

FACTORS INFLUENCING THE ATTITUDES OF FINAL YEAR UNDERGRADUATE STUDENTS TOWARDS ENTREPRENEURSHIP AS A CAREER OPTION: A CASE-STUDY AT THE UNIVERSITY OF VENDA IN LIMPOPO PROVINCE OF SOUTH AFRICA

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AUGUST 2020

DECLARATION

I, TENDANI ROBERT NETSHILINGANEDZA, hereby declare that this thesis for the Doctor of Philosophy in Rural Development Degree (PHDRDV) submitted to the Institute for Rural Development at the University of Venda has not been submitted previously for any degree at this or another university. It is original in design and in execution, and all reference materials contained therein have been duly acknowledged.

Signature **Date**

Mr T.R Netshilinganedza

To my family: wife, Johannah; my sons, Dakalo, Thimuhangwi, Pfanani and Lutendo; my daughter in law, Andisani and my granddaughter, Anza.

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ABSTRACT

Entrepreneurship is currently widely considered by government and other organisation bodies a means to reduce unemployment among young people. However, despite the South African government's efforts to promote entrepreneurship as a career choice, most graduates still prefer to be employed. The purpose of this study was to explore and assess the various factors that influence the attitudes of a group of final year University of Venda students to choose entrepreneurship as a career option. The objectives of the study were to explore and assess four factors operating amongst these students which would be influencing their attitudes towards entrepreneurship: the influence of their entrepreneurial awareness, personality traits, environmental factors, as well as the constraints these students perceived themselves to face in choosing to make entrepreneurship, a career. In addition, the study sought to explore and assess the attitudes of academics and ENACTUS students towards the integration of entrepreneurship across disciplines at the university. The study employed a descriptive research design that applies both quantitative and qualitative approaches in order to obtain an in-depth understanding of the research topic. Primary data were collected from the sampled students, lecturers, Heads of Department (HODs), deans, and ENACTUS members from the eight schools at the University. The target population of the study was 3096 final year undergraduate students. These included both those involved, and those not involved, in entrepreneurship, as well as 192 lecturers, 118 HODs and the eight deans of the university's eight schools. Profiles and background Information regarding undergraduate final year students was obtained from the Department of Postgraduate students, while profile information regarding the lecturers, HODs, and deans was obtained from the Department of Human Resources. Data for the quantitative phase of the research were collected from a self-administered questionnaire which was distributed among all undergraduate final year students at the University of Venda. Interview schedules were used to collect data from 6 ENACTUS students, 19 lecturers, 13HODs and 8 deans. The quantitative data collected were analysed using IBM SPSS 25.0 through descriptive techniques (frequency distribution, mean, percentages and standard deviation) and inferential techniques (Mann Whitney test), while the qualitative data were analysed using ATLAS ti.8 (the version available at the time), supplemented by content analysis. The findings from both sets of data revealed entrepreneurial awareness, personality traits and environmental factors to influence the attitudes of students towards entrepreneurship as a career option. Furthermore, most final year undergraduate students were found to have highly positive attitudes towards entrepreneurship as a career option. The perceived constraints students were found to be facing, in descending order of prominence, included the challenges of acquiring and raising finances, lack of experience, difficulty obtaining

licences and certificates, and fear of failure. Evidence obtained from the ENACTUS students, lecturers, HODs, and the deans from various schools showed substantial support for the inclusion of entrepreneurship in curricula across disciplines in the university. The study recommendations include that university management and other policy makers consider the introduction of a compulsory entrepreneurial module in the first year across schools, with the aim of creating early positive student perceptions and attitudes towards entrepreneurship as a career option through increasing students' knowledge about entrepreneurship. Also, recommended would be that formal and informal training in entrepreneurship be provided across disciplines at not only the University of Venda, to foster self-confidence, the need for achievement, innovativeness/creative thinking, the need for independence, locus of control, and risk-taking. This recommendation is supported by the literature which points to the tendency of students possessing these characteristics to realise their business ideas in the future and to be able to overcome the challenge of fear of failure. Also recommended is university management and other policy makers revisiting the idea of a budget for start-up financing for students who are interested in entrepreneurship as a career option after graduation. A final recommendation is for university management and other role players to encourage students who are interested in entrepreneurship to get involved in entrepreneurial extra-curricular activities such as ENACTUS and entrepreneurial clubs, with the aim of inculcating a culture of entrepreneurship. The findings of the study are seen to provide a deeper understanding of the factors that influence the attitudes of students to consider choosing entrepreneurship as a career, and to contribute new knowledge for use by those academics and policy-makers considered to have positioned entrepreneurship as a viable and attractive career option.

Key words: attitude, career choice; entrepreneurship; final university students; graduate

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ABBREVIATIONS AND ACRONYMS

BBBEE	Broad -based Black Economic Empowerment
SEDA	Small Enterprise Development Agency
DTI	Department of Trade and Industry
DTIYEDS	Department of Trade and Industry 's Youth Enterprise Development Strategy
EE	Entrepreneurship Education
ENACTUS	An international non-profit organisation dedicated to inspiring students to improve the world through entrepreneurial action (Entrepreneurial Action Us)
HOD	Head of Department
ICT	Information Communication Technology
ILO	International Labour Organisation
NGO	Non-governmental Organisation
NYDA	National Youth Development Agency
SMEs	Small and medium enterprises
IBM SPSS	IBM Statistical Package for the Social Sciences
TPB	Theory of Planned Behaviour
TRA	Theory of Reasoned Action
TVET	Technical and Vocational Education and Training
UK	United Kingdom
UNICEF	United Nations Children's' fund
USA	United States of America
WEF	World Economic Forum

CHAPTER 1 INTRODUCTION

Background

On a global scale, particularly in developing countries, and including in South Africa, entrepreneurship is regarded by governments and economists as key to reducing the social ills of poverty and unemployment, particularly amongst the youth. It is also seen as an alternative career choice among young people who constitute above 12 % of the unemployed throughout the world at present (Bignott, 2013). The Department of Trade and Industry 's Youth Enterprise Development Strategy (DTIYEDS) for 2013-2023 shows youth (14 - 35 years) to constitute 41.2 % of the South African population. However, the proportion of young people involved in entrepreneurial activities is about 6 %, which is extremely low in comparison with other developing countries. This number indicates that South Africa faces the challenge of limited and poor participation of young people in the country's economy. This results in persistently high rates of unemployment, especially among university graduates, due to their lack of work experience, and a low skills base, and particularly in the field of entrepreneurship. In his study conducted in Nigeria, Kareem (2015) highlights the importance of fostering entrepreneurship in a developing country. He views entrepreneurship as central to promoting economic prosperity through creating jobs, reducing unemployment, and increasing the economic growth and development of a region. Afriyie and Boohene (2014) identify entrepreneurship as a means to address unemployment among graduates. In their support of this view, Sharma and Madam (2014) suggest that promoting youth entrepreneurship reduces unemployment and helps young people to control their own destinies through starting their own companies.

