficacy has been claimed to be more profound of qualitative research (Saunders et al., 2016). A single case study focuses on the study of a specific person, unit or agency in their actual life, while a multiple case study design is focused on the study of multiple instances (Sekaren and Bougie, 2016). It is important to remember that the justification for a multi-case design is to decide if the results of one case relate to the findings in other related cases under review. Again, the multiple case study is fittingly justified in this study, as it incorporates both the quantitative and qualitative, and unearths the perception and experiences of selected students at UKZN with regard to their understanding of the role of enterprenuerial education in fostering student enterprenuership.

Table 3: Summary of the Research Philosophies and Approaches

Interpretivism	Positivism
New patterns are discovered through research findings to explain and comprehend phenomena; thereby laying a primary descriptive base that may bring about hypothesis generation.	Associated with theory verification or confirmation through hypothesis testing, where the mode of research is quantitative.
Induction	Deduction
Starts with a specific phenomenon used to derive broad generalisations; its findings may lead to the revision of conclusions, giving rise to a new theory or even the conception of hypotheses.	Draws from theory to attribute properties to certain phenomena, and, as such, is linked with theory verification through hypothesis testing.
Qualitative	Quantitative
Involves a lengthy narrative description of a phenomenon to determine its existence through a loosely structured process that is responsive to a research situation's requirements and nature.	Involves using statistical descriptions to identify causal relationships and facts about phenomena through a structured process. Due to the large size of samples drawn, of which the results may be generalised.

Source: Adapted from: (Fitzgerald & Howcroft 1998; Costa and Lima, 2018)

3.5 Research Choices

Research choices explicate the various methodological approaches employed to solve an identified research problem (Hanson *et al.*, 2005; Creswell, Clark & Petska, 2011; Fico, 2019). These methodological approaches can either be a single (either quantitative or qualitative), or multiple methods (the combination of either qualitative or quantitative techniques), or mixed methods (the combination of quantitative and qualitative techniques). For instance, in a single method, the decision might be to measure some constructs, thereby ascertaining the extent of a relationship between two or more variables quantitatively. Such would be realised through self-administered questionnaires, or by exploring the perception of respondents qualitatively, through

interviews. For multiple methods, the focus can be the utility of two or more quantitative methods such as a questionnaire and researcher-observation for a quantitative study, or a structured interview and a focus group for a qualitative study. For the choice of mixed-methods, the emphasis is on the use of both qualitative and quantitative methods in one study; however, the type of mixed-method to be used depends on the needs of the researcher. Therefore, three types of mixed methods are examined below with a justification for the utility of the most appropriate in this study.

3.5.1 Explanatory mixed method

The explanatory mixed method seeks to clarify quantitative result findings with the qualitative findings (Creswell & Plano Clark, 2011; Riffe, Watson, & Fico, 2019). In this type of mixed method, the quantitative data is first collected; and then qualitative questions are phrased either in the form of an interview or a focus group discussion, with the results of quantitative and qualitative data composed subsequently. Specifically, the rationale for the explanatory mixed method is the enabling of the qualitative findings to explain the quantitative findings (Wilson, 2010; Rashid et al., 2019). Therefore, the explanatory mixed research method seeks to interpret quantitative findings with corresponding qualitative results (Saunders et al., 2009; Saunders *et al.*, 2016).

3.5.2 Exploratory mixed method

In the exploratory mixed method, unlike the explanatory mixed methods, data is collected in two different phases (Wilson, 2010; Rashid et al., 2019). One major difference between the explanatory and exploratory mixed methods is the sequence of data collection. While quantitative data is first collected in the explanatory mixed method, qualitative data is first collected in the exploratory mixed method; and subsequent quantitative data is collected through the survey method (Creswell and Plano Clark, 2011; Sekaren & Bougie, 2016). One important point to note in this mixed-method type is that the findings ensuing from the qualitative data are used as a guide in constructing the self-administered questionnaire that forms the quantitative method strand (Wilson, 2010; Sekaren & Bougie, 2016). Consequently, the exploratory mixed method seeks to explain how quantitative result findings build on the qualitative results.

3.5.3 Convergent parallel/concurrent mixed methods

This is the most straightforward of all the mixed-method types in which data is collected from one specific source (Sekaren & Bougie, 2016). Quantitative and qualitative data are both

gathered for this mixed-method form and evaluated at the same time to provide holistic analysis results (Morgan, 1970 & Morgan, 2019). Such is more appropriate in a study when the focus is to integrate both the numeric and non-numeric data for a fuller understanding of the research problem. The equal emphasis is therefore given to each strand of quantitative and qualitative approaches in the data collection process, and the mixing of research results is explicitly carried out at the stage of analysis of the report (Creswell & Clark, 2017).

Having examined the features of the various types of mixed methods, this study adopted the convergent/concurrent mixed method. The reason for adopting the mixed method, firstly, was the need to gather data from both third-year and postgraduate students in the discipline of management and entrepreneurship. Quantitative data was collected from both groups; and qualitative was collected from postgraduate students to gather information about their entrepreneurial intentions upon graduation. Secondly was the need to apportion the methods equally to each strand of the quantitative and qualitative data. Thirdly, the adoption of the convergent/concurrent mixed method allows for comparison and corroboration of research findings for a fuller understanding of the research problem. To achieve this, findings from the self-administered questionnaires on respondents, and findings from the focus-group discussion involving selected respondents were corroborated, to observe the requirement of either convergence or divergence of results. Compiled, the convergent/concurrent mixed method is justified in this study to aptly connect the strength and weakness of both the quantitative and qualitative results, for a more valid research.

3.6 Study Site

This research was undertaken at the University of KwaZulu-Natal in the three campuses. Westville, Howard College, and Pietermaritzburg. These campuses have students enrolled in various programmes spread across the disciplines of commerce and management.

3.7 Target Population

Population is defined as the overall category of people the researcher attempts to examine (Sekaran and Bougie, 2016). For Saunders *et al.* (2016), a population is construed as a complete group of events or persons from which a sample is drawn. A population consists of a clearly defined group of cases from which a researcher can draw and make generalisations. The target

population, as applicable to this research, is composed of individuals or groups of people that the investigator aims to study (Rashid, Warraich, Sabir, and Waseem, 2019). Particularly, the population for this study are third- and fourth-year students enrolled in the School of Management, Information Technology and Governance, in the discipline of Management and Entrepreneurship at the University of KwaZulu-Natal. The population included students from the Westville, Howard College, and the Pietermaritzburg campus. Particularly, emphasis was specifically on these students who had been exposed to the curricula of entrepreneurship modules during their programme.

3.8 Sample Size

According to Serakan and Bougie (2016), a sample size is important in establishing the representativeness of the chosen sample. The sample for this analysis was determined using the (Krejcie and Morgan, 1970; Valizadeh, Bijani and Abbasi, 2016) statistical tables. The sample was drawn from students who had studied entrepreneurship modules during their programme, and had been exposed to entrepreneurial education for a minimum of a year. The total number of third-year students who had studied the second year entrepreneurship module was 233; and the number of honours students who have undertaken various entrepreneurship modules at the postgrad level were 97, which makes the total number of the population 330. Employing the statistical table and the sample size of all students was 180 based on a 95% level of significance.

3.9 Sampling Techniques

There are two types of sampling methods, known as probability sampling and non-probability sampling (Wilson, 2010; Rashid, Warraich, Sabir, and Waseem, 2019). Second, the probability is a sampling method that causes all the items that form a sample to have an equal chance of being chosen as part of the population (Sekaran & Bougie, 2016). The results arising from these elements was applied to the wider population. In the other hand, with non-probability, not all elements have an equal likelihood of being chosen as representative of the population (Farrokhi & Mahmoudi-Hamidabad, 2012; Sekaran & Bougie, 2016). While the probability sampling techniques are often employed with the survey and experimental research design, the non-probability sampling techniques are connected with case study and action research. (Saunders *et al.*, 2016). While the probability sampling techniques consist of the stratified, systematic, simple random, cluster, and multi-stage sampling techniques, the non-probability sampling techniques

consist of the purposive, convenience, and quota sampling techniques (Creswell & Plano Clark, 2011). The study adopted purposive sampling to collect both quantitative and qualitative data. Justification for the adoption and utility of this sampling strategy is given below.

3.9.1 Sampling strategies appropriate to this study

Purposive sampling is adopted when the information required for a study can only be supplied by certain persons who, in the opinion of the researcher, are in possession of such information (Saunders *et al.*, 2016). For this study, purposive sampling was utilised to elicit both quantitative and qualitative data from the respondents who were in the best position to engender such information.

Questionnaires were distributed to 180 students and 169 were returned. Twenty postgraduate students were then purposively selected for focus-group discussion from the 169 questionnaires that were returned. This selection was firmly influenced by the researcher's confidence that the chosen students were in the best place to have the necessary knowledge, rewarding students in the field of management and entrepreneurship.

3.10 Primary Data-collection Methods

Primary data-processing includes the collection of data from the original sources for the precise purpose of the analysis. For this cause, observation, questionnaires and interviews are common in research; these approaches give the researcher the ability to obtain a wide range of data from the respondents. Primary data-collection decision involves the specification of the method(s) of collecting the necessary data and the unification of the other phases in the analysis process. As a consequence, the researcher's choice of method(s) would depend on the goals of the analysis at hand, the research approach and the research questions. Primary data collection approaches are organized around four core methods of primary data collection: interviews, observation, management of questionnaires and experiments (Sekaran & Bougie, 2016).

Table 4: Merits and Demerits of the Primary Data-collection Tools

Method	Merits	Demerits
Questionnaires	<ul style="list-style-type: none"> • Can establish connection and encourage respondents to participate • Cost-effective when administered to groups of respondents • Nearly 100% response rate ensured • Provides accurate data, making it an effective tool 	<ul style="list-style-type: none"> • Relatively impersonal • Tick-box syndrome • Difficult to design • Poor design may lead to misinterpretation of questions by respondents
Focus groups	<ul style="list-style-type: none"> • Can establish connection and encourage respondents to participate • Can explain the questions if unclear, eliminate doubts, and may add new questions • Can obtain rich data • Respondents' group dynamics may be observed in terms of their attitudes and behaviour • Provides rich data allowing facilitator to gain insight 	<ul style="list-style-type: none"> • Prone to facilitator bias • Some individuals may dominate discussion • Data analysis is time-consuming • Takes personal time • Data yielded is not representative

Source: Adapted from Sekaran, U. & Bougie, R. (2016); Saunders, M., Lewis, P., & Thornhill, A. (2016)

Questionnaires and focus groups were the two-research instrument utilised in this study, with each instrument used to achieve specific goals of the study. Self-administered questionnaires were employed to answer the quantitative research questions, while focus groups were employed to answer the qualitative research questions. Therefore, the integration of these two research instruments neatly corresponds with the mixed methods approach selected for this study.

3.10.1 Self-administered questionnaire

The self-administered questionnaires are designed to elicit relevant and appropriate data from the study's respondents (Serakan & Bougie, 2016). Questionnaires are no doubt the most effective and efficient means of data collection, especially when the utility in a study has to do with the measurement of variables. Questionnaires are essentially designed for the collection of large quantitative data through survey. The contents of the questionnaire were clearly presented so that all the items reflected the research questions and hypotheses. In addition, themes and wordings contained in the questionnaire were presented in a clear language to avoid ambiguity for respondents.

The Likert five rating scale employed in this study was to allow respondents to have the freewill of choosing from a range of alternatives while responding to the questions on the questionnaire. Similarly, the ordering of responses ranged from strongly agree, disagree, neutral, agree, to strongly agree. The questionnaire comprises two sections. While section A captures the respondent's demographic information such as gender, race, age and educational qualification, section B contained questions that reflect the research questions and objectives. In section B, items 1.1-1.8 capture the entrepreneurial education constructs; items 2.1-2.6 comprise questions reflecting entrepreneurial mindset constructs; items 3.1-3.9 are questions on entrepreneurial intentions; and items 4.1-4.5 are questions on entrepreneurial action.

3.10.2 Focus-group discussion

Focus groups involve bringing individuals with similar experiences together to freely discuss a topic being investigated (Serakan & Bougie, 2016). In this case, the researcher could play the role of a moderator who will set the tone for the discussion, and allow the discussants to freely express their views. Members of a focus group are drawn from the research sample with adequate knowledge of the topic of research (Serakan & Bougie, 2016). Focus groups are a group interview that focuses exclusively on a single topic, subject, service or product, facilitating dialogue among participants and exchanging perceptions in an open and tolerant atmosphere.

The aim to use focus groups applies to the ability to examine how individual relationships and group dynamics contribute to the creation of common meanings (Belzile & Oberg 2012; McIlroy-Young, Öberg & Leopold, 2021).

The use of a focus group also enables the researcher to obtain appropriate information in the course of the discussion (Serakan & Bougie, 2016). The researcher plays the role of a moderator as the discussion unfolds. Specifically, for this study, twenty (20) honours students from the sample were selected for focus-group discussion. However, only fifteen (15) were available to participate. Questions posed to respondents during the discussion were those that fittingly captured the research questions, and respondents were not restricted to respond in a particular way: rather, efforts were made to ensure that they adequately expressed themselves as the discussion unfolded. The group discussion lasted for 30 minutes. The discussion was audio-taped, and notes were taken to assist in instances where responses were not clear during the transcription process.

This section of the study focused specifically on honours students who were at the time pursuing their degree in the discipline of entrepreneurship and management. The researcher decided to interview honours students to discover their plans after completing their degree; to obtain an in-depth understanding of what motivated them to study for an entrepreneurship-related degree (small business management); and to establish their plans upon completing their studies. The research used NVivo (version 11) to evaluate the qualitative data gathered. To accomplish or achieve the research goals, the researcher built research questions from the objectives, which were then told by nineteen (19) focus group questions. The study consisted of two (2) focus groups: one from Pietermaritzburg campus, and another from Westville Campus of UKZN. Students were contacted to request their voluntary participation in the study. The Howard college campus did not consist of students who have undertaken various entrepreneurship modules at the postgrad level, as a result no focus groups were conducted at this campus, since the focus group were intended at the honours students.

3.11 Pilot Testing

The design of the questionnaire has an effect on the response rate and the reliability and quality of the data gathered by the researcher, along with the response rate; both can be maximized by: (Saunders, et al., 2016).

- A good and proper design of individual questions
- A clear and attractive visual presentation
- Pilot testing
- A carefully planned delivery and a return of completed questionnaires.

A pilot test is a study that is carried out as a predecessor to the main survey, in order to attempt to increase a questionnaire's degree of reliability and validity (Wilson, 2016 and Rashid et al., 2019). Pilot testing according (Tichapondwa, 2013 and Mahlke et al., 2019) is a tool that is commonly used to assess and improve the viability and practicability, the validity and reliability of the analysis and the suitability of the research instrument. The pilot test used for the study selected a group of respondents who were part of the population but were not selected for the sample: those were third-year students who had not learned any entrepreneurship modules. It was a small group of six members at the UKZN School of Business, Information Technology and Governance on the Westville campus. The pilot sample was asked to give feedback with regard to the wording of scales used therein, design, length, and the overall appearance of the survey instrument. The input and the improvements made to the questionnaire were recorded in order to complete the final questionnaire by the sample selected by the researcher.

3.12 Measurement

The entrepreneurship education construct was measured with a self-developed questionnaire. The items on this construct were designed with inferences from the literature. While for entrepreneurship intention, the six scale items were developed by Liñán & Chen, 2009; Ahmed et al., 2020). Cronbach's alpha was employed to measure the entrepreneurship intention constructs. Similarly, the construct of an entrepreneurial mindset was measured by the scale of entrepreneurial mindset defined by Davis et al (2016). The entrepreneurial action scale was measured by the scale built by Bolton & Lane, 2012; Popov, Varga, Jelić, and Dinić, 2019). Responses to the scale items for each construct is based on the five-point Likert scale, with the responses being strongly disagree, disagree, neutral, strongly agree, and agree.

3.13 Data-collection Procedure

A gate-keeper's letter was applied for and granted by the registrar of UKZN, allowing the researcher to conduct the study among selected students of the university. Thereafter, permission was also applied for by the researcher to the HSSREC, prior to embarking on the fieldwork: corresponding ethical approval was granted. The questionnaires were personally administered by the researcher to the respondents during lecture time; and respondents were properly briefed before the questionnaires were administered. The confidentiality page was attached to the questionnaire, implying that inclusion in the researcher was voluntary, that the respondents could withdraw of their own free will, without negative consequences. Consent forms were presented to respondents to sign before participation, indicating their willingness to be part of the study.

Items contained in the questionnaire were designed in simple and clear language to allow ease of understanding by all research participants. The questionnaire was personally administered to respondents by the researcher, and, in some cases, it was retrieved immediately after being filled in. Responses were received from 169 with a response rate of 93%. This high response rate was achieved through the lecturer's support, who advise that the data should be collected during the examinations time. The students were asked to participate in the study immediately after they left their examination venues and were encouraged by the lecturers to support the researchers study. Data was also collected during the revision classes, since the majority of students attend these classes before they write their examinations. The researcher had three assistants who helped and encouraged students to complete the questionnaires.

For the focus-group discussion, the researcher purposively identified selected participants who were thoroughly briefed on the aim of the study. Each member of the group was encouraged to contribute to the discussion, for a more robust research finding. The focus-group discussion was conducted at a strategic location where the impact of noise and other distraction could be controlled, subsequently enriching the quality of the audio during transcription. Questions posed to selected respondents during the discussion were in line with the aim of the study; participants were persuaded to be as open as possible to the set of questions posed to them. The discussion was adequately audio-taped, and some follow-up note-taking was undertaken for accuracy.

3.14 Methods of data analysis

Two methods of data-analysis technique were employed to analyse the quantitative data. First, descriptive statistics were utilised to analyse respondent's demographic variables as contained in Section A of the questionnaire. The descriptive statistics employed are simple percentage and frequency distribution (Farrokhi & Mahmoudi-Hamidabad, 2012). Respondents' demographic profiles including age, gender, educational qualification, and race were analysed with simple percentages and frequency distribution. Thereafter, data was further presented in tables and charts for easy comprehension of trends and occurrences. On the other hand, inferential statistics were equally employed to test relationships between variables in the study. To this end, the Pearson Product Moment Correlation (PPMC) was used to assess the relationship between entrepreneurial education and student entrepreneurship using the Social Sciences Statistical Package (SPSS) version 21. SPSS is a data collection and research software intended to perform predictive data analysis, including descriptive statistics such as frequencies, maps, lists and tables, and complex multivariate and inferential statistical methods such as analysis of variance (ANOVA), cluster analysis, categorical data analysis, and factor analysis (Serakan & Bougie, 2016).