In this study conducted amongst university students, I am arguing that, in order for young people to be able to escape from the cycle of unemployment and poverty there is a need for students, while still engaged in their higher education courses, to learn to become employers. From the literature reviewed, and from my own experience and view, I am of the view that universities could and should play a significant role in entrepreneurial training with the main aim of increasing students' awareness of, and developing in them, both their skills in, and attitudes towards, entrepreneurship. Various scholars, for example, Kordnouri and Zandieh (2014), argue that, while the traditional role of universities has been to create knowledge and develop human capital through education and research, they are now being increasingly recognized as having a specific broader role in terms of economic development/growth and entrepreneurship. Kordnouri and Zandieh (2014) argue that a university is no longer simply a venue for absorbing narrowly bounded, 'silo-ised' knowledge as that associated with, or underpinning, the discipline of Economics, particularly classical economics, nor is there a

space for conducting relevant research within this discipline on the economics of industry and business, nor for creating new theories and methods for doing this. Kordnouri and Zandieh (2014) argue that, instead of, or in addition to, these roles and functions, a school of Economics should be delivering graduates who are able to apply their knowledge in the real world, through applied research, and, in this process, make use of both practical and innovative ideas to create jobs. This means equipping students with the appropriate entrepreneurial skills to enhance their employability and to increase the likelihood of some of them becoming successful entrepreneurs.

The vision of the University of Venda is “To be at the centre of tertiary education for rural and regional development.” (University of Venda Annual Report, 2016). To achieve this, the following mission was adopted by the university: “The University of Venda, anchored on the pillars of excellence in teaching, learning, research and community engagement, produces graduates imbued with knowledge, skills, and qualifications which are locally relevant and globally competitive” (University of Venda Annual Report, 2016). Both the vision and mission of the University, therefore, would seem to clearly indicate its commitment to improving the quality of life and economic well-being of people, including, and especially, those living in rural areas, such as those in Limpopo province and in the area in which the university is situated. Being a rural-based university means that a large proportion of the student population live in these rural areas, and this points to the importance of accelerating economic development in this area. Nkomo and Sehoole (2007), in their findings of a study on rural-based universities in South Africa, highlight the fact that these universities are advantageously situated for contributing to the economic development of those areas in which they are situated, and, in addition, possess a variety of characteristics that could enable them to effectively contribute to sustainable economic development in these areas. One of these characteristics is their location within the rural community. These scholars see these universities as reviewing their mission orientation to enhance their research capacity, expanding their intellectual / entrepreneurial social capital, and establishing strong and binding collaborative relationships with local businesses and agricultural projects. Currently, as a way of promoting an entrepreneurial culture among its students, the University of Venda offers entrepreneurship education only in the School of Management Sciences and the School of Agriculture. This implies that large numbers of students in other schools in the institution have little or no access to entrepreneurial skills at the university. Afriyie and Boohene (2014), based on their study conducted in Ghana, argue that entrepreneurship education should not be limited to those students in the business school. Other degree programmes should also open opportunities for students to become entrepreneurial in their chosen fields of study.

Given that the number of graduates increases every year at various universities in South Africa, unless the economic situation in the country changes, it follows that many students will be unemployed. Shama and Madam (2014) correctly point out that the growing number of unemployed graduates could be a serious threat for both the government and society. Despite the fact that training students in entrepreneurship is increasingly being regarded by government, development agencies, farmers, politicians, as well as by academics, as one of the strategies to be employed in the creation of jobs among youth, according to an existing significant body of research, this career choice is not favoured by young people in South Africa and globally, including university graduates (Othman & Ishak, 2009; Ekore & Okekeocha, 2012; Fatoki & Chidonga, 2012). This manifests in the low number of students motivated to start their own business after graduation. Thus, universities, particularly those in developing countries such as South Africa should create an enabling environment for developing a culture of entrepreneurship.

Despite the importance of entrepreneurship among the youth, specifically in South Africa, research studies in this area and those focussing on the rural areas, have been limited. Hence, this study aims to contribute to closing this research gap by exploring and assessing the factors that influence the attitudes of a sampled group of final year undergraduate University of Venda students towards choosing entrepreneurship as a career option. A comprehensive literature search suggests that currently little is known about what students have thought, or currently think, or what they know about entrepreneurship. In order to accomplish the aim of this research - to explore and assess students' knowledge and attitudes in this area- earlier research studies, together with literature focussing on entrepreneurship theories, were reviewed to inform the empirical and theoretical basis of the current study.

Statement of the Research Problem

As was mentioned above, entrepreneurship is widely viewed by researchers, economists, governments, and policy makers as a way of solving the problem of unemployed graduates. Apart from this view, many see entrepreneurship specifically as an attractive and viable alternative career choice for young people in South Africa and beyond. The number of unemployed graduates is increasing annually. Despite the efforts of governments and educational institutions to promote entrepreneurship as an alternative career choice, students continue to be uninterested in entrepreneurship as a means of livelihood or as a career (Awang *et al.*, 2014; Chua & Bedford, 2016). Studies conducted in Malaysia, such as that by (Ariff *et al.* (2010), have revealed that many students, upon graduating, prefer to be hired as employees and that There is little interest in venturing into self-employment initiatives. A similar study undertaken in South Africa (Brijlal, 2011) showed relatively few graduates becoming fully-fledged entrepreneurs after graduating.

The current study conducted at the University of Venda was premised on the argument that universities should produce large numbers of graduates with entrepreneurial knowledge, skills, and practical experience. In addition, and ideally, these graduates would also display certain positive and informed attitudes towards entrepreneurship that could both enhance their employability in the business sector, and increase the likelihood of some of them becoming successful entrepreneurs. All this, it can be argued, is empowering. This argument suggests that universities should revisit their vision and mission statements, and revisions to these should be informed by solid research and guided by the belief that, in the current moment, students need to be equipped with entrepreneurial knowledge, skills and attitudes that go beyond, or are integrated into, the curricula and courses offered by their degrees. Thus, research informing and guiding such revisions seeks to generate empirical evidence that has the potential to help shape the academic project at the university, a project that is informed by the realities of the market and of employment opportunities for graduates. The challenge posed to the university, therefore, is to build an inter-disciplinary approach which makes entrepreneurship education accessible to all the students in the university, whatever their area of study. The aim of this would be to create entrepreneurial awareness in all students and develop their entrepreneurial knowledge and traits with the goal of changing their attitudes towards entrepreneurship as a career option.

The current research is based on the premise that the decisions students make about whether to become involved in entrepreneurship or not could be explained by various factors influencing their attitudes towards entrepreneurship per se. Currently little is known about whether these factors are operating among the students at the University of Venda, and if so, what the nature of these factors is. Given the importance of entrepreneurship in and to the economy, and given the pressing need for the South African economy to grow, the researcher considers that this research area needs urgent attention. This study, therefore, aims to explore and assess the various factors that influence the attitudes of final year undergraduate University of Venda students towards considering the choice of entrepreneurship as a career

Significance of the study

The study, by providing detailed information on the above-mentioned factors, aims to establish some of the reasons for some, or many, students currently not considering entrepreneurship as their career choice. It is hoped that such an investigation may provide a more comprehensive and specific understanding of the nature of these factors, and that the findings may be useful in informing ways to motivate students to choose to become entrepreneurs. It is also hoped that this study may provide, not only the University of Venda, but other higher educational institutions, with valuable understandings of what specific knowledge and practical experience needs to be incorporated into curricula and courses across the institution to

develop entrepreneurial knowledge and skills in all students, and to effect positive changes in their attitudes towards entrepreneurship as a career.

This study has potential value for government, higher education Institutions, researchers, policy makers, curriculum developers, and society in general. It could assist and/or inform these stakeholders in formulating policies around entrepreneurship education. In addition, it could supplement other studies done on entrepreneurship and / or fill any gaps that exist in this research field, serving as a reference base for other researchers. Curriculum developers may use this study to develop entrepreneurship curricula that have practical relevance for the students in their searches for employment and career opportunities post-graduation.

1.4 Research Question

The question anchoring this study is: What are the various specific factors that influence the attitudes of final year undergraduate University of Venda students in their choice of entrepreneurship as a career?

1.5 Aim and Research Objectives

1.5.1 Main objective

The aim of this study is to explore and assess the various factors that influence the attitudes of final year university students to choose entrepreneurship as a career option. This research was conducted in order to propose and inform a potential intervention for inculcating and integrating entrepreneurship into various disciplines on offer at the university.

1.5.2 Specific objectives

The following specific objectives were used to underpin and structure the overall aim of the study:

1. To explore and assess the attitudes of students towards entrepreneurship as a career option
2. To explore and assess the influence of entrepreneurial awareness on students' attitudes towards entrepreneurship as a career option
3. To explore and assess the influence of the students' personality traits on their attitudes towards pursuing entrepreneurship as a career option
4. To explore and assess the influence of environmental factors on students' attitudes towards pursuing entrepreneurship as a career option

5. To explore and assess the constraints students face, and/or perceive themselves to face, regarding entrepreneurship as a career option and:
6. To explore and assess the attitudes of academics and ENACTUS students towards developing knowledge of entrepreneurship in students, and towards its integration across disciplines at the university.

The following are the specific research questions:

1. What is the specific nature of the various attitudes of students towards entrepreneurship as a career option?
2. What influence does entrepreneurial awareness exert on students' attitudes towards choosing entrepreneurship as a career option?
3. What specific 'entrepreneurial personality traits' influence students' attitudes to becoming entrepreneurs and to what extent?
4. To what extent do environmental factors influence students' attitudes towards becoming entrepreneurs?
5. What are the constraints students face, or perceive themselves to face, in choosing entrepreneurship as a career option?
6. What are the attitudes of Deans, HODs, lecturers, and ENACTUS students towards developing entrepreneurial knowledge and skills in students, and what are their attitudes towards the integration of entrepreneurship across disciplines at the university?

1.6 Hypotheses of the study

In order to explore the relationships of the variables of objectives 1, 2, 3, 4 and 5, the following null hypotheses were proposed:

Hypothesis 1

H1: There is no significance of influence of gender and academic discipline on perceptions of attitudes of students towards entrepreneurship as a career option.

Hypothesis 2

H2: There is no significance of influence of gender and academic discipline on perceptions of entrepreneurial awareness as determinants of attitudes towards entrepreneurship as a career option.

Hypothesis 3

H3: There is no significance of influence of gender and academic discipline on perceptions of personality traits as determinants of attitudes towards entrepreneurship as a career option.

Hypothesis 4

H4: There is no significance of influence of gender and academic discipline on perceptions of environmental factors as determinants of attitudes towards entrepreneurship as a career option.

Hypothesis 5

H5: There is no significance of influence of gender and academic discipline on perceptions students have of the constraints they face as determinants of attitudes towards entrepreneurship as a career option.

1.7 Theoretical background of the study

Various psychological, social, and cultural theories inform the method applied in the current study. These include five main interrelated theories, chosen because of their relevance to career development.

First, Ajzen and Fishbein's Theory of Reasoned Action (TRA) (1980), which originated in the field of social psychology and defines the links between beliefs, attitudes, norms, intentions, and behaviours of individuals. In terms of this theory a person's intention to perform a behaviour is the main predictor of whether he or she performs that behaviour. This intention, in turn is determined by the person's attitude and his or her subjective norms. Figure 1.1 illustrates how the attitude of a person towards a behaviour is influenced by their belief in the consequences of this behaviour, multiplied by their evaluation of these consequences. This evaluation on their part can therefore be either positive or negative. On the other hand, the factor 'subjective norms' is influenced by normative beliefs, a concept which refers to the individual's beliefs about what others will think about their performing the behaviour in question. However, this theory is to some extent situated within the individual and excludes certain external factors, such as social or economic factors, that may play a role in determining behaviour, Ajzen and Fishbein (1980) refer to these factors as external variables and include, in addition to personality traits, political influences and demographics. In summary, the Theory of Reasoned Action is a useful theory for the current research in terms of predicting for a person's interest in choosing entrepreneurship as a career option. According to this theory, the action of becoming an entrepreneur is highly influenced by both what a person believes and what they (subjectively) think or believe regarding others' perceptions of that action. For

instance, an individual's choice of entrepreneurship as a career may be influenced by their perceptions of the views of friends, teachers, families, and others. These views are 'normative by the individual, and therefore, for the person contemplating this career choice, the normative beliefs surrounding those ideas would be based upon what the individual sees, or receives as, how other people feel, or on their expressed opinions of this potential career choice. Thus, according to this theory, attitude and parental influence (subjective norms) can have a significant influence on an individual's decision whether or not to select entrepreneurship as a career.