Qualitative data were also analyzed using content analysis. Specifically, content review was used to define and explain the significance of frequent themes and how they aim to resolve study concerns. To make meaning of the lengthy transcribed data, data was reduced and presented in the form of anecdotes; inferences were drawn to make conclusions. However, to identify relevant themes, the NVivo (ver.11) qualitative analytical software was employed to identify and structure recurring themes from the focus groups transcripts.

3.15 Rationale of using research questions

The research question is an unambiguous statement that clearly articulates the phenomenon the researcher plan to investigate (Kivunja, 2016). The research questions were best suited for the nature of the study because research questions narrow the focus and provide a structure to the research. The research questions that were designed for this study were broad and open to unexpected findings. With more in-depth research, the research questions were fine-tuned and more questions were added to improve the nature of the research. According to (Kivunja, 2016) this is mostly common in qualitative research as it works with 'emerging design,' which means

that it is not possible to plan the research in detail at the start, as the researchers have to be responsive to what they find as the research proceeds. Observations combined with the participant's descriptions of "how the participant lived the experience that is being described determine the types of questions that must be asked to enrich the researchers understanding of the phenomenon (Korstjens and Moser, 2017).

This study adopted the convergent/concurrent mixed method. This is the most straightforward of all the mixed-method types in which data is collected from one specific source (Sekaran & Bougie, 2016). By using mixed methods technique in the gathering and analysis of data in others to ascertain the connection between the variables, it does adopt in its entirety all the assumptions of explanatory approach, but hypotheses were neither formulated nor tested as required by the explanatory research (Sekaran & Bougie, 2016). However, constructive research questions were asked on the basis of the gap discovered through the review of literature leading to the formulation of a contextual structure to answer the observed questions arising from the gap observed.

Entrepreneurial education was the independent variable and the presumed cause in the study. Entrepreneurial mindset, entrepreneurial intention and entrepreneurial action were the dependent variables and the presumed effect of the independent variable. The values of the dependent variables are also dependent upon the independent variable. Nevertheless, the linkage between the independent variable; entrepreneurial education and the dependent variables; entrepreneurial mindset, entrepreneurial intentions and entrepreneurial action were highlighted through descriptive and inferential statistics.

Inferential statistics were equally employed to test relationships between variables in the study. The Pearson Product Moment Correlation (PPMC) was used to assess the relationship between entrepreneurial education and student entrepreneurship using the Social Sciences Statistical Package (SPSS) version 21. According to (Mourougan and Sethuraman, 2017), a research hypothesis is a statement created by researchers when they speculate upon the outcome of an experiment. Every true experimental design must have this statement at the core of its structure, as the ultimate aim of any experiment. The hypothesis is generated by a number of means, and it is usually the result of a process of inductive reasoning where observations lead to the formation of a theory. Hypothesis is a tentative explanation that accounts for a set of facts and can be tested by further investigation (Kross and Giust, 2019). The authors further postulate that,

the hypothesis should be a statements expressing the relation between two or more measurable variables. It should carry clear implications for testing the stated relations. However; this study did not formulate hypothesis, instead the research questions were considered to be more suitable for the research at hand.

3.16 Descriptive Statistics

The descriptive analysis for this research was computed to evaluate the demographic characteristics of four subjects – ethnicity, gender, age and level of education. This study was also used to describe the characteristics of the respondents. According to Saunders et al. (2016), this data counts the number of events in each variable category. Studies performed by (Mack, 2010; Castleberry & Nolen, 2018) have shown that descriptive research has the potential to turn raw data into a form that would be easy to understand. The author further claimed that the descriptive analysis makes it easy to measure standard deviations, averages, mean, frequency distributions and percentage distributions, summarizing the results for the study at hand.

Frequencies generally refer to the number of occurrences that multiple subcategories of a given phenomenon exist, where the percentage and the average percentage of their occurrence can be easily measured. Frequencies may be visually displayed as bar charts, pie charts or histograms that help to explain the details (Serakan & Bougie, 2016). Frequencies in this study were displayed within frequency tables in the following chapter of this study, to establish a sample profile.

Standard deviation, according to Serakan and Bougie (2016), is also a metric of dispersion for interval data and ratio scaled data, which provides an indicator of distributional spread or data variability. Standard deviation is a widely used dispersion measure that is the square root of the variance. The mean and standard deviations are known to be the most common descriptive statistics for the distribution and ratio of the scaled results. As a consequence of the following statistical principles, the standard deviation in conjunction with the mean is known to be a useful tool in the normal distribution:

- All observations fall within the three standard deviations of the average or of the mean.
- Over 90% of the observations fall within the two standard deviations of the mean.

- More than half of the observations are within one standard deviation of the average or the mean.

The **mean**, also known as the average, measures the central trend which presents a simple picture of the data without flooding one with each of the observations in the data collection. The average or average is typically determined by obtaining the sum of all the observations divided by the cumulative number of all the individual observations (Sekaran & Bougie, 2016). The mean in this study was shown in various frequency distribution tables. **Standard deviation** makes it easier to interpret data by doing away with all variance squares, and depicting deviations in their prime units, according to Cooper & Emory, 1995; Schreiber et al., 2018). The standard deviation in this study was articulated in the form of frequency distribution tables.

3.17 Data quality control

Reliability and validity are the two main data-control techniques employed in this study. First, reliability explains the replicability and consistency of research findings over repeated use of a particular research instrument (Copper & Schindler, 2008; Schreiber et al., 2018). Similarly, the reliability of a research instrument helps or shows the degree to which a given measuring instrument is non-biased (Sekaran & Bougie, 2016). The internal consistency of the test questionnaire used in this analysis was calculated by the Cronbach alpha coefficient. The alpha coefficient of Cronbach is a calculation of the reliability coefficient dependent on the degree to which the objects on the instrument are positively related (Serakan & Bougie, 2016). The lower the coefficient is to 1, the higher the accuracy of the statements in the questionnaire.

The Cronbach alpha coefficient test was used to test the reliability of the research instrument in this analysis (see Chapter Four for the reliability coefficient). There are several contentions as to the most appropriate reliability coefficient that can be accepted as the appropriate value for reliability. For instance, (Pallant, 2011 and Mohajan, 2017) proposed that a reliability coefficient greater than 0.7 is reliable; while (Konting, 2004; Alia, Amatb & Karic, 2019) submitted that a reliability coefficient higher than 0.6 is adjudged reliable. For the purpose of this study, this supposition was adopted. Therefore, a reliability coefficient greater than 0.6 is considered reliable for the research instrument employed in this study.

Validity describes the level to which the measuring instrument measures what it wants to measure (Copper & Schindler, 2008; Pallant, 2011; Mohajan, 2017). For the purpose of this study, the content validity was employed to validate the questions contained in the questionnaire. Content validity explains that all the items contained in the questionnaire must reflect the constructs being measured (Pallant, 2011; Mohajan, 2017). The content validity was ensured by expert check. For example, the supervisor of the researcher and other specialists in the area of management and entrepreneurship studies have been approached; and a few changes have been made to the questionnaire to ensure that the contents are relevant. Similarly, the content of the questionnaire was ethically approved by the Human Social Science Research Ethics Committee (approval number: HSS/0957/018M) at the UKZN through suggestions for modification of sections of the questionnaire when it was submitted for ethical clearance.

3.18 Inferential Statistics

According to Sekaran and Bougie (2016), inferential statistics help to create relationships between variables and draw further conclusions from them. Inferential statistics help to draw inferences about a large population, based on data derived from a fraction of the population. Here are the inferential statistical analyses that were part of the data interpretation of this study:

Cronbach's alpha coefficient is a metric used to calculate the reliability of answers to questions that are combined as a scale to measure a certain definition. It consists of an alpha coefficient with a value between 0 and 1. The values of 0.7 and above suggest that the questions combined in the scale calculate the same thing (Saunders et al., 2016).

Pearson's product moment correlation coefficient is used to calculate the frequency of the relationship between two variables comprising numerical data. When data is derived from a survey, the sample should have been chosen randomly and the data should be normally distributed (Saunders *et al.*, 2016). The correlation coefficients (r values) were interpreted to indicate the associations among subscales within the dimensions used to determine the perceived risk.

3.19 Analysing Qualitative Data

Qualitative data is essentially meaningful; aside from this, data shows great diversity. Data includes not only counts and steps, but also any form of human expression – audio, written or visual – symbolism, cultural objects or behavior (Gibbs, 2018). This may encompass any of the following:

- Focus-group and individual interviews and their transcripts
- Email, web pages, advertisement-print, film, or TV
- Video recordings of TV broadcasts
- Video diaries; videos of interviews and focus groups
- Online discussion-group conversation
- Online social networking pages\online news libraries

Text is one of the most popular types of qualitative evidence used in research, and may be either a report from interviews, field notes from ethnographic work or some other kind of paper. Mostly, video and audio data are translated into text for study. Simply because text is a simple way to document and can be dealt with using the 'office' strategies described above. When it comes to the fluent, rapid and accurate examination of qualitative data, most people still find it easiest when dealing with textual data (Gibbs, 2018).

3.19.1 NVivo (Version 11)

According to Phillips and Lu (2018), NVivo (QSR International) is a software developed by QSR International for qualitative data analysis, including narrative analysis and material analysis. This type of program provides a workspace for researchers to manage, archive, evaluate and query unstructured data, including images, text, video, audio, and other forms of data. NVivo allows users to complete several qualitative research functions on the site, including the exploration and production of relationships between data, the processing and filtering of raw data, categories of data analysis results, the assignment and description of data and the compilation of reports (Phillips and Lu, 2018).

3.19.2 Qualitative data interpretation

In NVivo (version 11) for qualitative data: the thematic analysis highlights patterns; it pinpoints, and examines recurring themes from the data which was presented. The themes are visualised with the aid of ‘models’ and ‘arrows’ showing the linkages to the main themes. According to (Braun & Clark, 2006; Braun, Clarke & Weate, 2016), there are six basic steps followed when using a thematic analysis:

- I. Getting familiar with the data
- II. Generating the first set of codes,
- III. Searching for themes in the coded data
- IV. Reviewing the themes
- V. Redefining the themes and naming the themes
- VI. Producing the final report.

The researcher constructed research questions from research objectives, which then informed nineteen (19) focus-group questions. There were two (2) focus groups: one at PMB campus, another at Westville Campus, the University of KwaZulu-Natal (UKZN). Focus groups were only conducted on these two campuses, simply because there were no fourth year (honours) students at Howard College. Data was collected from the two groups at different times, the information gathered from PMB and Westville campus being analysed separately. This was achieved to compare both pieces of information, in reaching a suitable conclusion.

Each question was analysed and the response from each focus group was visualized with a model generated through the NVivo 11 software. NVivo uses the word “child” to denote the link or the relationships between two nodes, or between a question and a response. All responses were analysed under each itemised theme: *entrepreneurial education, entrepreneurial mindset, entrepreneurial intention, and entrepreneurial action*.

3.19.3 Trustworthiness in qualitative data

Dependability substitutes reliability and asserts that findings are distinctive to a specific time and place, and the consistency of explanations are present across the data (Younes, 2020). To ensure dependability this study comprised of respondents with similar characteristics, being the youth

between the ages of 18 to 35 years, therefore the responses were very much similar and consistent. This is evident on the data Figures representing the data analysis obtained from this study. Credibility refers to the truth of the data or the participant views and the interpretation and representation of them by the researcher (Polit & Beck, 2016). To ensure credibility, the researcher was responsible for selecting the sample, and monitoring the study to ensure that the correct respondents were the interviewed and that all questions were answered. In addition, the same researcher collected data in the initial study was also the lead researcher on this project and was also responsible of analysing data obtained from the respondents. To ensure dependability, coherent themes were reported across transcripts. To ensure transferability, the researcher implemented the content analysis procedures to show all the steps that were followed when the study was conducted so that other researchers can adapt the same plan. Entrepreneurship has been a major concern for both academics and decision makers, considering its important role in economic and social development. Therefore, individuals not involved in this study and readers can associate the results with their own experiences. To ensure confirmability, qualitative data obtained from the interviews, was analysed using the NVivo software. Figures representing the analysis of the qualitative data through NVivo were also presented for clarity. The study also guaranteed integrity, by ensuring confidentiality and anonymity with the data set collected.

3.19.4 Content analysis

Content analysis as a research methodology used to transform replicable and true meanings of data into their meaning (Krippendorff 1989; Bengtsson, 2016). Studies conducted by (Struwig & Stead, 2013; Nkonki & Ntlabathi, 2016), revealed that content analysis involves the collection and analysis of transcripts, while (Neuman, 2011; Wong & Neuman, 2019) suggests that content analysis may involve numeric and non-numeric assessments of text. The authors further state that, content analysis is theoretically one of the most significant research methods in the field of social science and is indigenous to communication research.

Studies by (Hsieh & Shannon, 2005; Twycross & Shields, 2008; Moldavska & Welo, 2017) agree that content analysis is normally used by researchers to assess narrative texts of qualitative nature, the content here means communications which could be in words, codes and themes. Content analysis also assesses the context and content of the messages being studied (Ritchie, Spencer, & O'Connor, 2003; Selvi, 2019). According to (Struwig & Stead, 2013; Nkonki & Ntlabathi, 2016), its major concept is to compress many words from the transcript into less

content classifications. For this current study, non-numerical data was coded and grouped around themes, observed patterns. Consequently, NVivo 11 was used in organising the data, while content analysis was adopted in interpreting the content of the texts.

The first step of the content analysis was the aggregation of primary data from the respondents, and the raw data was then extracted and interpreted using content analysis solely of some pre-arranged dimension. The reason for collecting this data from the honours students, was to discover the role of entrepreneurial education in fostering student entrepreneurship and also to discover the student's entrepreneurial intentions after completing their studies. The study used NVivo (version 11) to analyse the obtained qualitative data. To fulfil and meet the objectives of the study, the researcher constructed research questions from the objectives, which then informed nineteen (19) focus group questions. The questions were structured in a way that the study will achieve what it seek to find from these respondents.

The second process followed in analysing the qualitative data collected from the answers obtained from the 19 questions. Thirdly, the data was obtained from the focus group, pseudonyms were used in capturing the interview responses using NVivo 11. In the fourth stage the transcript of responses from open-ended questions were extricated and arranged thematically in line with the pre-arranged questions and other emerging sub-themes were noted and extricated. In the previous section of this chapter, the presentation and illustration of themes and sub-themes that emerged in the fifth stage were presented. Finally, figures generated by the NVivo 11 software were coded and presented pictorially to assist in clarifying the findings. The qualitative data was evaluated using content analysis and the outcome added to the suggestions offered from the research.

3.20 Ethical Issues

Ethical considerations were duly followed in this study. Firstly, the research was conducted in compliance with the UKZN ethical guidelines, wherein an ethical clearance letter was granted certifying the study fit and worthy (HSS/0957/018M). Secondly, a gatekeeper's letter was issued by UKZN granting permission for the conducting of the study. Among other ethical concerns, the research was conducted in a manner that accorded respect to the respondents and that ensured their privacy. Their responses were kept confidential. For instance, the consent of the participants was sought prior to the commencement of the study. To achieve such, participants were all

presented with a consent form wherein they could indicate their willingness to participate in this study. The research participants were also briefed on their right to voluntarily discontinue with the research should they at any time feel the need to do so. The respondents' private information was strictly avoided to safeguard the interest and privacy of respondents. The researcher ensured that all information supplied for the purpose of this study was strictly utilised for the same. Finally, upon conclusion of this research, the data gathered was deposited with the supervisor and will be stored in his office for a term of five years, during which it will be discarded.

3.21 Conclusion

This chapter comprehensively explained the methodology and research design employed to obtain the data in this study. It explored the various research philosophies and designs, while revealing their strengths and weaknesses. Careful deliberations and reviews were attempted before employing the most appropriate to this study. Similarly, the chapter afforded the research design and methods adopted in this study, offering explicit justification. The mixed-method research design was extended to the respective mixed-method types, with equal focus on quantitative and qualitative results. Non-probability sampling methods have been used to gather data for this analysis. The sample size was calculated by a well-founded judgment-sampling method. In designing the self-administered questionnaire and focus group discussion, the research questions were given full consideration. Thus, other constructs of the questionnaire were adopted from a validated instrument with standard and accepted psychometric properties.

CHAPTER FOUR: DATA ANALYSIS AND PRESENTATION OF RESULTS

4.1 Introduction

This chapter presents the results of data analysis connecting to responses from the students at the University of KwaZulu-Natal, who completed the questionnaires; and from those who participated in the focus-groups interviews discussion. The research findings of the study are presented in accordance with the order of research objectives set out in the study. Descriptive data is portrayed in a form of frequency distributions, pie charts and bar graphs; however, inferential data was portrayed in cross-tabulations as analysed by the statistical software package. Quantitative data that was obtained from the survey undertaken was analysed using IBM SPSS Statistics Version 21. NVivo (version 11) software was used in analysing qualitative data that was collected from the focus groups. The overall intention was to derive sufficient and rigorous statistical assessment of data collected from the respondents.

4.2 Survey Response Rate

The total sample size was 180. Responses were received from 169: a response rate of 93%. 42% of the respondents were male and 58% were female. It was found that 72% of the respondents were pursuing an undergraduate bachelor's degree, while the remaining 28% were enrolled in a postgraduate honours degree. The focus group consisted of fifteen (15) participants.

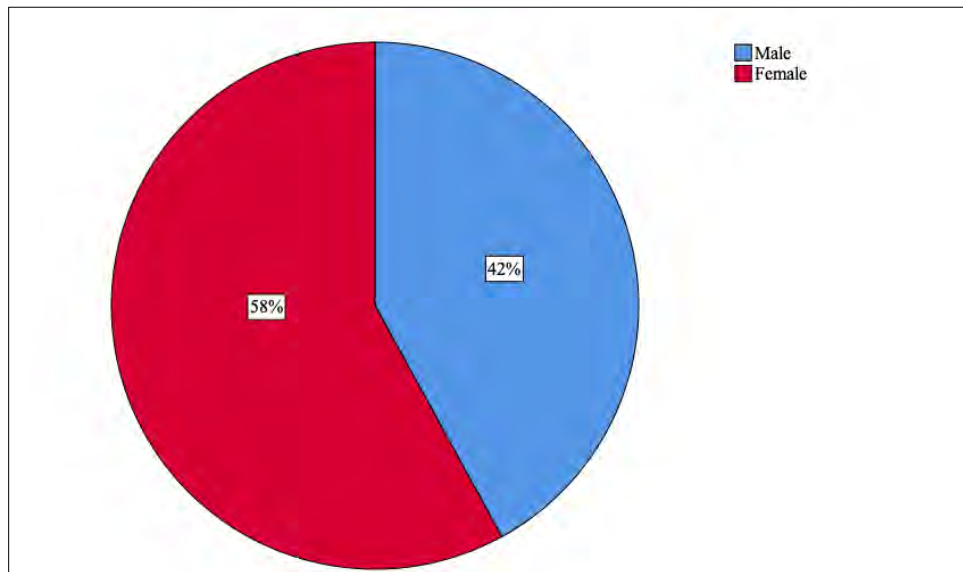
4.3 Demographic Profile of Research Sample

This sub-section of the chapter discusses the demographic data of the sampled respondents: the reporting of these data is solely for statistical purposes. It should be noted that the respondents identified and included in this study were UKZN students located across two of the institution's campuses: the Westville and Pietermaritzburg campuses. The findings on the demographic configuration of the sample are presented below.

4.3.1 Gender

The actual percentage of participants on the basis of their gender is shown on the pie chart below. A total of 58% of the participants in this study were female while the male respondents represented 42% of the total sample responses. Therefore, most of the responses to this study came from the female population as demonstrated on figure 7 below.

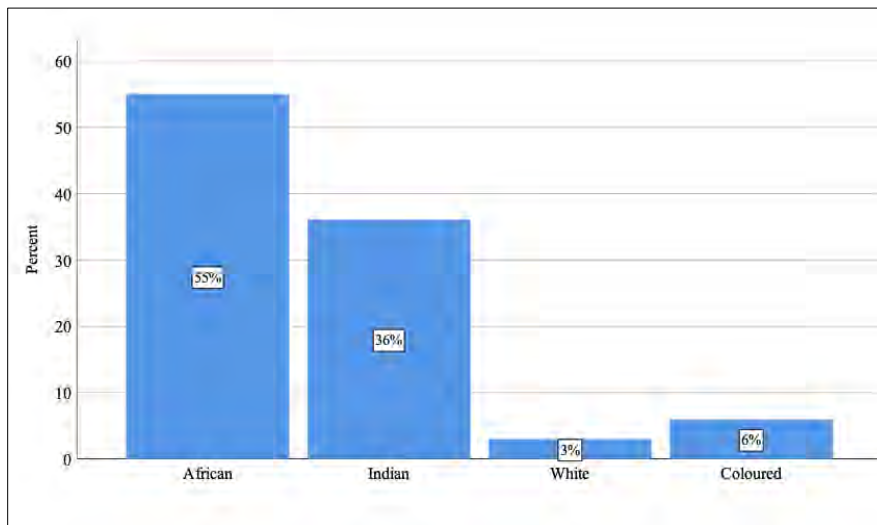
Figure 7: Gender distribution



4.3.2 Race

Figure 8 below presents the respondents demographic according to racial diversity. The respondents with the highest percentage of 55% was the Africans, followed by Indians (36%), coloureds (6%) and minority were the white respondents representing only 3% of the population.

Figure 8: Racial profile



4.3.3 Age

The frequency distribution presented in table 5 below indicates the variety of age groups for respondents. The highest percentage was 85.2% representing students between the ages of 21 to 25 years, followed by 5.9% representing students that were under 21 years. The result further showed that 5.3% of the students were between the ages of 26 to 30 years, 2.4% were between 31 and 35 years and 1.2% were over 35 years. Hence, the majority of the participants were in the youngest age bracket at the university.

Table 5: Respondents' Age Frequency Distribution

		Frequency	Per cent	Cumulative Per cent
Valid	Under 21 years	10	5.9	5.9
	21–25 years	144	85.2	91.1
	26–30 years	9	5.3	96.4
	31–35 years	4	2.4	98.8
	Over 35 years	2	1.2	100.0
	Total	169	100.0	

4.3.4 Education

The degree of respondents were broken down into two namely Bachelor's degree and Honours Degree. Out of the 169 participants, 72% of the students were pursuing their undergraduate bachelor's degree and 28% were enrolled in the postgraduate honours degree.

4.4.1 Entrepreneurial education (EE)

Table 6: One-Sample Statistics for Entrepreneurial Education

	N	Mean	Std. Deviation	Std. Error Mean
Entrepreneurial education studied engaged me with business concepts	169	3.91	.762	.059
Curriculum studied highly relates to entrepreneurship theory	169	3.93	.683	.053
Entrepreneurial education has taught me innovation and creative thinking	169	3.99	.783	.060
Entrepreneurial education has provided me with knowledge to start a business	169	4.02	.935	.072
I have practical details needed to start a business	169	3.98	.942	.072
Entrepreneurial education has contributed to my attitude of becoming an entrepreneur	169	3.95	.833	.064
Made use of entrepreneurship workshops and incubators provided by the university	168	3.48	1.153	.089
Entrepreneurial education has improved my competencies to innovate	168	3.92	.865	.067

Table 7: Student T-Test for Entrepreneurial Education

	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Entrepreneurial education studied engaged me with business concepts	15.537	168	.000	.911	.80	1.03
Curriculum studied highly relates to entrepreneurship theory	17.805	168	.000	.935	.83	1.04
Entrepreneurial education has taught me innovation and creative thinking	16.505	168	.000	.994	.88	1.11
Entrepreneurial education has provided me with knowledge to start a business	14.147	168	.000	1.018	.88	1.16
I have practical details needed to start a business	13.561	168	.000	.982	.84	1.13
Entrepreneurial education has contributed to my attitude of becoming an entrepreneur	14.778	168	.000	.947	.82	1.07
Made use of entrepreneurship workshops and incubators provided by the university	5.421	167	.000	.482	.31	.66
Entrepreneurial education has improved my competencies to innovate	13.742	167	.000	.917	.78	1.05

EE1: *Entrepreneurial education studied engaged me with business concepts.*

Findings reveal that there was significant agreement that entrepreneurial education studies engaged the respondents with various business concepts, with results indicated as (M=3.91, SD=0.762), $t(168) = 15.537$, $p < .0005$).

EE2: *Curriculum studied highly relates to entrepreneurship theory.*

It is revealed that there was significant agreement that the curriculum studied by the respondents was highly related to entrepreneurship theory, with the yielded results being (M=3.93, SD=0.683), $t(168) = 17.805$, $p < .0005$).

EE3: *Entrepreneurial education has taught me innovation and creative thinking.*

There was significant agreement that entrepreneurial education had taught the respondents to be innovative and think creatively, with results indicating (M=3.99, SD=0.783), $t(168) = 16.505$, $p < .0005$).

EE4: *Entrepreneurial education has provided me with knowledge to start a business.*

Findings reveal that there was significant agreement that entrepreneurial education had equipped the research participants with knowledge to starting a business. Results were indicated as (M=4.02, SD=0.935), $t(168) = 14.147$, $p < .0005$).

EE5: *I have practical skills needed to start a business.*

It was found that there was significant agreement that respondents possessed the practical skills required to start a business, with results indicated as (M=3.98, SD=0.942), $t(168) = 13.561$, $p < .0005$).

EE6: *Entrepreneurial education has contributed to my attitude of becoming an entrepreneur.*

It was revealed that there was significant agreement that entrepreneurial education had contributed to the respondents' attitude of becoming entrepreneurs, with the yielded results being (M=3.95, SD=0.833), $t(168) = 14.778$, $p < .0005$).

EE7: *During their programme, the students indicated that they made use of entrepreneurship workshops and incubators that were provided by the university.*

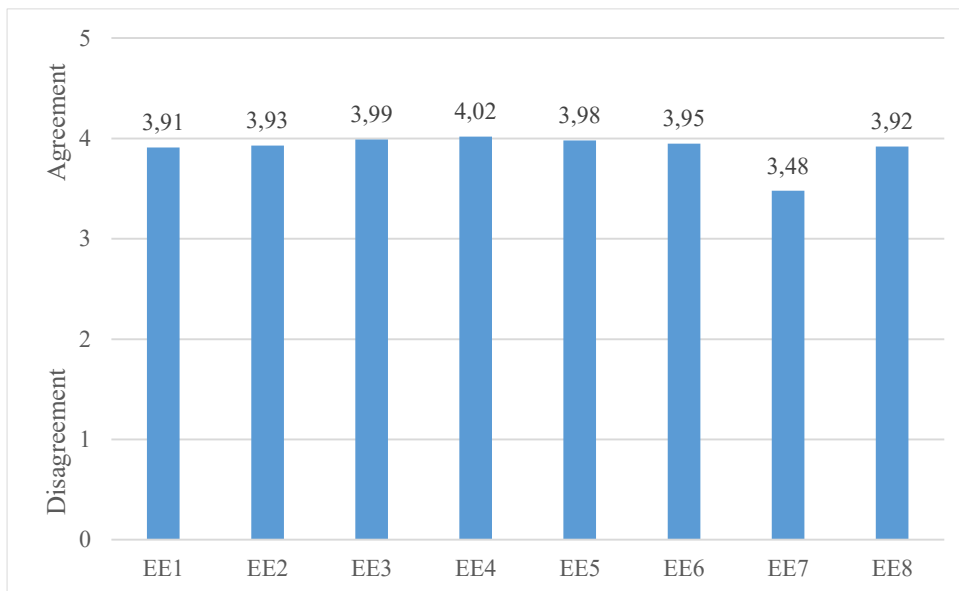
There was significant agreement that the respondents had made use of entrepreneurship workshops and incubators provided by the university, with results indicating (M=3.48, SD=1.153), $t(167) = 5.421, p < .0005$).

EE8: *Entrepreneurial education has improved my competencies to innovate.*

Findings reveal that there was significant agreement that entrepreneurial education had improved the research participants' competencies to innovate. Results were indicated as (M=3.92, SD=0.865), $t(167) = 13.742, p < .0005$).

The yielded mean scores for the scale items within the entrepreneurial education sub-construct are summarised in Figure 9 below.

Figure 9: Mean scores of entrepreneurial education



4.4.2 Entrepreneurial mindset (EM)

Table 8: One-Sample Statistics for Entrepreneurial Mindset

	N	Mean	Std. Deviation	Std. Error Mean
Being an entrepreneur implies more advantage than disadvantage to me	169	3.92	.859	.066
A career as an entrepreneur is attractive to me	169	3.89	.903	.069
Being an entrepreneur will help me achieve my life goals	169	3.92	.866	.067
I now realise that to start a business and keep it working, would be easy for me	169	3.78	.929	.071
I would rather be an entrepreneur than an employee	169	3.90	1.021	.079
Entrepreneurship module has taught me to see all things and failure as an opportunity to improve	169	3.93	.773	.059

Table 9: Students T-test for Entrepreneurial Mindset

	T	Df	Test Value = 3			
			Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Being an entrepreneur implies more advantage than disadvantage to me	13.968	168	.000	.923	.79	1.05
A career as an entrepreneur is attractive to me	12.784	168	.000	.888	.75	1.02
Being an entrepreneur will help me achieve my life goals	13.856	168	.000	.923	.79	1.05

I now realise that to start a business and keep it working, would be easy for me	10.933	168	.000	.781	.64	.92
I would rather be an entrepreneur than an employee	11.447	168	.000	.899	.74	1.05
Entrepreneurship module has taught me to see all things and failure as an opportunity to improve	15.731	168	.000	.935	.82	1.05

EM1: *Being an entrepreneur implies more advantage than disadvantage to me.*

Findings reveal that there was significant agreement that being entrepreneurs implied a greater advantage than disadvantage to the respondents, with results indicated as (M=3.92, SD=0.859), $t(168) = 13.968, p < .0005$).

EM2: *A career as an entrepreneur is attractive to me.*

It was revealed that there was significant agreement that a career in entrepreneurship was attractive to the respondents, with the yielded results being (M=3.89, SD=0.903), $t(168) = 12.784, p < .0005$).

EM3: *Being an entrepreneur will help me achieve my life goals.*

There was significant agreement that being an entrepreneur would assist the research participants achieve their life goals, with results indicating (M=3.92, SD=0.866), $t(168) = 13.856, p < .0005$).

EM4: *I now realise that to start a business and keep it working, would be easy for me.*

Findings revealed that there was significant agreement that the respondents now realised that starting a business and keeping it working was easy for them. Results were indicated as (M=3.78, SD=0.929), $t(168) = 10.933, p < .0005$).

EM5: *I would rather be an entrepreneur than an employee.*

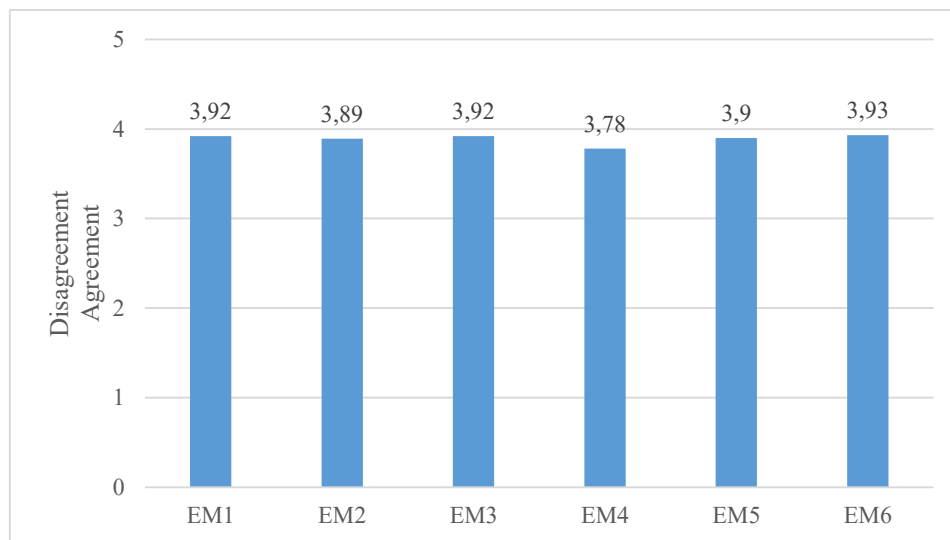
It was found that there was significant agreement that respondents would prefer being entrepreneurs than employees, with results indicated as (M=3.90, SD=1.021), $t(168) = 11.447, p < .0005$).

EM6: *The entrepreneurship module has trained me to see all things, including failure, as an opportunity for growth.*

It was revealed that there was significant agreement that the entrepreneurship module had trained the respondents to view all things, including failure as opportunities to improve, with the yielded results being (M=3.93, SD=0.773), $t(168) = 15.731, p < .0005$).

The yielded mean scores for the scale items within the entrepreneurial mindset sub-construct are shown in Figure 10 below.

Figure 10: Mean scores of entrepreneurial mindset



4.4.3 Entrepreneurial intention (EI)

Table 10: One-Sample Statistics for Entrepreneurial Intentions

	N	Mean	Std. Deviation	Std. Error Mean
I had strong entrepreneurial intentions before starting my degree	169	3.56	1.090	.084
My professional goal is to become an entrepreneur	169	3.66	.975	.075
I will now make an effort to start and run my business	169	3.80	1.038	.080
I have thought seriously about starting my business after completing my studies	169	3.96	.957	.074
I have no doubts about starting my business in the future	169	3.87	1.003	.077
I am ready to do anything to become an entrepreneur	169	3.76	1.019	.078
I intend to start my business after graduating	169	3.72	1.013	.078
Entrepreneurial education has contributed towards my interest in starting a business	169	3.93	.942	.072
My intention of starting a business will be to create jobs	169	3.94	1.033	.079

Table 11: Students T-test for Entrepreneurial Intentions

One-Sample Test						
Test Value = 3						
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
I had Strong intention to start my business before starting degree	6.632	168	.000	.556	.39	.72
My professional goal is to become an entrepreneur	8.834	168	.000	.663	.51	.81

I will now make an effort to start and run my business	10.000	168	.000	.799	.64	.96
I have thought seriously about starting my business after completing my studies	13.105	168	.000	.964	.82	1.11
I have no doubts about starting my business in the future	11.270	168	.000	.870	.72	1.02
I am ready to do anything to become an entrepreneur	9.736	168	.000	.763	.61	.92
I intend to start my business after graduating	9.189	168	.000	.716	.56	.87
Entrepreneurial education has contributed towards my interest in starting a business	12.817	168	.000	.929	.79	1.07
My intention of starting a business will be to create jobs	11.836	168	.000	.941	.78	1.10

EI1: *I had strong entrepreneurial intentions before starting my degree.*

Findings revealed that there was significant agreement that the respondents had possessed a strong intention to start their own businesses prior to embarking on their degree, with results indicated as (M=3.56, SD=1.090), $t(168) = 6.632, p < .0005$).

EI2: *My professional goal is to become an entrepreneur.*

It was revealed that there was significant agreement that the research participants' professional goal was to become entrepreneurs, with the yielded results being (M=3.66, SD=0.975), $t(168) = 8.834, p < .0005$).

EI3: *I will now make an effort to start and run my business.*

There was significant agreement that the respondents were willing to make start and run their own businesses, with results indicating (M=3.99, SD=1.038), $t(168) = 10.000, p < .0005$).

EI4: *I have thought seriously about starting my business after completing my studies.*

Findings revealed that there was significant agreement that respondents had thought seriously about starting their own businesses after completing their studies. Results were indicated as (M=3.96, SD=0.957), $t(168) = 13.105$, $p < .0005$).

EI5: *I have no doubts about starting my business in the future.*

It was found that there was significant agreement that respondents had no doubts in starting their businesses in the future, with results indicated as (M=3.87, SD=1.003), $t(168) = 11.270$, $p < .0005$).

EI6: *I am ready to do anything necessary to become an entrepreneur.*

It was revealed that there was significant agreement that the research participants were ready to do anything necessary to become entrepreneurs, with the yielded results being (M=3.76, SD=1.019), $t(168) = 9.736$, $p < .0005$).

EI7: *I intend to start my business after graduating.*

There was significant agreement that the respondents intended to start their businesses upon graduating, with results indicating (M=3.72, SD=1.013), $t(168) = 9.189$, $p < .0005$).