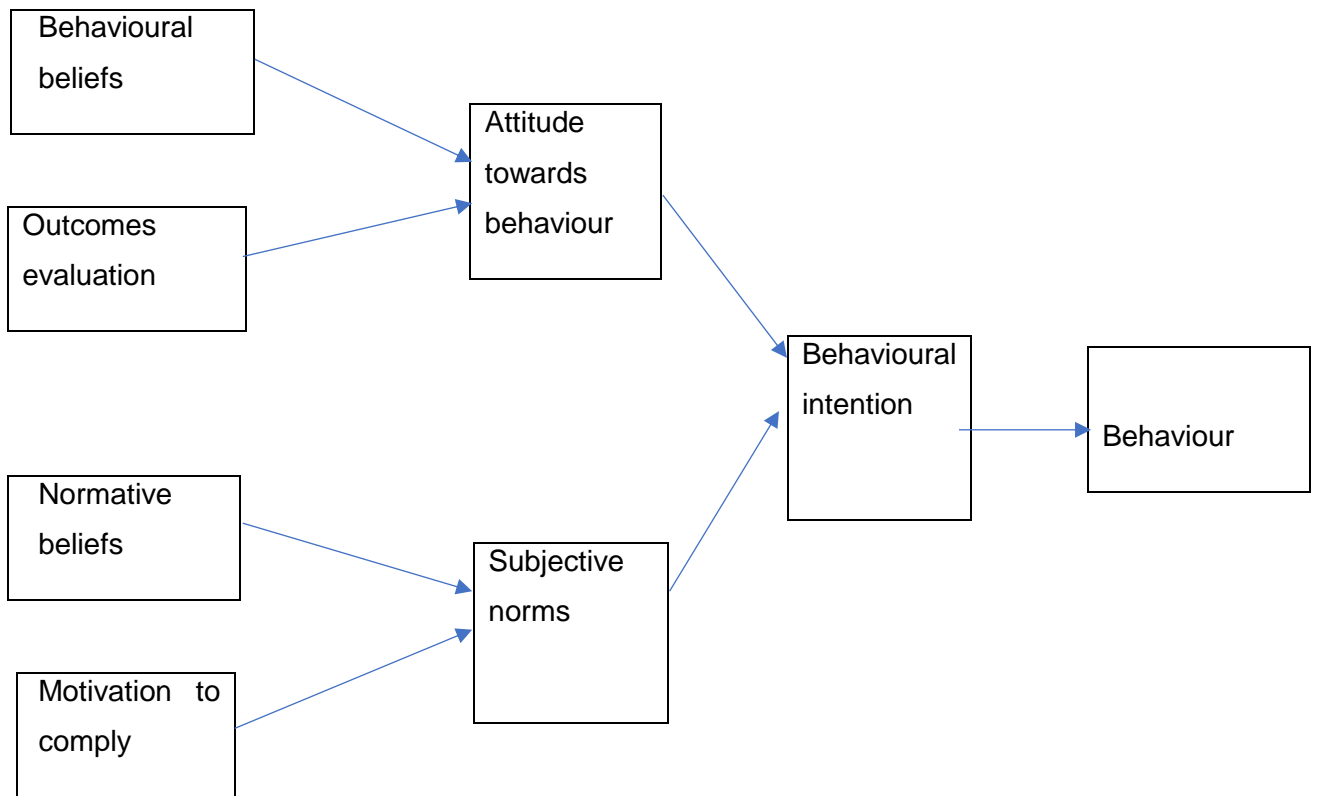


Figure 1.1 Theory of Reasoned Action (Ajzen & Fishbein 1980

The second model included in the theoretical/conceptual framework of the current study is the Entrepreneurial Event Model of Shapero and Sokol (1982). The model is simply an intention model which defines the interaction of cultural and social factors that can lead to a firm creation by influencing the individual's perceptions. This model (Figure 1.2) suggests that an entrepreneurial event is primarily a function of its desirability and feasibility as perceived by the individual, and the individual's propensity to act. These three factors are major factors which, according to this theory, are said to control or influence a person's intention to start a new business.

Perceived desirability refers to the degree to which a person considers starting a business as being attractive. It relates to how attractive the idea is, or appears to be, to an individual to become an entrepreneur. This means that a person must first see the act of becoming an entrepreneur as desirable before their intentions of becoming an entrepreneur will be formed.

Perceived feasibility, on the other hand, is the degree to which one believes they can start a business. 'Thus, this describes the individual's perception of their chance of becoming an entrepreneur. It again relates to an individual's perception or assessment of the available resources (e.g. financial support) which would make this possible.

According to Shapero and Sokol (1982) perceived desirability and perceived feasibility interact with each other in that, if an individual sees the starting of a business as feasible, they may perceive it as being desirable, and vice versa. While McStay (2008) explained how students' attitudes towards self-employment may be positively impacted by participation in entrepreneurship education, in the absence of perceptions of feasibility (belief in one's ability to be self-employed, and/or to acquire the necessary resources for this), self-employment intentions may not be actioned nor eventuate. Conversely, students' perceptions of feasibility may be positively impacted by participation in entrepreneurship education, but may be accompanied by a lack of desirability to be self-employed, and thus, again, self-employment intentions may not be formed. The third factor, propensity to act, refers to an individual's willingness to act once they decide they want to become an entrepreneur (Shapero & Sokol, 1982).

In summary, this model was developed to understand entrepreneurial intentions and behaviour. In terms of this model, perceived desirability is influenced by the culture, family, previous work experience, colleagues, mentors etc., while perceived feasibility is influenced by financial and other support, such as skills training. This model places more emphasis on perceptions without taking into specific consideration external factors such as social, economic, or cultural factors .

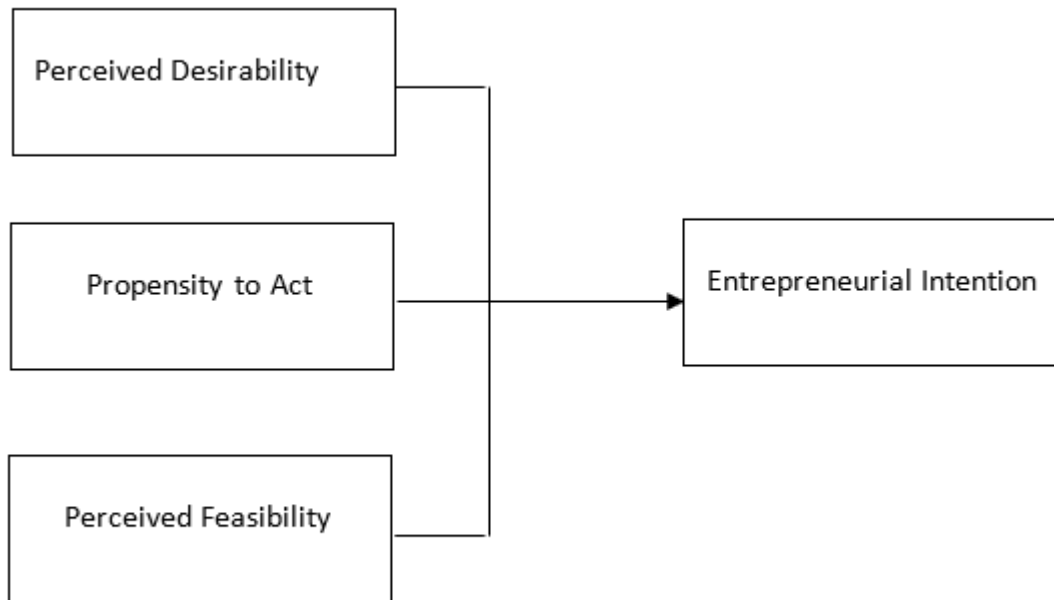


Figure 1.2 Shapero and Sokol's Entrepreneurial Event model

The third theoretical model is Ajzen's (1991) Theory of Planned Behaviour (TPB). This theory posits that individuals engage in an activity of starting a business as a deliberate action which is clearly reflected in their intention to engage in this behaviour. In other words, every action in human behaviour is planned. According to this theory, there are three significant factors that determine a person's intentions to engage in certain behaviour: a person's attitude towards their intended behaviour, their subjective norms, and their perceived (by them) behavioural control (Figure 1.3).

A person's attitude towards a certain behaviour of this person or others refers to the degree to which a person has a favourable or unfavourable evaluation of the behaviour in question (Ajzen, 1991). Regarding entrepreneurship, according to TPB theory, the person's deliberate intention to launch a new business will be influenced by personal values and attitudes that have been shaped over time (Mwiya, 2014).

Subjective norms refer to social pressure to perform or not to perform a behaviour as perceived by the individual contemplating an action (Ajzen, 1991). This relates to a person's beliefs or perceptions about whether their peers, and people of importance to that person, think the individual should engage in the behaviour. Thus, the way in which other people consider entrepreneurship, or the person perceives them to do so, will influence a person's own perception of entrepreneurship as a career option.