EI8: *Entrepreneurial education has contributed towards my interest in starting a business.*

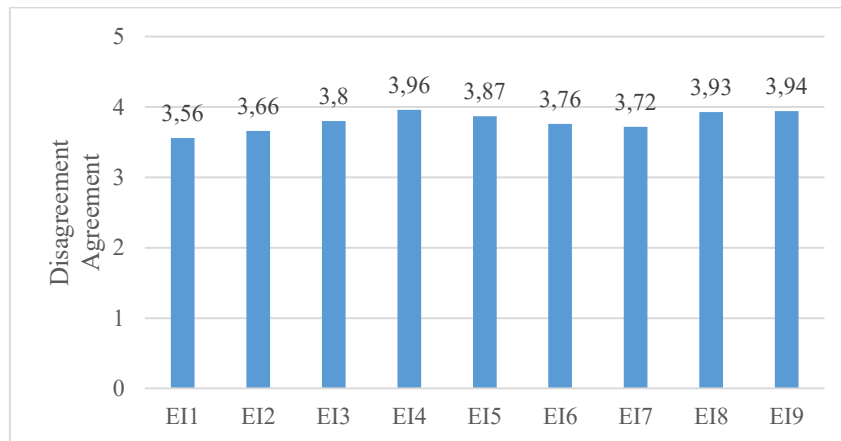
Findings revealed that there was significant agreement that entrepreneurial education had contributed towards the research participants' interest in starting a business. Results were indicated as (M=3.93, SD=0.942), $t(168) = 12.817$, $p < .0005$).

EI9: *My intention of starting a business will be to create jobs.*

It was revealed that there was significant agreement that the respondents' intention of starting a business would be to create jobs, with the yielded results being (M=3.95, SD=1.033), $t(168) = 11.836$, $p < .0005$).

Figure 11 below presents the yielded mean scores for the scale items within the entrepreneurial intention sub-construct.

Figure 11: Mean scores of entrepreneurial intention



4.4.4 Entrepreneurial action (EA)

Table 12: One Sample Statistics for Entrepreneurial Action

	N	Mean	Std. Deviation	Std. Error Mean
I know of the risks involved with being an entrepreneur, and I am willing to start a career in entrepreneurship	168	3.67	.852	.066
I will not look for a job but will start my business	168	2.62	1.223	.094
I am already running a business	168	2.18	1.220	.094
I have started saving up for my business	168	2.15	1.163	.090
I already have a business plan for my business	168	2.21	1.209	.093

Table 13: Students T-test for Entrepreneurial Action

	t	df	Sig. (2-tailed)	Test Value = 3		
				Mean Difference	95% Confidence Interval of the Difference	
				Lower	Upper	
I know of the risks involved with being an entrepreneur, and I am willing to start a career in entrepreneurship	10.138	167	.000	.667	.54	.80
I will not look for a job but will start my business	-4.039	167	.000	-.381	-.57	-.19
I am already running a business	-8.726	167	.000	-.821	-1.01	-.64
I have started saving up for my business	-9.418	167	.000	-.845	-1.02	-.67
I already have a business plan for my business	-8.420	167	.000	-.786	-.97	-.60

EA1: *I know of the risks involved with being an entrepreneur, and I am willing to start a career in entrepreneurship.*

Findings revealed that there was significant agreement that the respondents were aware of the risks involved with being an entrepreneur, and they were willing to start a career in entrepreneurship. Results were indicated as (M=3.67, SD=0.852), $t(167) = 10.138, p < .0005$.

EA2: *I will not look for a job but will start my business.*

It was revealed that there was significant disagreement that respondents would not look for employment, but would embark on starting their businesses, with the yielded results being (M=2.62, SD=1.223), $t(167) = -4.039, p < .0005$.

EA3: *I am already running a business.*

There was significant disagreement that research participants were already running their own businesses, with results indicating (M=2.18, SD=1.220), $t(167) = -8.726, p < .0005$.

EA4: *I have started saving up for my business.*

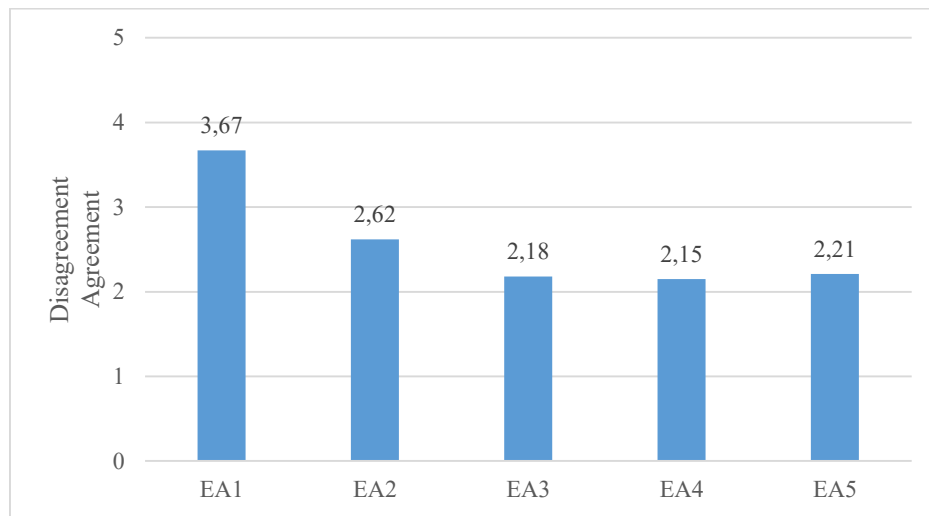
Findings revealed that there was significant disagreement that the respondents had begun saving up for their business. Results were indicated as (M=2.15, SD=1.163), $t(167) = -9.418, p < .0005$.

EA5: *I already have a business plan for my business.*

It was found that there was significant disagreement that respondents had already drawn up business plans for their business, with results indicated as (M=2.21, SD=1.2019), $t(167) = -8.420, p < .0005$.

Figure 12 below presents the yielded mean scores for the scale items within the entrepreneurial intention sub-construct.

Figure 12: Mean scores of entrepreneurial action



4.5 Reliability Testing

Reliability testing was conducted on the data-collection tool to guarantee satisfactory inter-item consistency to solidify the survey instrument’s ability to obtain data and measure the scales as represented in the conceptual framework. As such, Cronbach’s alpha coefficient test was used as a measure of instrument reliability and construct validity, and to further test the reliability of data in the pilot study that was conducted prior to the main survey. According to Sekaran and Bougie (2016), it is adjudged that a coefficient value no less than 0.7 is deemed to be acceptable. The reliability assessment conducted on the scale items used in this study, EE, EM, EI and EA, yielded the results displayed in Table 14 below.

Table 14: Reliability Assessment

Reliability Statistics		
Construct	Cronbach's Alpha	N of Items
Entrepreneurial Education	.774	8
Entrepreneurial Mindset	.749	6
Entrepreneurial Intention	.894	9
Entrepreneurial Action	.869	5

The results obtained indicated that the survey instrument had the required reliability. The yielded coefficients were all above the recommended 0.7 mark, rendering the survey of prerequisite inter-item consistency, and having reliability of data.

4.6 Pearson’s Product Moment Correlation Coefficient

The Pearson’s product moment correlation coefficient (PPMC) was used to assess strength, direction, and significance of relationships among the three sub-constructs (EE, EM and EI) hypothesised to have an influence on EA. Table 15 below presents the correlation matrix among the scale variables measured in this study.

Table 15: Pearson’s Correlation Matrix

Correlations				
		Entrepreneurial Education	Entrepreneurial Mindset	Entrepreneurial Intention
Entrepreneurial Education	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	169		
Entrepreneurial Mindset	Pearson Correlation	.463**	1	
	Sig. (2-tailed)	.000		
	N	169	169	
Entrepreneurial Intention	Pearson Correlation	.486**	.707**	1
	Sig. (2-tailed)	.000	.000	
	N	169	169	169
**. Correlation is significant at the 0.01 level (2-tailed).				

From Table 15 above, it is clear that all the bivariate associations were significant. Results show that there was a positive correlation between EE and EM ($r = .463$, $n = 169$, $p < .001$), indicating high levels of entrepreneurial education associated with high levels of entrepreneurial mindset. Results also showed a significant moderate, positive correlation between EE and EI ($r = .486$, $n = 169$, $p < .001$), indicating high levels of entrepreneurial education associated with high levels of entrepreneurial intention. Additionally, it was found that there was also a positive correlation between EM and EI ($r = .707$, $n = 169$, $p < .001$), showing high levels of entrepreneurial mindset associated with high levels of entrepreneurial intention.

Table 16: Pearson Correlation between EI and EA

Correlations			
		Entrepreneurial Intention	Entrepreneurial Action
Entrepreneurial Intention	Pearson Correlation	1	.388**
	Sig. (2-tailed)		.000
	N	169	168
Entrepreneurial Action	Pearson Correlation	.388**	1
	Sig. (2-tailed)	.000	
	N	168	168
**. Correlation is significant at the 0.01 level (2-tailed).			

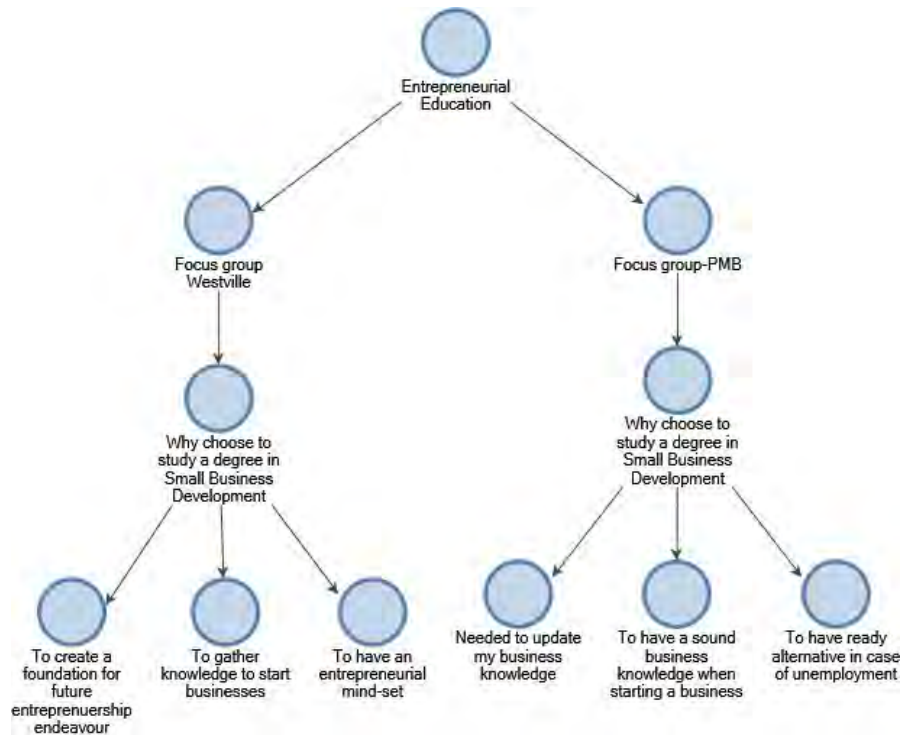
Table 16 above shows a significant yet small, positive correlation between EI and EA, $r = .388$, $n = 168$, $p < .001$, indicating high levels of entrepreneurial intention associated with high levels of entrepreneurial action.

4.7 Assessment of qualitative data

To analyse all qualitative data obtained from different sections of the questionnaire of the focus group, content analysis were adopted using the NVivo software. Figures representing the analysis of the qualitative data through NVivo were presented for clarity. In the next section, discourse on the analysis of information collected in all the sections of the questionnaire are presented.

4.7.1 Entrepreneurial Education

Figure 13: Model showing responses to the question on why respondents chose to study a degree in small business development

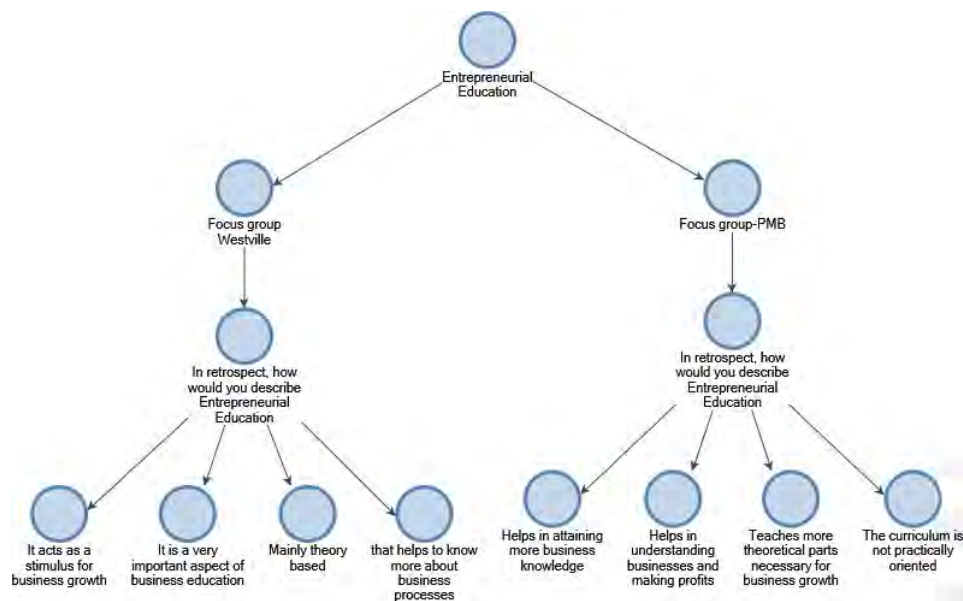


This question was directed to those students who were studying small business development at that time.

Responses: The respondents revealed that ‘choosing to study a degree in Small business development’ would help to *create a foundation for future entrepreneurship endeavour - to gather knowledge to start businesses and to have an entrepreneurial mindset*. And added that studying a small business development degree *was needed to update my business knowledge; to have a ready alternative in case of unemployment and to have a sound business knowledge when starting a business*.

The relationships between the nodes are symmetrical, because the respondents mirror one another’s responses. Almost all the respondents affirmed that they studied a small business development degree to gain business knowledge for their future entrepreneurial endeavours.

Figure 14: Model showing responses to the question on how the respondents described entrepreneurial education

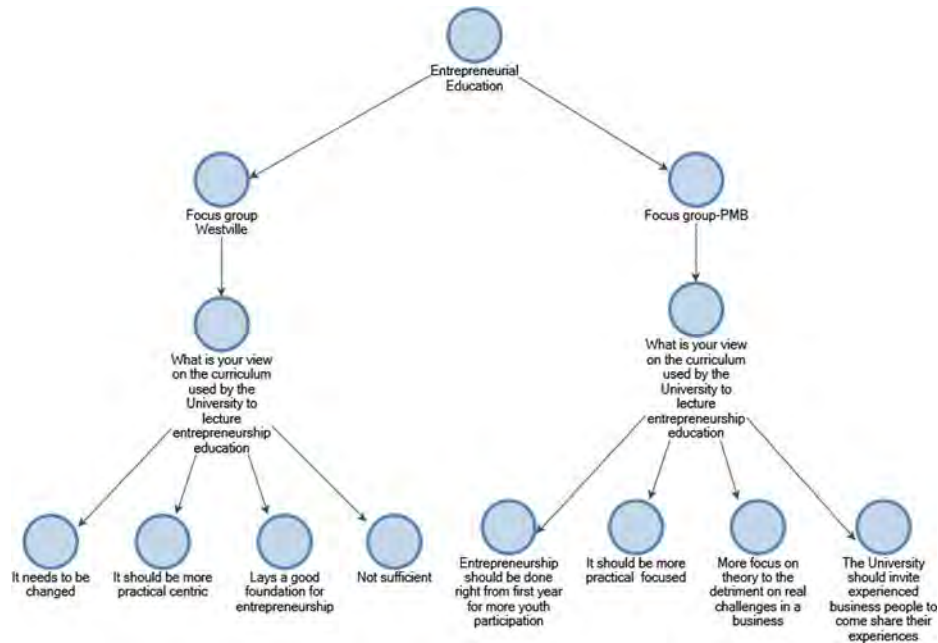


Responses:

The respondents described entrepreneurial education as education *that helps to know more about business processes; it acts as a stimulus for business growth; it is a very important aspect of education and it is mainly theory -based.* The respondents further described entrepreneurial education as education that *helps in attaining more business knowledge; the curriculum is not practically oriented; it also helps in understanding businesses and making profits; and teaches more the theoretical parts necessary for business growth.*

The connectors reveal a symmetrical relationship, as the responses of the respondents reflect one another. The respondents indicated that entrepreneurial education is important because it is more about obtaining and understanding business knowledge. The respondents further stated that entrepreneurial education taught at the university is more theoretically-based than practical. They identified that as a disadvantage.

Figure 15: Model showing responses to the question on the opinion of respondents on the curriculum used by the university to lecture entrepreneurship education

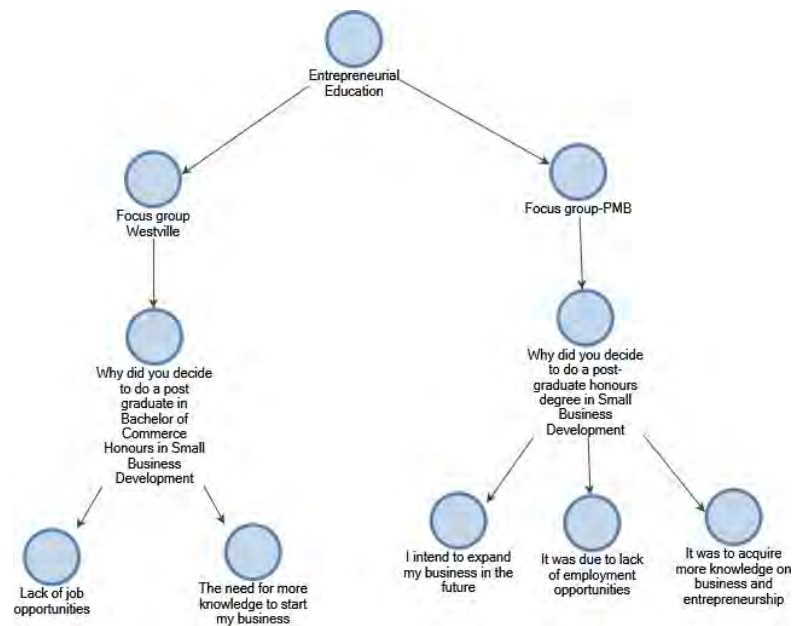


Response:

The respondents views on the curriculum used in teaching entrepreneurship education at the university was that *it lays a good foundation for entrepreneurship, but it should be more practical; it needs to be changed*. The respondents further stated that *entrepreneurship should be done right from first year for more student participation*. Another view is that there should be *more focus on theory to the detriment on real life challenges in a business; it should be more practical focused; the university should invite experienced business people to come share their experiences; and there is too much repetition that contained same content in the curriculum since first year*.