Perceived behavioural control is defined in the TPB as the person's perception of the ease or difficulty involved in the fulfilment of the behaviour of interest. Perceived behavioural control can be likened to the Social Cognitive term 'self-efficacy' (see below Bandura's 1986 Social Cognitive Theory).

In summary, the Theory of Planned Behaviour can be of value in helping us understand the ways in which we may be able to change or influence the behaviour of people, and can predict that behaviour and gain insight into the ways in which it can be deliberate and planned. This theory, therefore, has the potential to assist in explaining the various possible reasons why students have an interest, or have no interest, in entrepreneurship as a career option.

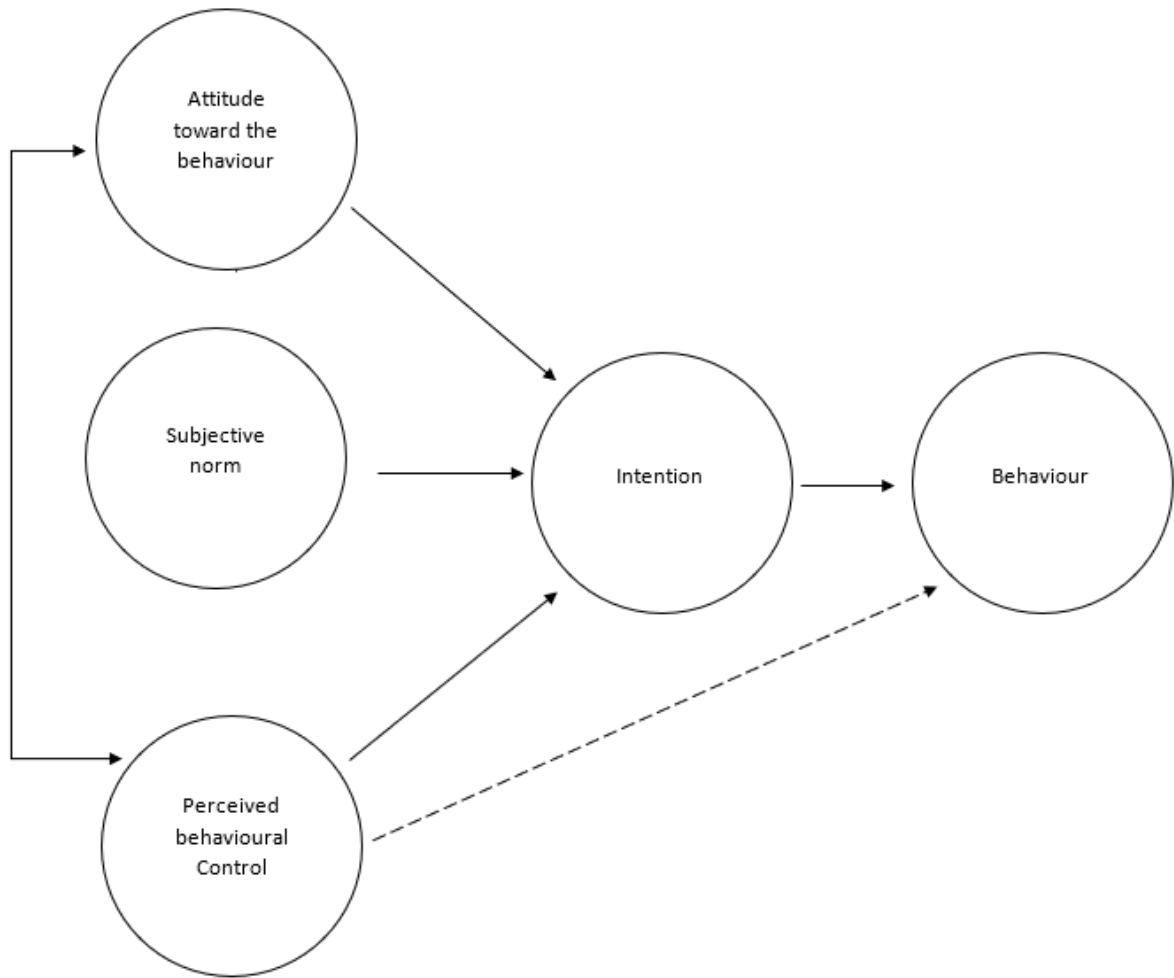


Figure 1.3 Ajzen (1991) Theory of planned behaviour

Fourth, Social Cognitive Theory was originally developed by Bandura (1986) as Social Learning Theory. Social Learning Theory suggested at the time that people learn from one another through observation, imitation, and modelling. It attempted to explain human behaviour in terms of continuous interaction between cognitive, behavioural, and environmental influences. When the theory was developed as Social Cognitive Theory in 1986, it introduced the concept of triadic reciprocity to explain the interactions between persons (cognitive), their behaviour, and their environments. Related to this concept is the concept of reciprocal determinism, which sees behaviour as being determined by the individual through cognitive processes, by the environment, and through external stimulus events (Figure 1.4). Bandura's 1986 Social Cognitive Theory emphasised that a person's behaviour has an influence on, and is influenced by, the environment in a reciprocal and cyclical process. Thus, personal attributes (e.g. knowledge, expectations and attitudes), external environmental factors (e.g. social norms, class, economic factors) and manifest behaviour (e.g. skills, self-efficacy) all mutually affect each other. Students live in a social world where they interact with the environment (physical, socio-economic etc) as they seek guidance towards careers (Mtemeri, 2017). Hence, the complex and multi-faceted environment in which students find themselves has an impact on their choice of entrepreneurship as a career option.

At the centre of Bandura's Social Cognitive Theory (1986) is the concept of self-efficacy. According to Bandura (1986), self-efficacy is one of the most important variables that influence people's beliefs about their capability to produce designated levels of performance that exercise an influence over events that affect their lives. Furthermore, this theory asserts that people will choose, persist in, and expend effort on tasks that they believe they can carry out successfully. Consequently, according to this concept, people will tend to avoid situations that they believe will be beyond their coping skills. More recently, Bignotti (2013) found, from his research conducted at a South African university that self-efficacy in the career choice selection can serve as a potential explanatory variable for career selection because it illustrates how people do not consider occupations for which they deem themselves to lack the necessary capabilities, irrespective of how appealing those occupations may seem. McStay (2008) in his research also indicates that individuals with high entrepreneurial self-efficacy are more likely to be entrepreneurs than those with low entrepreneurial self-efficacy. It can therefore be understood that students with a high level of self-efficacy towards entrepreneurship as a career option are likely to put more effort into succeeding in it. Thus, based on insights gained from this theory, and from research conducted, Social Cognitive Theory is well suited to studying and helping to inform the reasons for students deciding for or against making entrepreneurship their career choice.