The connectors revealed a symmetrical relationship: almost all the respondents affirmed that the curriculum used by the university to lecture entrepreneurship education was highly theoretical, rather than practical, and the respondents believed that it should be more practical. The respondents further highlighted that there was too much repetition, as first-year content was repeated; the curriculum should be changed.

Figure 16: Model showing responses to the question on why respondents decided on doing a postgraduate degree in bachelor of commerce (honours) in small business development



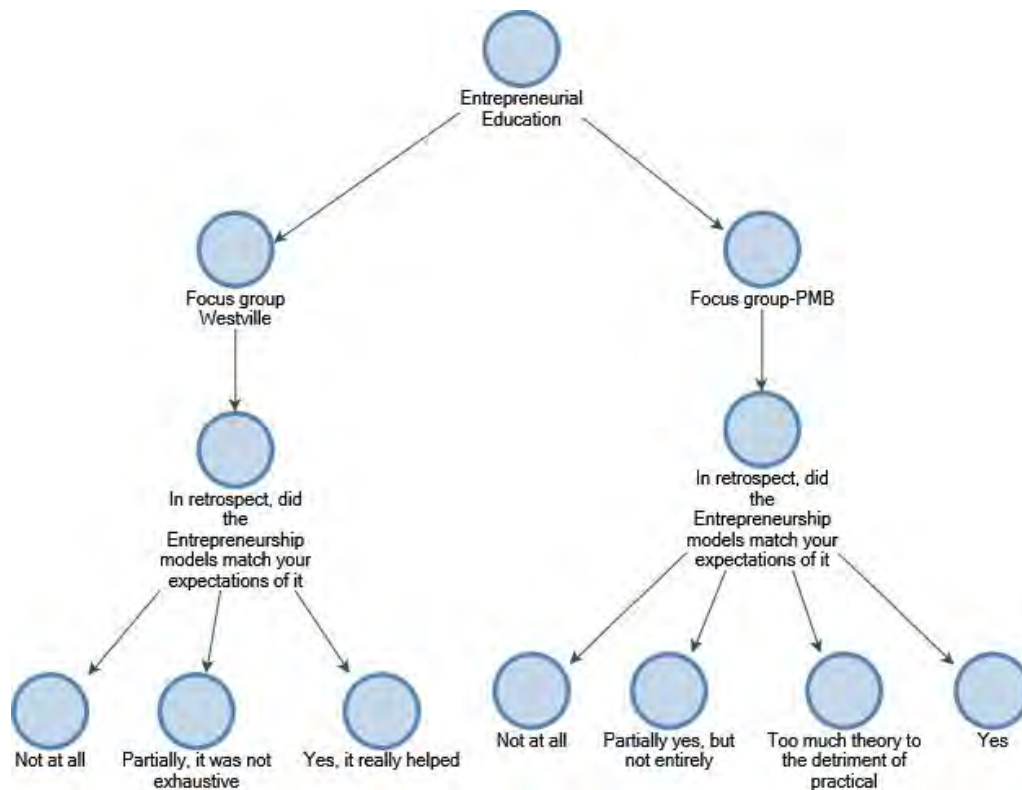
This question was directed to those students who were currently doing their final year in small business development.

Responses:

In their responses, respondents indicated that *lack of job opportunities was the main reason to do a post graduate honours in small business development; the need for more knowledge to start my business; I intend to expand my business in the future; it was to acquire more knowledge on business and entrepreneurship.*

The relationships between the nodes are symmetrical, and the majority of the respondents revealed that it was owing to the lack of job opportunities that they decided to do their postgraduate degree in small business development. However, there were respondents who indicated that they required more business knowledge to start their own business.

Figure 17: Model showing responses to the question on whether the entrepreneurship models taught at the university matched their expectations



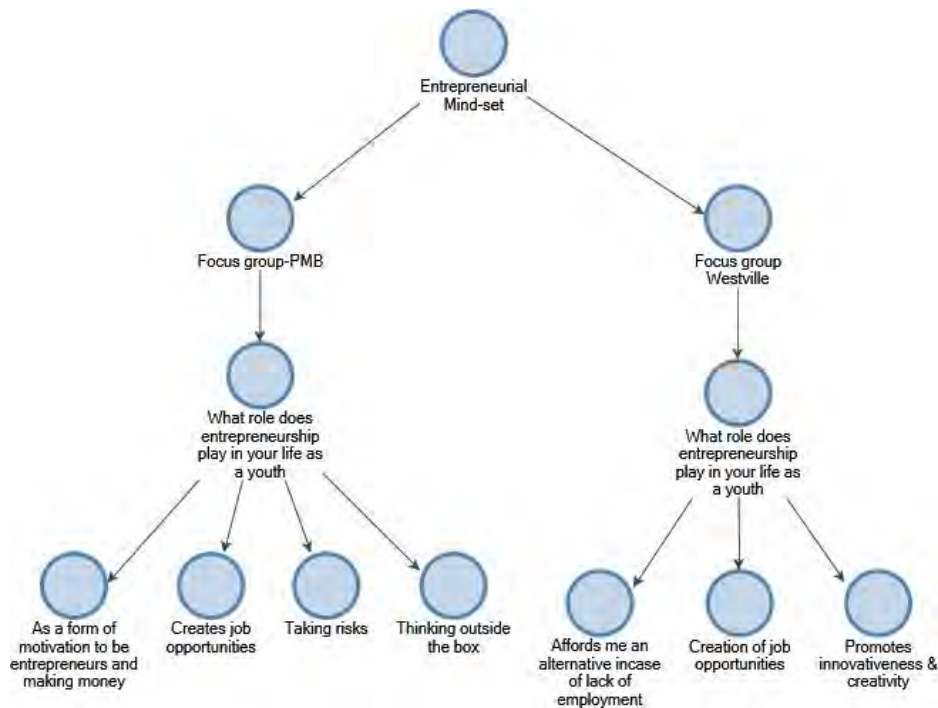
Responses:

The respondents stated *not at all*; *partially, it was not exhaustive*; *yes, it really helped*; *partially yes, but not entirely*, *too much theory to the detriment of the practical*, while other respondent stated *yes it did*.

The connectors revealed an associative relationship, where the responses from the respondents varied. The *not at all* statement implies that some respondents were not satisfied with how the entrepreneurship models were taught at the university. On the other hand, some respondents indicated that their expectations of how the entrepreneurship models were taught were *partially* met. The remaining students affirmed that their expectations were met completely.

4.7.2. Students entrepreneurial Mindset

Figure 18: Model showing responses to the question on the role that entrepreneurship plays in the life of the youth

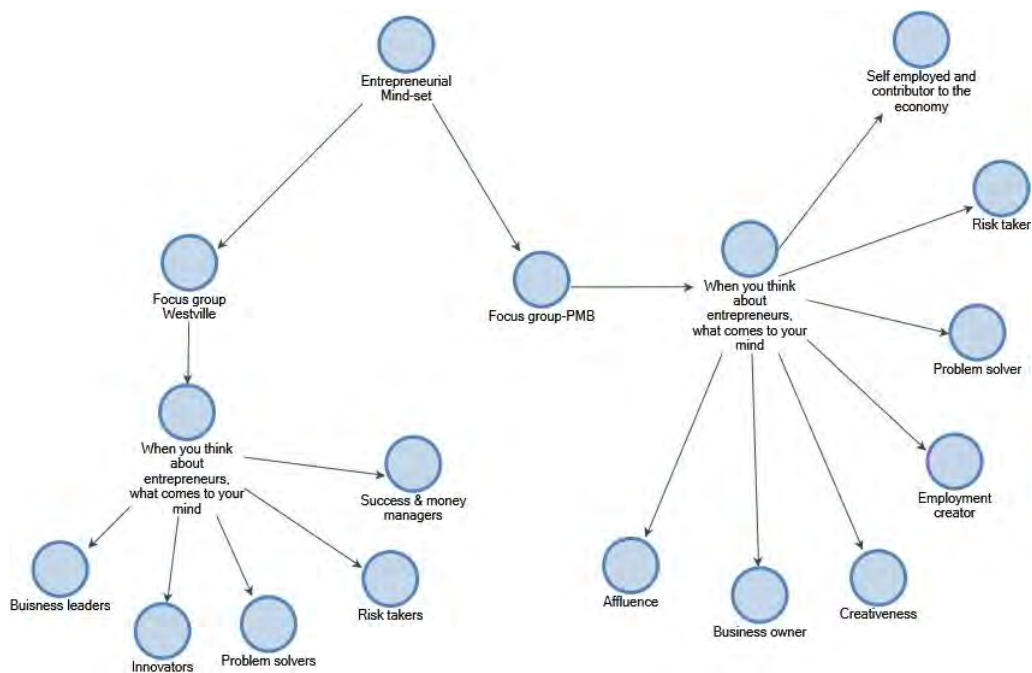


Responses:

The respondent's states that entrepreneurship plays several roles: *affords me an alternative form of employment in case of lack of employment; it creates job opportunities and promotes innovativeness and creativity. It creates job opportunities; is a form of motivation to be entrepreneurs and making money, taking risks, and thinking outside the box.*

The relationships between the nodes are symmetrical. There seems to be a common sentiment shared among the respondents that entrepreneurship creates job opportunities, and affords the student an alternative by being self-employed should they not be able to find employment. The respondents also added that entrepreneurship promotes innovation and creativity, and serves as a motivation to students to become entrepreneurs.

Figure 19: Model showing responses on what comes to respondents' minds when they think of entrepreneurs

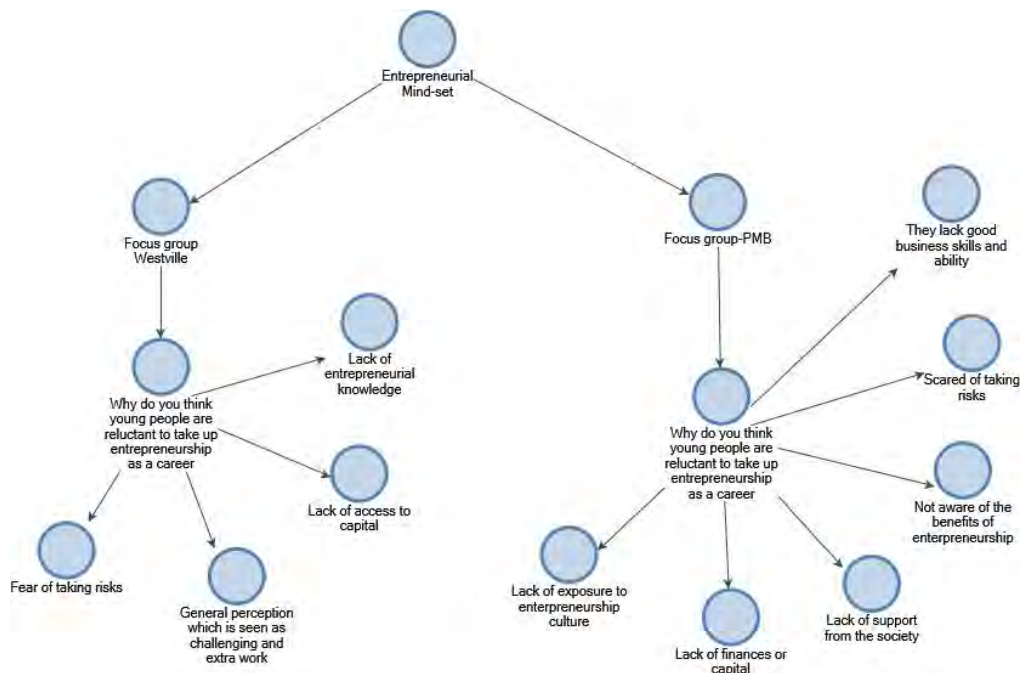


Responses:

The respondents states that when they think about entrepreneurs they think about *business leaders, innovators, problem solvers, risk takers, success, and money; affluence, business owner, creativeness, employment creator and self-employer.*

The connectors revealed a symmetrical relationship between the nodes, in which the respondents' responses mirror one another. Virtually all the respondents mentioned similar characteristics of an entrepreneur – the actual characteristics that studies have identified.

Figure 20: Model showing responses of respondents on why the youth are reluctant to take up entrepreneurship as a career

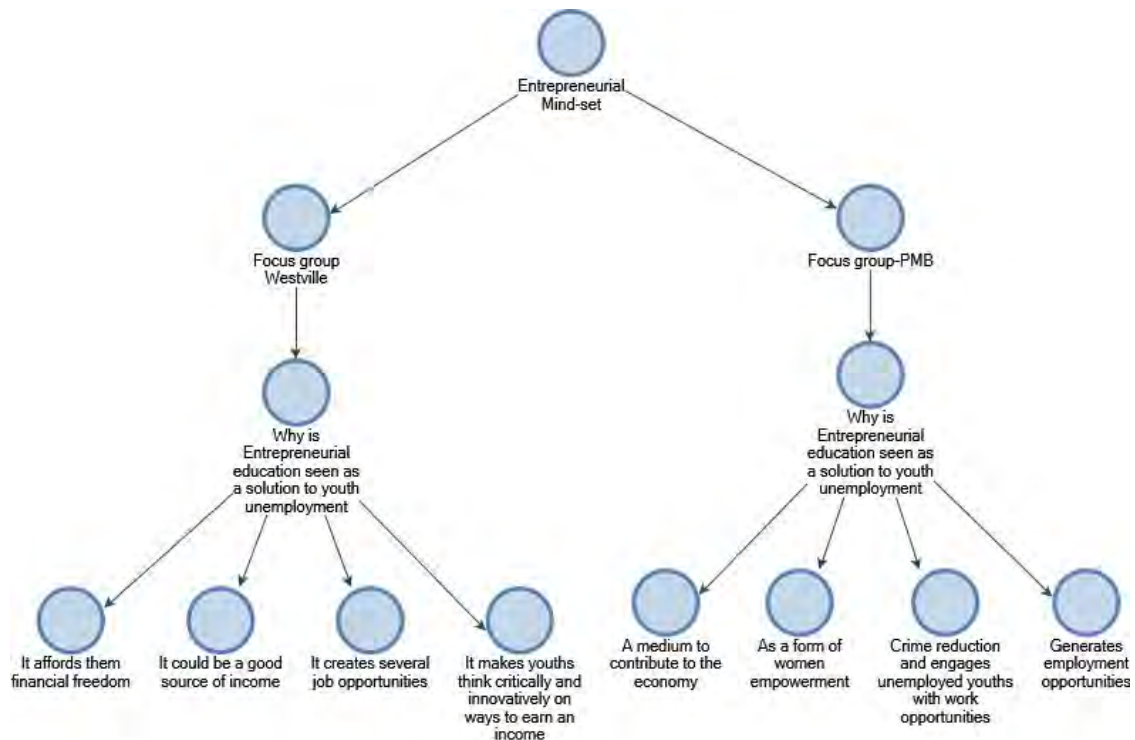


Responses:

The respondents revealed that *the fear of taking risks; the general perception that entrepreneurship is seen as challenging and extra work; a lack of access to capital; lack of entrepreneurial knowledge*, are some of the reasons that make the youth reluctant to taking up entrepreneurship as a career. Respondent’s further stated that *lack of exposure to entrepreneurship to culture; lack of finance or capital; lack of support from society; not aware of the benefits of entrepreneurship; afraid of taking risks, and a lack of good business skills and ability*.

The relationships between the connectors are symmetrical, in which the majority of the respondents shared the same view about why the youth was reluctant to develop a career in entrepreneurship. Most respondents felt that it was owing to the fear of taking risks, a lack of business knowledge, and the lack of capital that is needed to start a business.

Figure 21: Model showing responses by respondents on why entrepreneurship is seen as a solution to unemployment



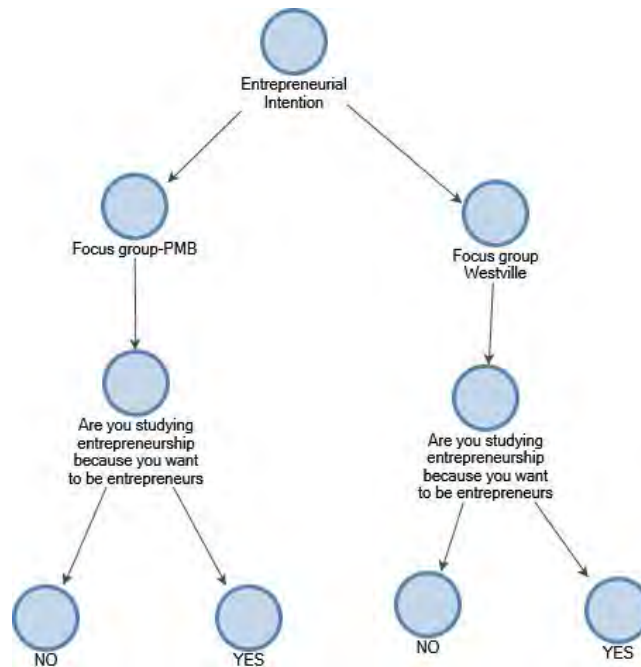
Responses:

The respondents believe that entrepreneurship is seen as a solution to youth unemployment because *it could be a good source of income; it affords me financial freedom; it creates several job opportunities; and it makes young people think critically and innovatively about ways to earn an income. It is a medium of contributing to the economy; a form of women empowerment; reduces crime; offers unemployed youths work opportunities; and it generates employment opportunities.*

The connectors revealed a symmetrical relationship between the nodes, in which the respondents’ responses reflect one another’s. Most of the respondents commented on how entrepreneurship contributes positively to the economy by creating more job opportunities for the youth, which is why entrepreneurship is seen as a solution to youth unemployment.

4.7.3 Students entrepreneurial Intention

Figure 22: Model showing responses of respondents on whether they were studying entrepreneurship because they wanted to become entrepreneurs

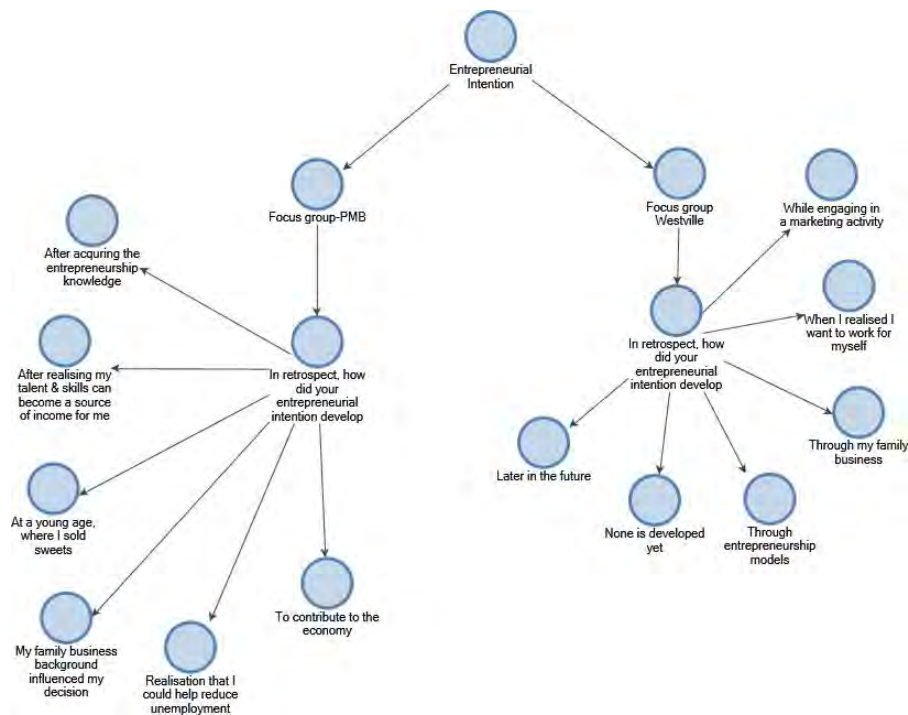


Responses:

When asked if the respondents are studying entrepreneurship because they want to become entrepreneurs. The majority of the respondents replied *no*, and very few respondents answered *yes*.

The relationships between the connectors are symmetrical, as this was a closed question. Respondents were clear in the statement of their perspectives, even though they were asked to elaborate on their responses. The respondents who answered *no* indicated that they were not studying entrepreneurship because they wanted to be entrepreneurs; but there is a high possibility that they could embark on entrepreneurship in the future. Some indicated that they did not chose to study entrepreneurship modules, but they were part of their programme. The remaining respondents who replied *yes* were confident that they wanted to be entrepreneurs, and some of them were already entrepreneurs.

Figure 23: Model showing responses from respondents about how their entrepreneurial intentions developed

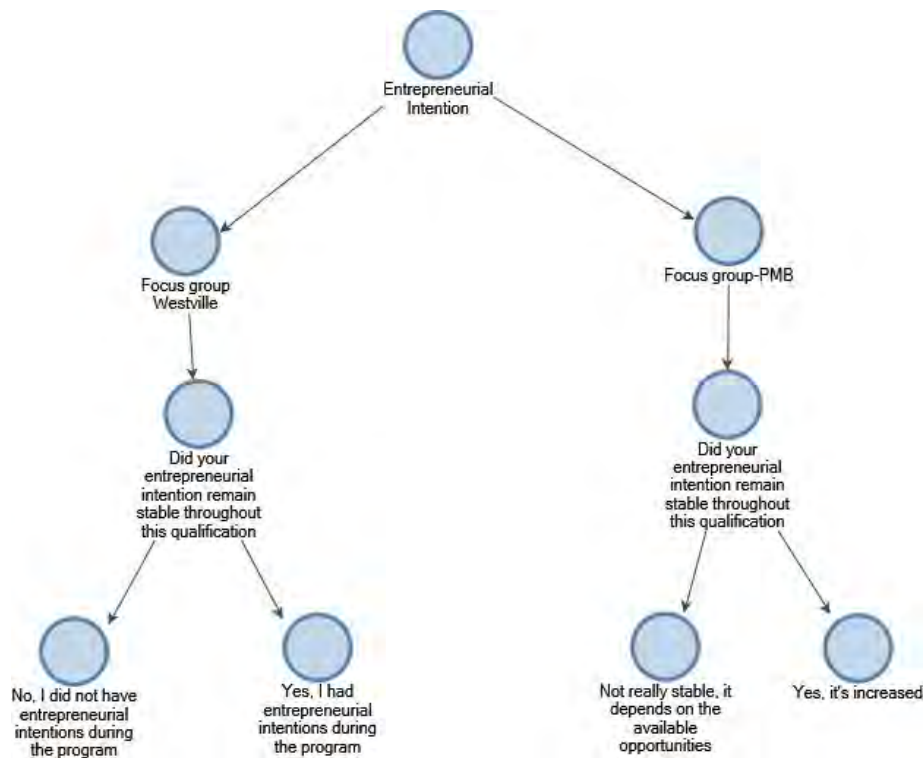


Responses:

The respondents highlighted the various ways and the stages their entrepreneurial intentions developed. These include: *in the future*; *none is developed yet*; *through entrepreneurship modules*; *through my family business*; *when I realised I want to work for myself* and *while engaging in a marketing activity*. *After acquiring the entrepreneurship knowledge*; *after realising my talent and skills can become a source of income for me*; *it developed at a young age when I sold sweets at school*; *my family business background influenced my decision*; *the realisation that I could help reduce unemployment* and *to contribute to the economy*.

The connectors revealed an associative relationship, as respondents held differing views with respect to their entrepreneurial intentions. It was revealed that the respondents’ entrepreneurial intentions developed at a very young age; and some indicated that it was their family business background that influenced their entrepreneurial intentions. Other respondents asserted that their entrepreneurial intention developed through the entrepreneurship taught at the university. Some respondents commented that it was when they realised their entrepreneurial skills and wanted to work for themselves.

Figure 24: Model showing responses of respondents to whether their entrepreneurial intentions remained stable through the qualification period

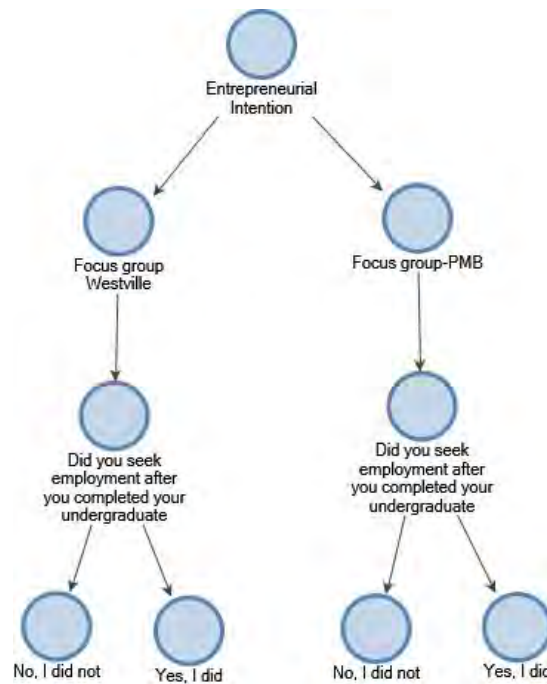


Responses:

Most respondents replied *yes, I had entrepreneurial intentions during the programme; yes, it's increased*. While only a few respondents replied *no, I did not have entrepreneurial intentions during the programme; not really stable, it depends on the available opportunities*.

The relationships between the connectors are symmetrical: the respondent's responses mirror one another. The majority of the respondents asserted that they had entrepreneurial intentions, and their entrepreneurial intentions increased during their qualification. However, some respondents indicated that they did not have any entrepreneurial intentions at that time; as a result their response was *no*.

Figure 25: Model showing responses by respondents on whether they sought employment after completing their undergraduate degrees

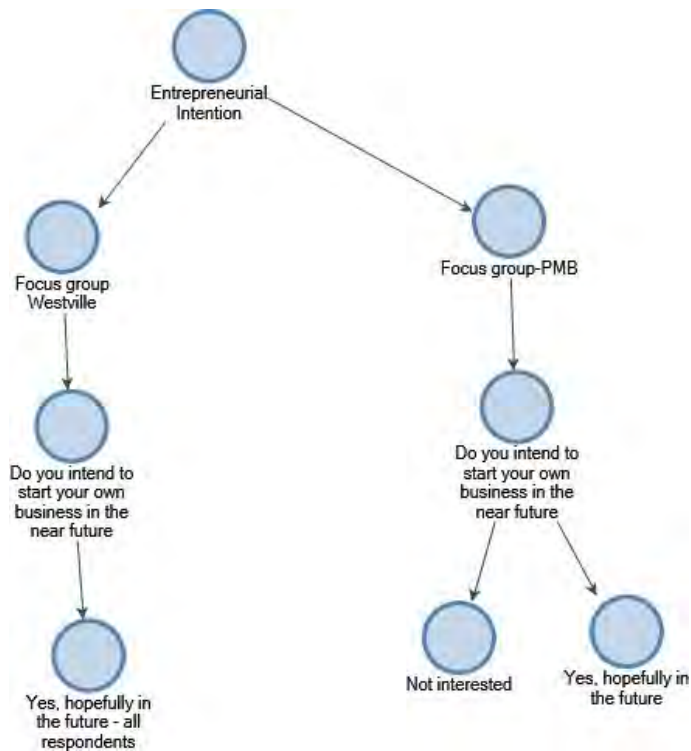


Responses:

Eight (8) respondents *no, I did not*; and another seven (7) respondents stated *yes, I did* in answering the question whether they sought employment after completing their undergraduate degree.

The relationships between the connectors are symmetrical: there seems to be common sentiment shared among the respondents. Respondents indicated that they did not look for employment after they completed their undergraduate; their aim was to further their studies. Some of the respondents indicated that they did seek employment after their undergraduate degree; however, they were unsuccessful. They then decided to continue with their studies.

Figure 26: Model showing responses by respondents on whether the students intended to start their own business in the near future



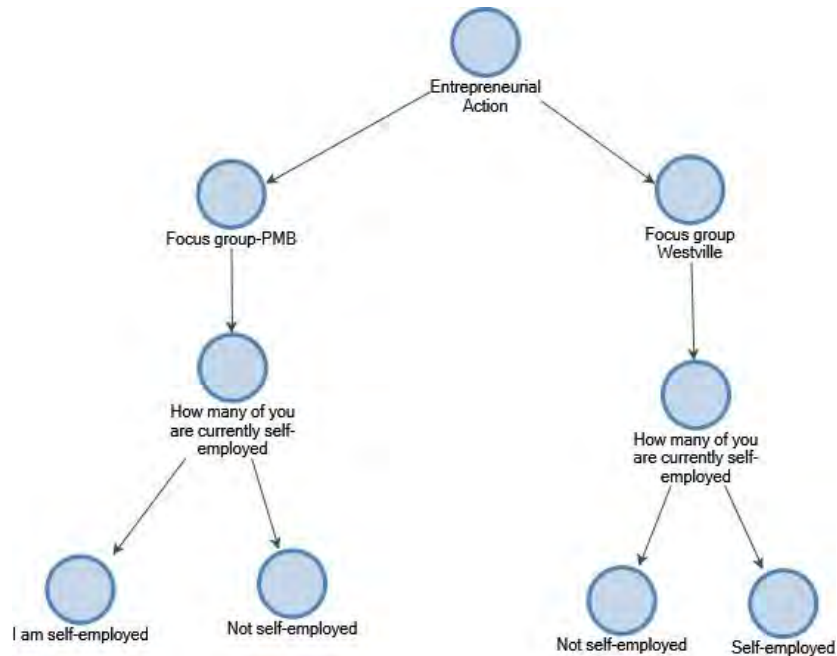
Responses:

The majority of the respondents stated *yes, hopefully in the future* and just one respondent stated *not interested*.

There was a one-way relationship between the connectors, with a common sentiment shared among the majority of the respondents, in which they indicated that they do intend to start their own businesses in future. Only one respondents did not state this.

4.7.4 Students entrepreneurial Action

Figure 27: Model showing responses by respondents on how many were self-employed at that time

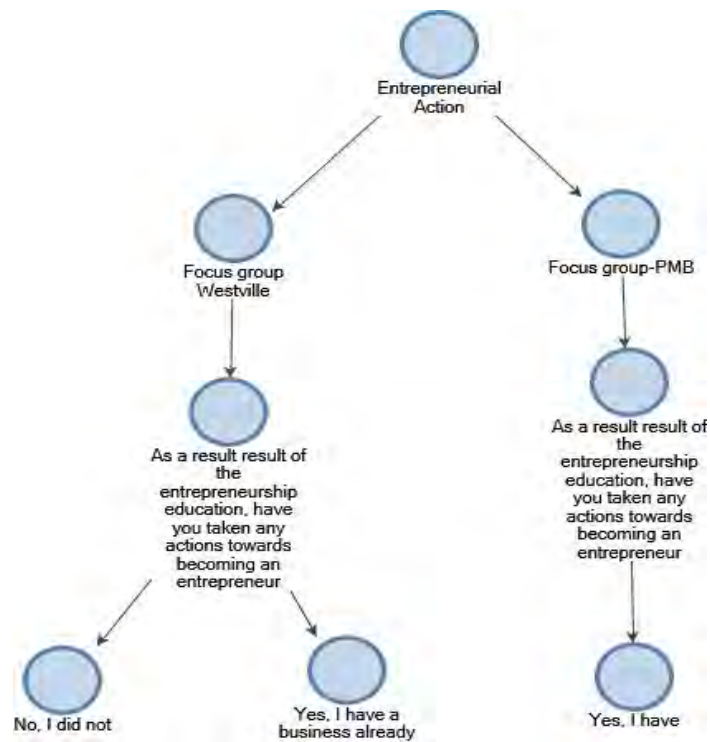


Responses:

Ten (10) respondents replied *not self-employed*, while five (5) respondent stated that they were *self-employed*.

The relationships between the connectors are symmetrical, with the responses of the respondents reflecting one another. Most of the respondents stated that they were not self-employed, while some of the respondents stated that they were already entrepreneurs and were running their businesses.

Figure 28: Model showing responses by respondents on both Westville and PMB campuses to the question of whether they have taken any steps towards becoming an entrepreneur

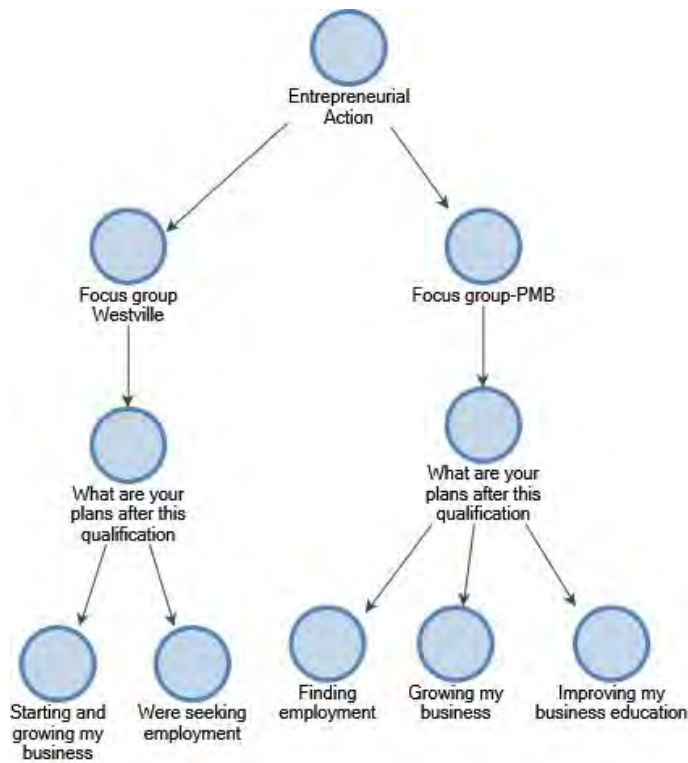


Responses:

Most of the respondents in their responses to the question on whether they have taken any steps towards becoming an entrepreneur, stated *No, I have not* while others stated *Yes, I have a business already; Yes, I have taken steps*.

The relationships between the connectors are symmetrical. The responses were closed questions; however, the respondents were asked to elaborate. Respondents who were already entrepreneurs mentioned that they have taken steps towards entrepreneurship. However, some respondents indicated that they are studying entrepreneurship, which is indeed a step towards becoming an entrepreneur, even though it is a long-term goal for them.

Figure 29: Model showing responses by respondents to the question on what the respondents planned to do after acquiring the qualification

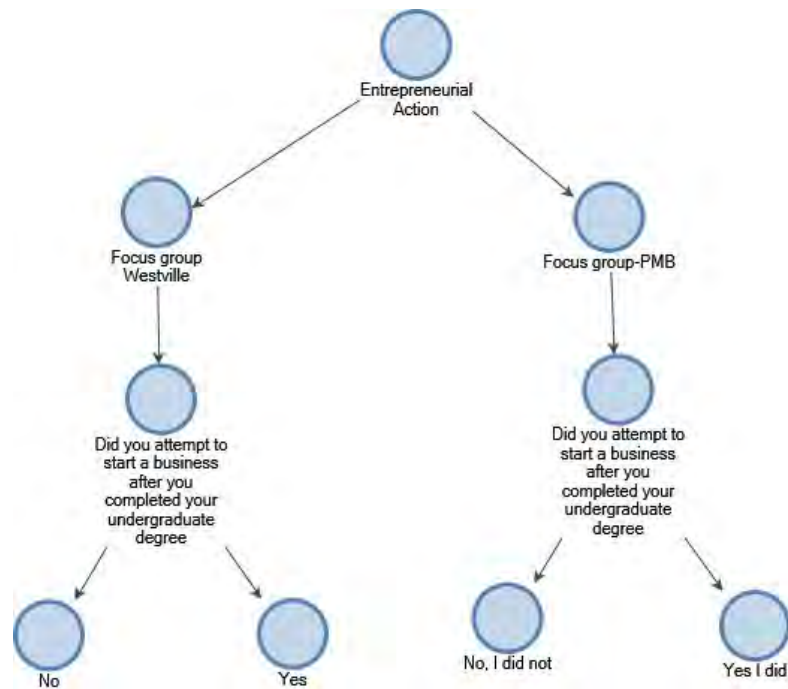


Responses:

The question asked students to describe their plans after they graduate from their program. The respondents stated that they planned to *seek employment; start and growing my business; finding employment; growing my business* and *improving my business education*.

There was a symmetrical relationship between the connectors, with a common sentiment shared among the majority of the respondents. Respondents indicated that they will seek employment after they complete their degrees, although some of the students who were already in business indicated that they would utilise the knowledge gained from their qualification to grow their business after they completed their degree.