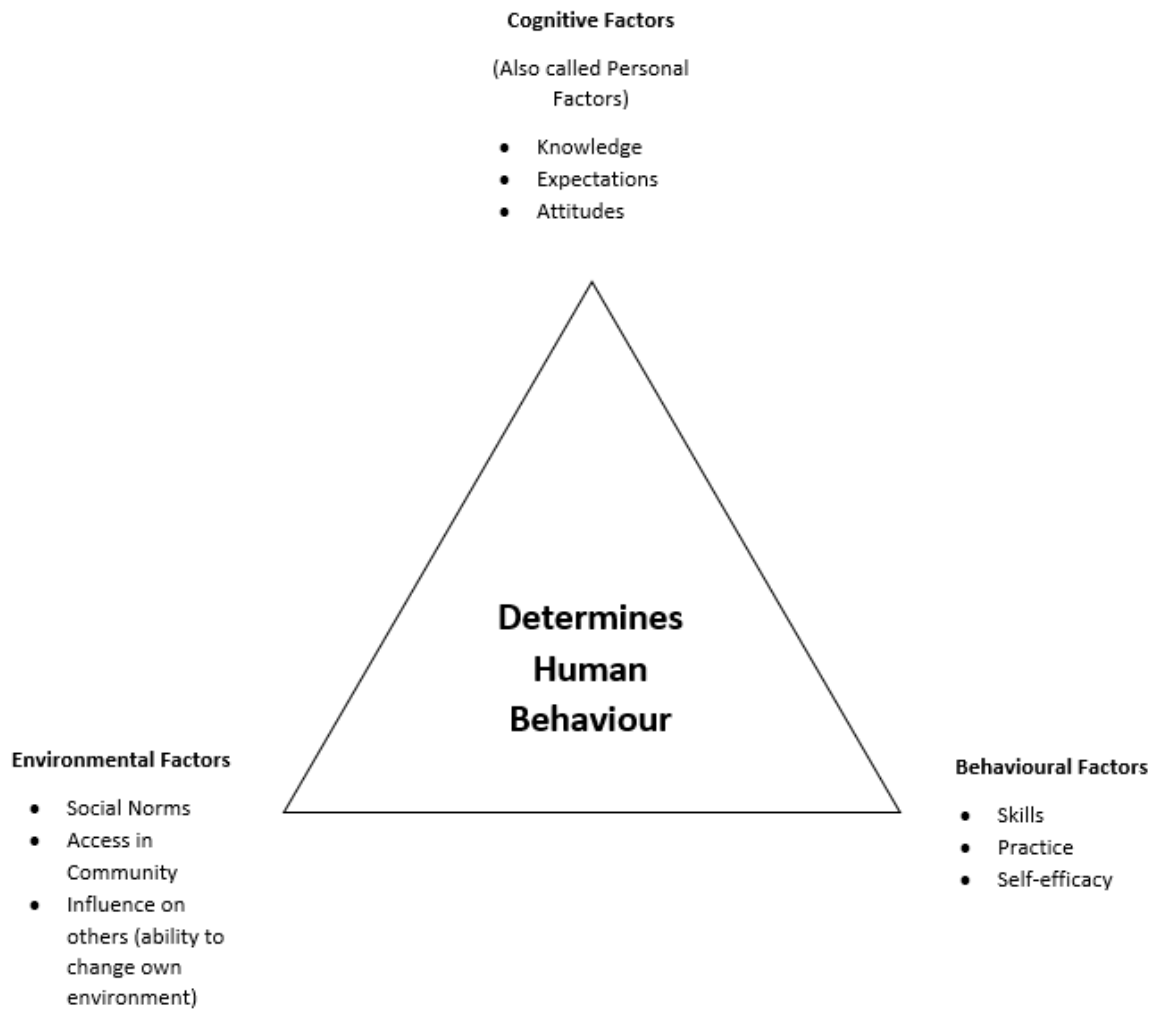


Figure 1.4 Bandura (1986) model of reciprocal dynamism

Fifth, The ABC Model of attitudes theory defines attitude as a person's evaluations of ideas, events, objects, or people, and this person seeing these attitudes as generally positive or negative, although the attitudes can also be uncertain, and waver between these binaries at various times, as in the course of a person's journey towards choosing a career. The ABC model of attitudes suggests that attitude has three components: affective, behavioural, and cognitive. Jain (2014) explains that in the ABC model the affective component relates to the individual's feelings about an attitude object. The behavioural component relates to the individual's intention towards an attitude object. The cognitive component would relate to the beliefs an individual has about an attitude object.

1.8 Conceptual Framework of the Study

The conceptual framework for the current study is guided by the theories of Ajzen and Fishbein (1980), Bandura (1986), Shapero and Sokol (1982), Ajzen (1991), and the ABC Model of attitude. The conceptual framework was developed through a process of investigating possible factors that would influence students' attitudes towards entrepreneurship as a career option. Figure 1.5, based on Ajzen's 1991 TPB, shows the interrelationship among variables of the study and presents the factors thought to have a possible influence on the attitudes of University of Venda students towards entrepreneurship as a career. The conceptual framework shows the possibility and/or probability that students' attitudes towards entrepreneurship are influenced by factors such as entrepreneurial awareness, personality traits, environmental factors, and their perceived constraints to venturing into entrepreneurship.

Entrepreneurial awareness

According to Lidovolo and Iravo (2016) the purpose of helping students acquire entrepreneurial awareness would be to increase the number of students having enough knowledge about small enterprises, self-employment, and entrepreneurship, so that they would be willing to consider that alternative as a rational and viable career option. Research has found that entrepreneurial awareness can be increased through entrepreneurial education, campaigns, workshops, competitions etc. This is supported by the study done by Rockman and Ahmed (2015) who found entrepreneurship education as an attempt to develop in the participants (students or trainees) the intention to perform entrepreneurial behaviours, to acquire entrepreneurial knowledge, and to increase the desirability of the entrepreneurial activity. According to their findings, entrepreneurial awareness can play a significant role in changing the attitudes of students towards entrepreneurship as a career option.

Environmental factors

These factors include family, educational, political, social, and economic factors, all of which have a significant impact on the individual's attitude towards starting, developing, and running a business. Rockman and Ahamed (2015) found educational support through professional education in universities to be an efficient way of obtaining necessary knowledge about entrepreneurship. Additionally, these scholars concluded that self-employed parents affect their children's entrepreneurial interest and career choices. This implies that students whose parents are entrepreneurs are more likely to become entrepreneurs. Thus, according to this research, the family background of students can exert a significant influence on their attitude towards entrepreneurship as a career choice.

Personality traits

Personality traits refer to the personal characteristics of entrepreneurs, and can be divided into risk-taking, need for achievement, locus of control, need for autonomy, creativity and innovation, and self-confidence. The study by Rockman and Ahamed (2015) found personality traits to be closely connected to entrepreneurial intention. This implies that these traits can serve as clear indicators of the likelihood of changing students attitudes towards starting their own businesses. Hence, according to this research, for students to become entrepreneurs, they need to be willing to take risks, have a need for achievement, have internal locus of control, and be creative.

Constraints

Constraints, or perceived constraints, to embarking on entrepreneurship also have an influence on an individual's decision to pursue entrepreneurship as a career choice. These factors thus, can be found to influence the attitudes of students in the process of considering entrepreneurship as a viable career option.