Figure 30: Model showing responses by respondents to the question on whether they had made any attempt to start a business after completing their undergraduate degree

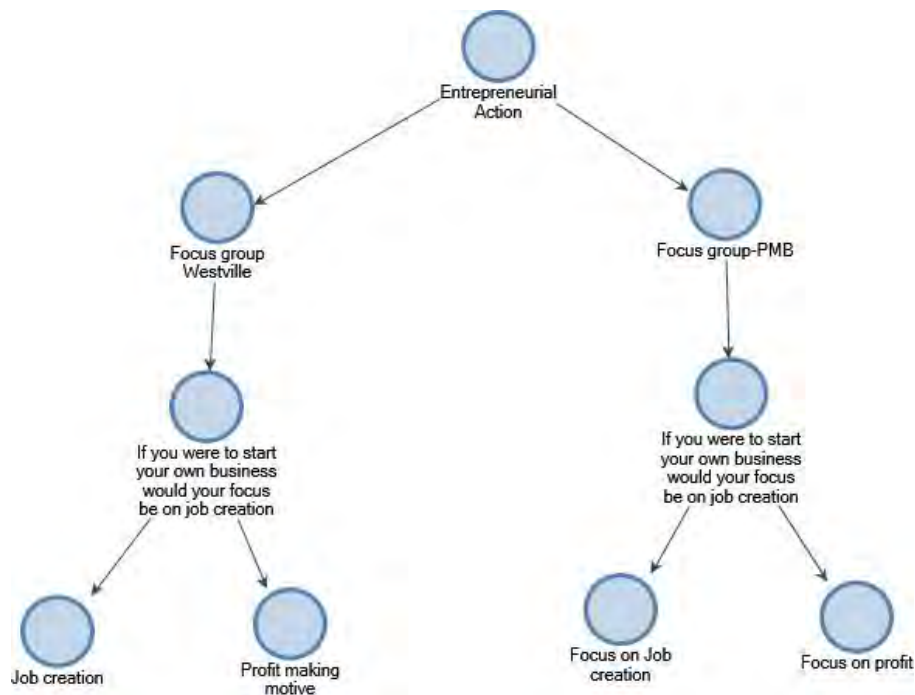


Responses:

In their response to the question, did you attempt to start a business after you completed your undergraduate degree? The majority of the respondents answered *no, I did not* and only a few respondents replied *yes I did*.

The relationship among the nodes is seen to be symmetrical, as the responses mirror one another. Some respondents indicated that they did attempt to start a business after they completed their undergraduate degrees, while some indicated that they did not attempt to start a business, as their plan was to focus solely on furthering their studies.

Figure 31: Model showing responses by respondents to the question on what the focus would be if the respondents were to start a business



Responses:

The majority of the respondents indicated their focus will be for *profit-making motive*, while others indicated that their focus will be *on job creation*.

The relationship among the connectors was symmetrical, as the respondents’ responses mirror one another. The majority of the respondents indicated that profit-making would be the main focus should they decide to start a business. Those who already have businesses revealed that profit-making was their primary goal, while job creation was their secondary goal.

4.8 Conclusion

Chapter Four of this study presented data obtained from both qualitative and quantitative research that was analysed using the appropriate statistical operations SPSS Statistics Version 21 for quantitative data and NVivo 11 was used for qualitative data. Descriptive data was shown in the form of frequency distributions, bar graphs, and pie charts; while inferential data was depicted in cross-tabulations as analysed by SPSS Statistics Version 21. These were provided to give a better understanding of what had been presented in the study. The following chapter critically interprets and discusses the empirical findings in light of the research objectives set out

in the study. The implications of this research project in relation to the findings are also presented.

CHAPTER FIVE: DISCUSSION OF FINDINGS

5.1 Introduction

This section discussed the findings of the study in context of the objectives of the study and theory. The objective of the study was to discover the influence of entrepreneurial education on student entrepreneurship. This was to determine whether entrepreneurial education is significantly related to entrepreneurial mindset and entrepreneurial intention, leading to entrepreneurial action among third years (undergraduate) as well as the honours students that were completing their degrees in the discipline of management and entrepreneurship at UKZN.

Data was be collected and analysed including triangulation to establish the various dimensions of the research findings. This section of the study discusses findings obtained from the quantitative survey research that was inclusive of the third-year students (undergraduates) who had studied entrepreneurship modules during their second year. Qualitative data of the study was obtained from honours students who were studying entrepreneurship modules when the study was conducted.

5.2 The objectives of the study

In formulating the research questions and objectives, attention was given to ensure that there was a linkage between both, so that when answering the research questions simultaneously resulted in the achievement of the objectives. The objectives of the current study in relation to the findings are discussed below.

Objective 1: To examine the role of entrepreneurial education in fostering student entrepreneurship:

Findings reveal that there was a significant agreement that entrepreneurial education studies engaged the respondents with various business concepts, with results indicated as ($M=3.91$, $SD=0.762$), $t(168) = 15.537$, $p < .0005$). Entrepreneurship education has also been shown to prepare respondents with adequate knowledge to run a business. The results of this study support and expand those of Ediagbonya (2013), which argues that entrepreneurial education seeks to

provide tertiary students with the right knowledge, inspiration and skills to promote entrepreneurship studies in a more diversified manner. This argument is also backed by studies conducted by the Consortium for Entrepreneurship Education (2013) which note that entrepreneurial education is seen as a mechanism for improving thought, skills and entrepreneurial knowledge through educational methods. Entrepreneurship education can then be further used to train certain students with entrepreneurial skills, by enabling them to seek a career in entrepreneurship.

The findings obtained from the focus group of the honours students revealed that the participants chose to study entrepreneurial education modules because it helped them to create a foundation for future entrepreneurship endeavour, as well as to gather knowledge about how to start businesses, and to develop an entrepreneurial mindset. The participants further stated that there was a lack of job opportunities; therefore the need for entrepreneurship education to start their business was crucial should they be unable to gain employment. This result is confirmed by a research shared by Morris, Shirokova and Tsukanova (2016), which supports a strong connection between entrepreneurial education and the growth of student entrepreneurship skills in higher learning institutions. This statement is further supported by Beeka and Rimmington (2016), who affirm that entrepreneurship offers graduate students self-employment opportunities. It is therefore a preferred career choice for the graduates because it has been proven to ameliorate social ills, and to improve employability for the youth.

The findings obtained from the focus group indicated that, entrepreneurship plays different roles in the lives of the respondents. These roles included that entrepreneurship affords the respondents an alternative to start a business should they be unable to find jobs after they have completed their qualification and that entrepreneurship creates job opportunities. It has also been discovered that entrepreneurship serves as a motivator for ingenuity, imagination, risk-taking, and builds the potential to come up with unique ideas and make more money. This result was confirmed by studies undertaken by Ediagbonya (2013) Entrepreneurship Education, which aims to provide students in tertiary institutions with the right knowledge and the right skills and motivation to promote entrepreneurship studies in a diversified way.

Objective 2: To establish the influence of entrepreneurial education on students' entrepreneurial intentions:

The findings revealed a significant, mild, positive association between EE and EI ($r = .486$, $n = 169$, $p < .001$), showing a high level of entrepreneurial education correlated with a high level of entrepreneurial intention. These results imply that entrepreneurial education does influence students' entrepreneurial intentions. Respondents possessed strong entrepreneurial intentions. It was also discovered that there was a significant agreement that the respondents were willing to make an effort to start their own businesses in the future. This may mean, in fact, that students are now aware of the challenges of finding jobs, rendering entrepreneurship a viable career option. As Maleban and Zindiye (2017) have pointed out, entrepreneurship is rapidly becoming a preferred career option for unemployed graduates in South Africa. Entrepreneurship stimulates sluggish markets with extraordinarily high levels of unemployment among graduates and young people in general. This forces students to understand that entrepreneurship is a realistic alternative to employment.

The results further emphasised that the research participants did develop entrepreneurial intentions in the sense that, after studying the importance of entrepreneurial education and its advantage as an alternative to unemployment, their intention to become entrepreneurs increased. Similarly, the findings found that entrepreneurial education led to the engagement of students in the pursuit of a business. In part, this supports Wilson *et al.* (2016) results that successful entrepreneurial education can be an empowering force in encouraging students to take on entrepreneurship by enriching their sense of self-assurance. Gelaidan and Abdullateef (2017) concluded that, with sufficient entrepreneurial education, students would build the skills and trust required to start their own businesses during and after their qualifications. The research finds that due to lack of finances and capital to start a business, most students plan to have a secure job first then later on open a business; most students do not intend to start their own business immediately after they graduate from the University.

Findings obtained from the focus groups revealed that most of the respondents indicated that entrepreneurial education did increase their entrepreneurial intentions. According to studies undertaken by Gird and Bagraim (2008), previous exposure to entrepreneurship is what affects the interest to become an entrepreneur. While other respondents stated that their entrepreneurial intentions remain stable. Some of the respondents indicated that they did not have any

entrepreneurial intentions and amongst those who did have entrepreneurial intentions, view entrepreneurship as a long term, this finding is further supported by studies by (Fatoki & Chindoga, 2011; Pendame, 2014) which indicated that there are low entrepreneurial intentions, mainly among tertiary and university students in the country, stating that students prefer wage employment over entrepreneurship.

Objective 3: To examine the influence of entrepreneurial education on students' entrepreneurial mindset:

The findings show a significant, mild, positive association between EE and EM ($r = .463$, $n = 169$, $p < .001$), which indicated a high level of entrepreneurial education correlated with a high level of entrepreneurial thought. These studies have demonstrated that entrepreneurial education has had a positive effect on student enterprise, student entrepreneurship, student employability, and student positions in society and the economy as a whole. It also revealed that a career in entrepreneurship was attractive to the students, as this would assist the participants to achieve their life goals. The results also outlined that the respondents preferred to be entrepreneurs, creating jobs, rather than becoming employees. The above findings are supported by L uthje and Franke (2003) are of the opinion that entrepreneurial education plays an imperative role by providing a positive impact on the entrepreneurial aspirations of students, which tends to improve their motivation and their desire to start a business, which demonstrates positive attitudes towards a career in entrepreneurship. It was mentioned in the study that the students do have a desire of becoming entrepreneurs but this is a long term goal, as they prefer to secure employment before embarking into an entrepreneurial journey.

The results confirmed that individuals with an entrepreneurial mindset have the ability to recognise opportunities that lead to entrepreneurial intentions. Studies conducted by Sajdak (2017) support this finding, by stating that the mechanisms of an entrepreneurial mindset include recognising entrepreneurial opportunities. The prospective entrepreneur has entrepreneurial alertness, finding real options, an entrepreneurial framework, and an opportunity register. Hitt and Sirmon (2014) agrees with the statement above by stating that, the entrepreneurially-minded individual is able to identify and spot new opportunities because they have the reasoning abilities that allow them to draw meaning from ambiguous and disjointed situations.

Findings drawn from the focus groups indicated that, the respondents found entrepreneurial

education as a foundation for future entrepreneurship endeavours. The respondents also indicated that, entrepreneurial education helps them in gathering knowledge that is needed to start a business, and it also encourages them to have an entrepreneurial mindset. For those respondents that had existing businesses, the respondents stated that entrepreneurial education was needed to update their business knowledge. However, the respondents also indicated that, entrepreneurial education was needed because they see entrepreneurship as an alternative should they be unable to secure a corporate career. The significance of this finding is supported by the statement made in the study of the European Commission (2014), which postulates that entrepreneurship education has a positive effect on the entrepreneurial mindset of students and their entrepreneurial intentions. It was also clear that students are not cynical of becoming an entrepreneur, the study showed that chosen students were already entrepreneurs, and that is the profession they are most comfortable to follow. This result is reinforced by (Farrington, Gray & Sharp, 2011) who argue that an individual's understanding of an entrepreneurial career has an effect on their decision to continue on that career path. While other students indicated that they had strong intentions to start their own business someday.

Objective 4: To examine the influence of entrepreneurial mindset on students' entrepreneurial intentions:

The findings revealed a significant, large, positive association between EM and EI ($r = .707$, $n = 169$, $p < .001$), with a high level of entrepreneurial thought correlated with a high level of entrepreneurial purpose. This indicates that there is a strong positive impact of entrepreneurial thought on the student's entrepreneurial intentions. The participants in the study indicated that they would rather be entrepreneurs than be employees. Participants further stated that they had strong intentions of starting their businesses after completing their degrees, only if they have financial support. It was evident that, students find it easier to begin with new undertakings if they have proper support of financial resources. Due to financial constraints the students revealed that after completing their studies, seeking for employment will be their primary objective and start a business at a later stage. Those students who already had business, stated that, after completing their studies, their focus will be to grow their small businesses.

The study further revealed that entrepreneurial intentions were higher for students who had been exposed to personal business. Supporting this finding, Kolvereid (2000) also maintains that students with prior entrepreneurial experience have strong entrepreneurial intentions relative to

those students with no prior exposure to entrepreneurship. The history of family enterprise, childhood memories and social expectations also motivates students' entrepreneurial intentions. The research will confirm that students with a higher entrepreneurial mindset tend to have more entrepreneurial intentions and a strong desire to start a business. This finding is supported by studies conducted by Bux (2017) who postulates that thinking will allow students to think in an imaginative, creative and diverse way; to improve expectations of job opportunities. This can contribute to increased expectations of their entrepreneurial intent or increase their perceptions of entrepreneurial activity.

Results indicated that there were students who were already entrepreneurs, and their entrepreneurial intentions had developed from a very young age. Supporting this finding is Peterman and Kennedy (2013) who argue that a favorable association between prior job experiences in a business atmosphere has an effect on an individual's appetite for entrepreneurship. In addition, Ahmed, Nawez, Ahmad, Shaukat, Rehman and Ahmed (2010) argue that students with entrepreneurial experience, be it self-experience, family experience or previous job experience, are more inspired to take entrepreneurship as a profession.

Findings obtained from the focus group indicated that, respondent's view entrepreneurship as an alternative. When ask what comes to mind when they think of entrepreneurship, the respondents indicated that you think of a business leader, innovation, self-employed, problem solvers, success and employment creator. However, the respondents also indicated revealed the general perception of entrepreneurship is that it is challenging, needs extra work and that there is too many risks involved. Regardless of the challenges mentioned, some of the students indicated that they do have entrepreneurial intentions, and those who were entrepreneurs at that time indicated that they will continue with the venture. Bux (2017) postulates that mindsets may enable students to think diversely, innovatively, and creatively; to have expanded perceptions of career opportunities. This may lead to increased perceptions of their entrepreneurial intent.

Objective 5: To discover whether there is a relationship between entrepreneurial intentions and students' entrepreneurial action:

The findings revealed a good association between entrepreneurial intent and entrepreneurial action. The findings demonstrate that persons with strong entrepreneurial aspirations are entirely capable of taking entrepreneurial action. Supporting this finding are previous studies conducted by Malebana and Zindiye (2017) have shown that the entrepreneurial desire of students to start

a company is a good indicator of future entrepreneurial action. Entrepreneurial intention is thus positively related to entrepreneurial action.

The results obtained from the study on entrepreneurial intention indicated that students have no doubt about starting their own businesses in the future; and that the students' entrepreneurial intention increased during their entrepreneurship programmes. The results further revealed that there were students who were already entrepreneurs and planning to develop their businesses upon graduating. Beeka *et al.* (2011) agrees with this finding by noting that entrepreneurship is one of the job choices for young people and graduates. There was also significant agreement that some of the respondents intend to start their businesses upon graduating, provided that they have funding and entrepreneurial support to start a business. Supporting this funding is Luthje and Franke (2003), who argue that entrepreneurial support plays a crucial role in the growth of entrepreneurship among students, by having a positive effect on their entrepreneurial intentions and their attitudes towards entrepreneurship. In addition, non-financial and financial assistance can be provided to university students in order to develop their entrepreneurial skills and competencies. Such support will also enable those students with entrepreneurial aspirations to launch their own company after graduation.

The findings obtained from the focus group indicated that there is a relationship between entrepreneurial intentions and entrepreneurial action. This study revealed that three of the respondents developed entrepreneurial intentions at a very young and were already entrepreneurs when the study was conducted and were motivated to continue with their business after they complete their studies. While the rest of the respondents indicated that they do intend of becoming entrepreneurs but this was a long term goal when they have secured employment. Studies by Shane and Venkataraman (2015) as well as Shane (2014) have suggested that it is by market potential that the entrepreneurial purpose can be converted into effect and thus contribute to the development of a business.

5.3 Triangulation

Triangulation, is a process that seeks to converge and validate findings of a study about the same issue or problem, was therefore carried out (Greene, Caracelli & Graham, 1989). Qualitative data was collected via focus group interviews (close-ended questions) alongside quantitative data which was collected using a survey instrument. Equal priority was given to the two forms of data collection. Content analysis was adopted to achieve data and methodological triangulation in the process of examining the connection entrepreneurial education and students' entrepreneurship.

5.3.1 Comparative analysis of outcomes from the quantitative and qualitative data

The review, display and interpretation of the findings from the quantitative and qualitative data used in this study revealed the following data triangulations.

The outcome of the descriptive statistics used in ascertaining the role of entrepreneurial education in student entrepreneurship revealed that entrepreneurial education engaged the respondents with various business concepts and has taught respondents to be creative and innovative thinkers and that entrepreneurial education contributed to the respondent's attitude of becoming entrepreneurs. This was further supported by the qualitative data analysis where the respondents stated that entrepreneurship studies helps to create a foundation for future entrepreneurship endeavour, to gather knowledge to start businesses and to have an entrepreneurial mindset.

The quantitative data analysis, focused on the goal of analyzing the effect of entrepreneurial education on the entrepreneurial ambitions of students, found that most of the respondents had good entrepreneurial intentions to start up their own businesses before they graduated and had no reservations about setting up their businesses in the near future. Qualitative statistics followed the results of the quantitative data review. Amongst the qualitative data, there were few students who developed entrepreneurial intentions from a very young age who also indicated that their entrepreneurial intentions increased during their qualification. These respondents already had established businesses and were willing to keep their business because their professional goal was also to become entrepreneurs.

However, the majority of the respondents from the qualitative data also revealed that they did not have entrepreneurial intentions before starting their qualification. However few of the respondents indicated that the entrepreneurial intentions did develop during their qualification. The quantitative data indicate higher entrepreneurial intentions than the qualitative data.