Attitude

Gibson *et al.* (2011) define attitude as a complex mental state involving beliefs, feelings, values, and dispositions, all of which influence a person to act in a certain way. They argue that attitudes tend to change across time and situations through an interactive process with the social environment. Attitudes are said to have a knowledge / belief (cognitive) component, an emotional (affective) component, and a conative (behavioural) component. A person develops favourable attitudes towards those objects or modes of behaviour which they perceive will facilitate success, and unfavourable attitudes towards those which they perceive will hinder their success or lead to failure. Figure 1.5 illustrates how an attitude towards entrepreneurship is influenced by environmental factors, personality traits, and a person's



level of awareness (exposure to) of entrepreneurship. This study, and its findings, while accepting that a university may well undertake generative activities, proposes, as is set out in Chapter 5 (5.7. Recommendations), a potential intervention for inculcating and integrating entrepreneurship across various disciplines.

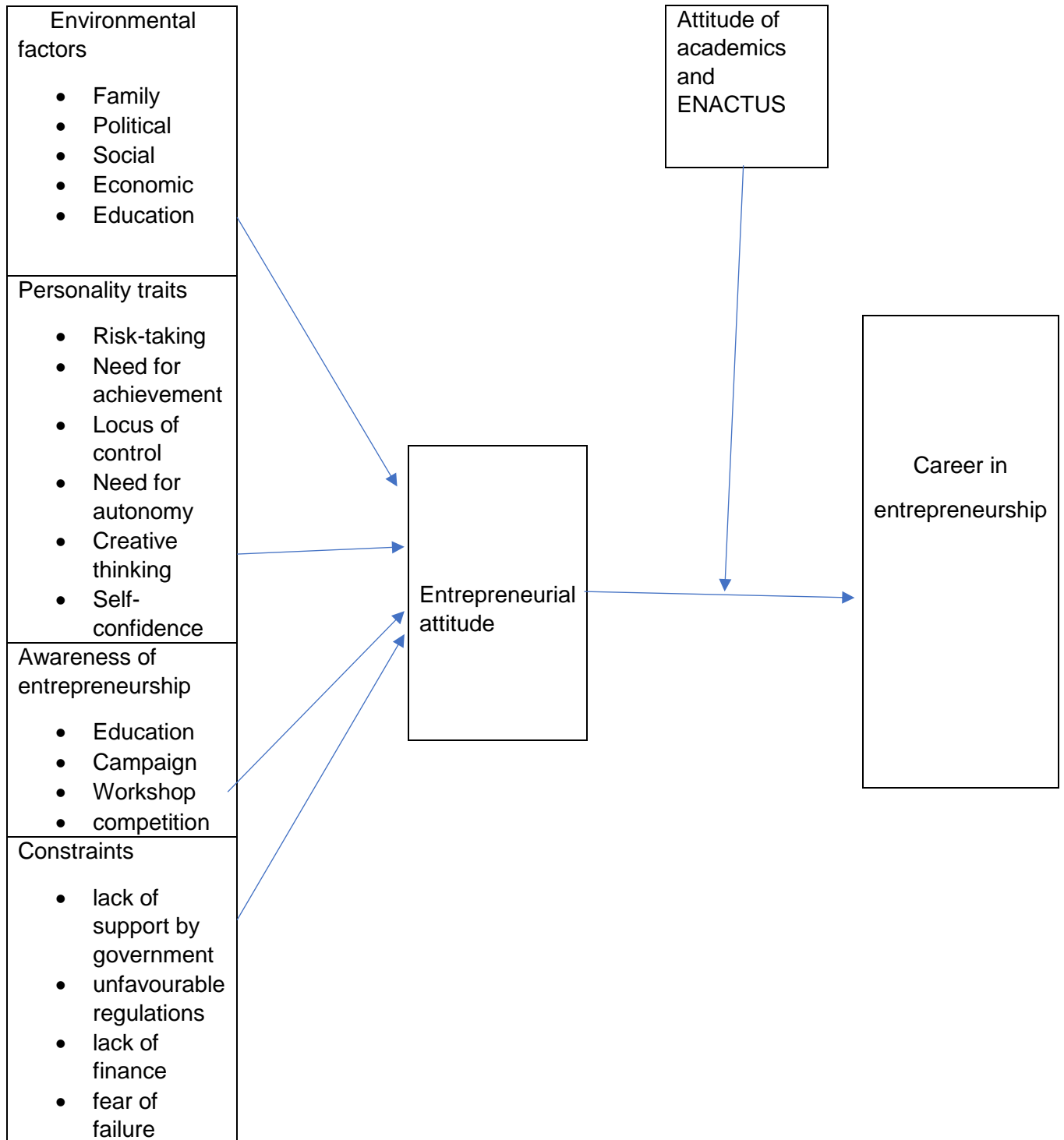


Figure 1.5 Conceptual framework (Adapted from Ajzen (1991))

1.9 Operational Definitions of Key Terms and Concepts

Detailed definitions of many of these terms and concepts are presented in Chapter 2.

Entrepreneurship is generally defined as a state of self-employment, usually involving starting and running one's own business. In the context of this study, and as a career option, it is seen as the process whereby individuals become aware of self-employment as a career option, develop ideas, take and manage risks, learn the process involved, and take initiatives in developing and owning the business (Chigunta, 2005). A detailed definition is presented in Chapter 2 (2.2). *Entrepreneurs* refers to people who create and grow enterprises.

Youth in South Africa is defined as that segment of the population that falls within the 15-35 age bracket. *Youth entrepreneur* refers to a young person who is in the process of starting, has started, or is operating a business venture (Beeka & Remmington, 2011). *Youth entrepreneurship* is defined as self-employment of people younger than 30 years (Jakubczak, 2015). For this study, students aged 18-35 years from rural areas are considered as youths.

Attitude is an individual's viewpoint about a specific thing/object, and/or environment (Chen & Lai, 2010). An attitude is multi-faceted and complex: it can be understood to be a collection of personal traits that can be learned. In the specific sense and context of attitude toward entrepreneurship, attitude includes an individual's concept of entrepreneurship, together with his or her assessment, and inclination towards entrepreneurial behaviour or self-employment. Attitude can be based on personality traits and demographic characteristics; it can also be shaped and reshaped with education (Ahmed *et al.*, 2010). It can also be seen as a person's disposition to respond favourably or unfavourably to an object, person, institution or event (Yurtkoru *et al.*, 2014)

Entrepreneurial intention is defined as the conscious state of mind that precedes action and directs attention towards a goal such as starting a new business

Graduates refers to post-secondary school students attending a higher education institution. Such institutions include universities and other tertiary institutions, such as technikons.

Final year university students are those undergraduate students who are doing modules which, upon completion, enable them to graduate at the end of their final academic year.

Youth unemployment refers to the youth who are 18 or more years and are in the process of seeking employment in the public and/or private sector.