The findings of the analytical statistics used to measure the effect of entrepreneurial education on student entrepreneurial thinking have shown that the majority of respondents have demonstrated that entrepreneurial education has contributed significantly to respondents' engagement in beginning a company and that they choose to be entrepreneurs rather than workers. However, the result of the qualitative data analysis revealed that the respondents feel that entrepreneurial education played a positive role in their lives but they still preferred being employees than being entrepreneurs, they viewed entrepreneurship as an alternative in case of unemployment.

The outcome of the quantitative data study performed for Objective 4 to inspect the effect of entrepreneurial thought on students' entrepreneurial interests has shown that becoming an entrepreneur has a greater benefit than a drawback since a future in entrepreneurship is desirable to them. The respondents also had strong intention to start their own businesses prior to embarking on their degree since their professional goal was to become entrepreneurs. There was also a significant agreement that the respondents intended to start their businesses upon graduating. However, the qualitative data provided more clarity to the results obtained from the quantitative data analysis through the response of the majority of the respondents in qualitative data indicating that upon graduating they will seek for employment and start their businesses at a later stage when they have financial support and more knowledge, as it will not be viable for them to start a business immediately after graduating as they will need funding and many other resources that are needed to start a business, securing employment first will be a good start for them.

Quantitative and Qualitative data analysis indicated that the respondents had no doubts about starting their businesses in the future, however this was a short-term goal for most respondents in the qualitative group and a long-term goal for the majority of the respondents in the quantitative group. The quantitative group also indicated that intention of starting a business would be to create jobs, while the qualitative group indicated that it will be for profit-making motive. Quantitative data analysis also indicated that at that time the study was conducted, the respondents did not have any established businesses, did not have any business plan in place and

did not save up for a business. Quantitative data analysis also supported the qualitative data results in confirming that the majority of the respondents did not have any businesses at that time. However within the qualitative data, few of the respondents indicated that they had established businesses and will continue running their business after they complete their studies.

5.4 Conclusion

Chapter five of the report analyzed the context of the study, reviewed the literature review provided in Chapter Two, and addressed the literature supporting the results of quantitative and qualitative evidence. The key conclusions of the thesis were presented and explored in depth with reference to the analysis questions and priorities presented. This chapter has been explicitly written to address the results of the report. The results revealed the findings on the role of entrepreneurial education in promoting student entrepreneurship. Finally, the implications of the study related to the findings were discussed. It is anticipated that these findings presented in this chapter will contribute positively to the field of entrepreneurship education in higher education institutions. This is especially so now that South Africa is in need of developing its human capital to its full potential by addressing the issue of youth unemployment.

CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

The present chapter explains the recommendations and the conclusion of the study, which may be of interest to the researchers in the field of entrepreneurship, based on what the research has revealed. The primary goal of the study was to discover the role of entrepreneurial education in fostering student entrepreneurship. Given the results from the study, below is a list of recommendations suited to each objective that was presented for this study:

Objective 1: To examine the role of entrepreneurial education in fostering student entrepreneurship:

Entrepreneurial education has taught students to be creative thinkers and it has improved their innovative competencies, by developing new and unique business ideas as well as new ways of dealing with problems. Supporting this objective is Packham *et al.* (2010) who suggest that governance allows universities to cultivate skilled graduates with a wide spectrum of creativity and entrepreneurship capabilities that can be used to create their companies. Entrepreneurial education gives students direction and the necessary skills and knowledge that are required to become entrepreneurs. The participants, as students, also stated that entrepreneurship played different roles in their lives, such as “affording them an alternative form of employment, creation of job opportunities, and the promotion of innovativeness and creativity”.

Objective 2: To establish the influence of entrepreneurial education on students’ entrepreneurial intentions:

The study also supported this second objective, where students stated that entrepreneurial education played a major role in students developing entrepreneurial intentions and interest in starting a business. However, their intentions of becoming entrepreneur comes second after they have secured a proper employment, meaning it is a long term goal. The more students are introduced to entrepreneurial education, the higher are the entrepreneurial intentions. The study also showed that entrepreneurial education increases the degree of self-efficiency, helping students develop more plans to start their own companies.

Based on this objectives, entrepreneurial education associated with entrepreneurial support such as incubators and workshops offered by universities and the government, can stimulate entrepreneurial intention. Students with previous participation and experience in entrepreneurial education, educational programs and seminars have a higher degree of entrepreneurial intention.

Objective 3: To examine the influence of entrepreneurial education on students' entrepreneurial mindset:

Entrepreneurial education has the potential to positively promote the growth of entrepreneurial thought among students, particularly those who have been introduced to entrepreneurship. Entrepreneurship education enhances the entrepreneurial, spirit and philosophy of students. It is also correlated with the identification of opportunities, development and the formation of ventures; and also promotes the transition of student entrepreneurship skills.

Entrepreneurial education studies have greatly encouraged the building of the individual's self-efficacy. This suggests the essential role of entrepreneurial education in equipping individuals with the requisite entrepreneurial thought and capacity to initiate productive intentions in the development of new business projects. From the above conclusion, it may be proposed that one of the key consequences of entrepreneurial education is increased trust in the development of enterprises through entrepreneurial mindset.

Objective 4: To examine the influence of entrepreneurial mindset on students' entrepreneurial intentions:

Students who were enrolled in the small business management degree which is a postgraduate qualification, had a higher entrepreneurial mindset and positive entrepreneurial intentions. The study also concludes that entrepreneurial education does increase the students' entrepreneurial mindset; and that there are different ways and stages that entrepreneurial mindset can develop. This includes the immediate environment, such as friends and family. Prior exposure to entrepreneurship and experience does influence the students to develop entrepreneurial mindset.

Objective 5: To discover whether there is a relationship between entrepreneurial intentions and students' entrepreneurial action:

The research might suggest that entrepreneurial education affects the entrepreneurial mindset of students, which raises the capacity for entrepreneurial intentions of students and may contribute to entrepreneurial action. One can state that entrepreneurial intention is a possible major

determinant of the students' entrepreneurial action. The research also find that start-up capital resources are factors that limit students with entrepreneurial intentions from starting a business, as a result securing a job is seen as a first option for the students. It is also clear that the entrepreneurial intentions of the students are first inspired by the desire to have a rich life. Entrepreneurship and entrepreneurial behavior ratings are higher if students are conscious of the need to study entrepreneurship at the university.

6.2 Recommendations

The demand for practical's when studying entrepreneurship is relatively high. The current curriculum used by the universities in teaching entrepreneurial education is more closely related to entrepreneurship theory than to practical entrepreneurship exercises such as introducing mentor co-teaching and real-life business insight to further enhance students' learning effectiveness. These activities can be coordinated for off-campus internships in the future. This collaboration would strengthen the comprehension of fundamental knowledge of entrepreneurship as a course, which would also allow students to pass knowledge to the workplace, while at the same time recognizing the essence of learning by doing so, rather than only acquiring theoretical exercises.

The study also highlighted the general level of entrepreneurship in South Africa. It would be advisable for higher education institutions to strengthen entrepreneurial education modules and make them compulsory for all qualifications. When students are oriented to entrepreneurship from first year to final year, it will become easier to develop successful ventures. Entrepreneurship modules are currently mainly provided to students of business, management and economic-related classes, and are not made accessible to other disciplines within the university. This research suggests that, since entrepreneurial mindset is perceived to be a vital feature of entrepreneurial education, there must be a strong and consistent definition of what it entails and its importance. The study proposes that the entrepreneurship education program should contain modules that will concentrate on the growth of students' perceptual skills and their environment, which will promote the improvement of entrepreneurship.

The study proposes that the university invite prominent business owners from diverse sectors to perform practical activities for students in the fields of entrepreneurship and management. Such individuals may act as mentors to the students, by sharing their entrepreneurship journey, both

good and bad experiences, so that the students may have a clear picture of what entrepreneurship entails. This will help encourage entrepreneurial intentions. In addition, all non-financial and financial assistance must be made available to university students to better develop their talents and entrepreneurial skills. Such aid will further help those students with an ambitious plan to launch their own company after graduation.

6.3 Future research

Future research studies that can explore the connection between entrepreneurial education, entrepreneurial mindset, entrepreneurial intention and entrepreneurial action can shed further light on the determinants of the role of entrepreneurial education in South Africa. And to bring more importance to the study, potential studies should apply the study to other institutions in order to obtain a different viewpoint. Further studies in the above-mentioned fields will support the field of entrepreneurship education research. Future experiments will benefit from sampling greater numbers of people, both provincially and globally.

6.4 Limitation of the study

The study was only conducted at the University of KwaZulu-Natal, providing insights from one cohort at one institution. Therefore, it might not be expedient to make generalisations of the findings. The context may vary within other schools at the universities and other geographical areas of South Africa. This study concentrated on the role of entrepreneurial education in fostering student entrepreneurship; only students from the University of KwaZulu-Natal took part in the study.

6.5 Conclusion of the Study

It may be argued that entrepreneurial education plays a role in entrepreneurship among students, which enhances the ability of students to establish entrepreneurial intentions. Entrepreneurship education sets the basis for the potential entrepreneurship of students and the gathering of more information about beginning a business. The study highlighted that entrepreneurial education contributes towards the youth's interest in becoming entrepreneurs, especially if the curriculum of entrepreneurial education focuses more on practical skills, as they are seen as imperative to starting a business.

Entrepreneurial education offers students with instruction in core competencies such as communications, management and finance. Entrepreneurial education contributed to the respondents' attitude towards becoming entrepreneurs. Respondents acknowledged that it was owing to entrepreneurial education that they made use of entrepreneurship workshops and incubators provided by the university. Such facilities helped them to be more involved in entrepreneurship and to develop an interest in entrepreneurship. Finally, entrepreneurial education motivated and enhanced students' interest in career considerations in entrepreneurship. This interest stemmed from entrepreneurship education, which provided students with the skills and information needed to effectively and confidently decide to pursue a career in entrepreneurship.

Exposure to entrepreneurial education does increase entrepreneurial mindset, intention, and entrepreneurial action. The conclusions from this study infer that it is by previous market awareness and business potential that the entrepreneurial intention can be converted into effect, thereby contributing to the development of a business.

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Appendix A: Ethical clearance



30 January 2020

Ms Nompumelelo Sindiswa Ngoko (211559861)
School of Management, IT & Governance
Westville Campus

Dear Ms Ngoko,

Protocol reference number: HSS/0957/018M
New Project Title: The role of Entrepreneurial Education in fostering student entrepreneurship

Approval Notification – Amendment Application

This letter serves to notify you that your application and request for an amendment received on 28 January 2020 has now been approved as follows:


- Change in title

Any alterations to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form; Title of the Project, Location of the Study must be reviewed and approved through an amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

Best wishes for the successful completion of your research protocol.

Yours faithfully


Dr Shamila Naidoo (Chair)

/dd

Cc Supervisor: Mr Nigel Chlweshe
Cc Academic Leader Research: Professor Isabel Martins
Cc School Administrator: Ms Angela Pearce

Humanities & Social Sciences Research Ethics Committee

Westville Campus, Govan Mbeki Building

Postal Address: Private Bag X54001, Durban 4000

Telephone: +27 (0) 31 260 3567/0350/0657 Facsimile: +27 (0) 31 260 4609 Email: ethics@ukzn.ac.za / ethics@ukzn.ac.za / ethics@ukzn.ac.za

Website: www.ukzn.ac.za

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Appendix B: Language editor letter



Lydia Weight
NTSD English Specialist
SACE No: 11135129

E-mail: lydiaweight@gmail.com

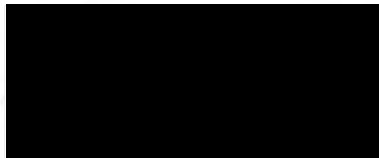
Pinpoint Proofreading Services

40 Ridge Rd
Kloof
Durban
3610
10 January 2020

To whom it may concern

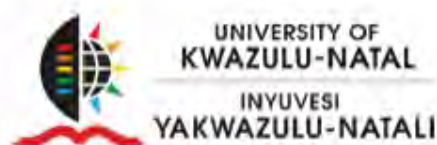
This is to certify that I, Lydia Weight, have proofread the document titled: The role of entrepreneurial education on student entrepreneurship: A case of UKZN by Nompumelelo Nqoko. I have made all the necessary corrections. The document is therefore ready for presentation to the destined authority.

Yours faithfully



L. Weight

Appendix C: Supervisors permission to submit form



College of Law and Management Studies

Supervisors Permission to Submit Thesis/ Dissertation for Examination

Name: Nompumelelo Sindiswa Nqoko	No: 211559861	
Title: The Role of entrepreneurial education in fostering student entrepreneurship		
Qualification: Masters of Commerce in Entrepreneurship	School: School of Management, IT and Governance	
	Yes	No
To the best of my knowledge, the thesis/dissertation is primarily the student's own work and the student has acknowledged all reference sources	✓	
The English language is of a suitable standard for examination without going for professional editing.	✓	
Turnitin Report	9%	
Comment if % is over 10%:		
I agree to the submission of this thesis/dissertation for examination	✓	
Supervisors Name: Nigel Chiweshe		
Supervisors Signature:	[Redacted Signature]	
Date: 10/1/2021		
Co- Supervisors Name: N/A		
Co- Supervisors Signature:	N/A	
Date:		

Appendix D: Survey instruments; Questionnaire

SECTION A – Demographic Data

Please indicate your answer with an X

1. Gender

Male	
Female	

2. Race

African	Indian	White	Coloured	Other

3. Age

Under 21 years	21–25 years	26–30 years	31-35 years	Over 35 years

4. Education:

Kindly state your current degree:

Bachelors degree	
Honours degree	

Please state the degree you are currently registered for.

.....

Kindly state your undergraduate qualification. (*For Honours students only*)

.....

SECTION B Indicate your level of agreement from the following statements:

1. RELEVANCE OF ENTREPRENEURIAL EDUCATION

S/N	ITEMS	Strongly Disagree	Disagree	Neutral	Strongly Agree	Agree
1.1	The entrepreneurial Education that I studied within our School of management engaged me in a good way with business concepts.					
1.2	The curriculum of the Entrepreneurial Education that I studied within our					

	School of management highly relates to entrepreneurship theory.					
1.3	Entrepreneurial Education has taught me to be innovative and to be a creative thinker.					
1.4	Entrepreneurial education has provided me with sufficient knowledge required to start a business.					
1.5	Through Entrepreneurial Education I now know all about the necessary practical details needed to start a business.					
1.6	Entrepreneurial Education has contributed positively to my attitude of becoming an entrepreneur.					
1.7	I made use of the entrepreneurship workshops and incubators provided by the University.					
1.8	The Entrepreneurial Education has improved my entrepreneurial competencies to be innovative.					

2. ENTREPRENEURIAL MINDSET

S/N	ITEMS	Strongly Disagree	Disagree	Neutral	Strongly Agree	Agree
2.1	Through Entrepreneurial Education I have learnt that being an entrepreneur implies more advantage than disadvantage to me.					
2.2	Through Entrepreneurial education I have decided that a career as an entrepreneur is totally attractive to me.					
2.3	Through Entrepreneurial education I have decided that being an entrepreneur will help me to achieve my life goals.					
2.4	Through Entrepreneurial education I have now realized that to start a business and keep it working would be easy for me.					
2.5	Through Entrepreneurial education I have decided that I would rather					

	be an entrepreneur than an employee in a company.					
2.6	The Entrepreneurship module has taught me to see all things I do, even failure, as an opportunity to improve.					

3. ENTREPRENEURIAL INTENTION

S/N	ITEMS	Strongly Disagree	Disagree	Neutral	Strongly Agree	Agree
3.1	I had a strong intention to start my own business before I started my degree.					
3.2	Through Entrepreneurial education I now know that my professional goal is to become an entrepreneur.					
3.3	Through Entrepreneurial education I will now make every effort to start and run my own business.					
3.4	Through Entrepreneurial education I have thought seriously about starting my own business after completing my studies.					
3.5	Through Entrepreneurial education I do not have doubts about ever starting my own business in the future.					
3.6	Through Entrepreneurial education I am ready to do anything to be an entrepreneur.					
3.7	Through Entrepreneurial education I intend to start my own business after graduating.					
3.8	Entrepreneurial Education has contributed positively towards my interest in starting a business.					
3.9	Through Entrepreneurial education my intention of starting my own business will be to create jobs.					

4. ENTREPRENEURIAL ACTION

S/N	ITEMS	Strongly Disagree	Disagree	Neutral	Strongly Agree	Agree
-----	-------	-------------------	----------	---------	----------------	-------

4.1	I now know all about the risks involved when being an entrepreneur and I am willing to start a career in entrepreneurship.					
4.2	After I complete my degree I will not look for a job but will start my own business.					
4.3	I am already running a business.					
4.4	I have already started saving up for my business.					
4.5	I already have a business plan for my business.					

Bux, S.,(2017). The effect of entrepreneurship education programmemes on the mindset of South African youth (Doctoral dissertation, University of Pretoria; Nqoko, N.S., 2020. The role of entrepreneurial education in fostering student entrepreneurship. A cases of UKZN.

Appendix E: Focus group questions

Focus Group

Entrepreneurial Education

1. Why did you choose to study a degree in Small Business Development?

.....
.....

2. In retrospect, how would you describe Entrepreneurial Education?

.....
.....

3. What is your view on the curriculum used by the University to lecture entrepreneurship education?

.....
.....

4. Why did you decide to do a post graduate in Bachelor of Commerce Honours in Small Business Development?

.....
.....

5. In retrospect, did the Entrepreneurship models match your expectations of it?

.....
.....

Entrepreneurial Mindset

6. What role does entrepreneurship play in your life as a youth?

.....
.....

7. When you think about entrepreneurs, what comes to your mind?

.....
.....

8. Why do you think young people are reluctant to take up entrepreneurship as a career?

.....
.....

9. Why is Entrepreneurial education seen as a solution to youth unemployment?

.....

Entrepreneurial Intention

- 10. Are you studying entrepreneurship because you want to be entrepreneurs?
.....
.....
- 11. In retrospect, how did your entrepreneurial intention develop?
.....
.....
- 12. Did your entrepreneurial intention remain stable throughout this qualification?
.....
.....
- 13. Did you seek employment after you completed your undergraduate degree?
.....
.....
- 14. Do you intend to start your own business in the near future?
.....
.....

Entrepreneurial Action

- 15. How many of you are currently self-employed?
.....
.....
- 16. As a result of the entrepreneurship education, have you taken any actions towards becoming an entrepreneur?
.....
.....
- 17. What are your plans after this qualification?
.....
.....
- 18. Did you attempt to start a business after you completed your undergraduate degree?
.....
.....
- 19. If you were to start your own business would your focus be on job creation?
.....
.....

End!