1.10 Outline of the Thesis

The study is structured as follows: Chapter one presents an introduction to the research and a brief background of the study, the research problem, research question, research objectives,

theoretical background, conceptual framework of the study, and operational definitions of key terms and concepts. Chapter two presents the literature review which describes, discusses, and evaluates the relevant literature related to the background, and to the objectives and theoretical underpinnings of the study. It also gives an overview of the legislative framework related to the youth in South Africa, particularly that legislature pertaining to youth employment. The third chapter addresses the research methodology and includes a description of the study area, research design, population and sampling procedures, data collection, data analysis, reliability of the study, and ethical considerations. Chapter four presents the research results and includes descriptive and inferential analyses. The chapter also deals with the final discussions of the findings. Chapter five presents the conclusions from the findings and includes discussions of the major findings, the final conclusions, recommendations from the findings, and the limitations of the study.

CHAPTER 2 : LITERATURE REVIEW

2.1 Introduction

As was described in Chapter 1, the choice of entrepreneurship as a career is a function of various, often interrelated, factors, such as attitudes towards entrepreneurship, entrepreneurial awareness, personality traits, external environmental factors, and constraints. The attitudes of young people towards this career choice can in turn be influenced by the last four factors. This chapter presents a review of both global and local literature which has explored and theorised these factors. The review covers various definitions of entrepreneurship emerging from the literature, various studies carried out on youth entrepreneurship, and theories and conceptual models, including various personality theories.

2.2 Definitions of Entrepreneurship

Entrepreneurship, specifically, youth entrepreneurship, - the focus of this current study - is considered by academicians, educationists, economists, and policy makers as a means to integrate young people into the mainstream economy. Scholars agree that entrepreneurship is defined differently by different scholars at different times and in various contexts (Tsegaye, 2015). The originator of the concept can be said to be Schumpeter (1934), a political economist who, more than eighty years ago, defined entrepreneurship as the series of actions of creating “new combinations” of factors to produce economic growth. He was the first person to view entrepreneurship as an act of innovation which manifests itself in the form of new products, new production methods, new markets, and new forms of organization. He can thus be said to be one of the earliest theorists to define entrepreneurship from an economic perspective. Nearly eighty years later Bula (2012) argued that any definition of entrepreneurship depends on the focus of the person defining it, and on the perspective or lens used by that person to define it. Recent various perspectives, or lenses through which entrepreneurship is defined, include not only the economic, but also the sociological, psychological, social, socio-cultural, and management perspectives. Despite the fact that there is little clarity or agreement amongst scholars, educators, policy makers, and the corporate world on who or what precisely an entrepreneur is, and what entrepreneurship means, all of the various scholars in the literature reviewed were found to agree that entrepreneurs are innovators, risk-takers, leader managers, initiators, and creative thinkers, and that they have an internal locus of control.

In the last decade, various economic academicians have offered their definitions, many of which overlap, or place different emphases on, the defining characteristic of entrepreneurship. Shamsuddin *et al.* (2018) define entrepreneurship as the ability to recognise, and to exploit business opportunities using scarce resources. Using the agreed-upon definition above,

together with that of Shamsuddin *et al.* (2018), one can view entrepreneurship as essentially a process which requires individuals to organise and manage resources with the aim of making a profit. From the rural perspective, which, as was mentioned in the previous chapter, is of direct relevance to the focus of the current study, entrepreneurship can be seen as a phenomenon which is emerging in rural areas and in the rural context, Paul and Sharma (2013) define a rural entrepreneur as someone who resides in a rural area and who contributes to its development. Thus, based on this research and definition, it can be argued that, as a rural university, the University of Venda has the potential to make a significant contribution to the creation of rural youth entrepreneurs through entrepreneurship education. Based on research conducted in Botswana, Baliyan and Baliyan (2018) define entrepreneurship as a way of thinking, reasoning and acting that is opportunity obsessed, holistic in approach, and leadership balanced for the purpose of value creation. Opportunity obsession is the characteristic of an entrepreneur who constantly comes up with new ways of doing things (Baliyan and Baliyan, 2018). This definition also implies that an entrepreneur is creative, motivated, committed, honest, visionary, and passionate, and makes decisions under conditions of uncertainty. Hassain *et al.* (2018) also see entrepreneurship as linked to the 'opportunity obsessed' idea of Baliyan and Baliyan (2018). For them, an entrepreneur is a person who is actively and constantly looking for opportunities to execute their business plan. The authors regard entrepreneurship as a process of vision, change, and creation. As a dynamic process, it requires an application of energy and passion towards the creation and implementation of new ideas and creative solutions (Niculescu & Mihiu, 2014).

Koe *et al.* (2012) define entrepreneurship as a process in which individuals recognise and utilise opportunities through their ability to think and to apply new ideas and eventually gain satisfaction from this process. This definition overlaps with that of Hassan *et al.* (2018) in its suggestion that an entrepreneur continually innovates and identifies business opportunities for the promotion and sale of the product and services which satisfy both himself and others.

For this study, the earlier definition provided by Chigunta (2005) is adopted since his definition is one which sees entrepreneurship as a complex process, and one which incorporates several – and interrelated - lenses through which entrepreneurship can be viewed, perspectives which go beyond the economic to include the social, psychological/behavioural, and environmental perspectives. He saw entrepreneurship as a process whereby individuals become aware of self-employment as a career option, and then proceed to develop ideas, take and manage risks, learn the process, and take initiatives in developing and owning their business. According to his definition, the entrepreneurial process, or process for setting up and growing a business, can be broken into five phases: idea generation, opportunity evaluation, planning, company formation/launch, and growth. Thus, in terms of the focus of

this study, this view suggests the importance of the preparedness of young people for, and their openness to the idea of, embarking on this process. Table 2.1 shows, in chronological historical order, selected definitions of entrepreneurship in the literature and the various ways in which entrepreneurship has been similarly and differently defined by different scholars over time.

Table 2.1 Selected definitions of entrepreneurship, 1934-2014

Authors	Definitions of explanations
Schumpeter (1934)	New combinations, including the doing of new things, or doing things that are already being done in a new way. New combinations include introduction of new goods, new methods of production, opening of new markets, new sources of supply, and new organizations.
Kirziner (1973)	The ability to perceive new opportunities. This recognition, and the seizing of an opportunity, will tend to "correct" the market and bring it back to equilibrium.
Drucker (1985)	The act of innovation that involves endowing existing resources with new wealth capacity.
Timmons (1999)	A way of thinking, reasoning, and acting that is 'opportunity obsessed', holistic in approach, and leadership balanced.
Rwigwema and Venter (2004)	The process of conceptualizing, organizing, launching and, through innovation, nurturing a business opportunity into a potentially high growth venture in a complex, unstable environment.
Chigunta (2005)	The process whereby individuals become aware of self-employment as a career option, develop ideas, take and manage risks, learn the process, and take initiatives in developing and owning the business.
Blundel and Lockett (2011)	The phenomenon associated with entrepreneurial activity. It includes a complex pattern of social interactions that extends beyond individual entrepreneurs to incorporate teams, organisations, networks, and institutions.
Bula (2012)	Entrepreneurs are risk-bearers, coordinators and organisers, gap-fillers, leaders, and innovators or creative imitators.
Nieman and Nieuwenhuizen (2014)	The emergence and growth of new businesses. It is also the process that causes changes in the economic system through innovations of individuals who respond to opportunities in the market.

2.3. Conceptualising youth

As with 'entrepreneurship', the literature shows no universally accepted definition of the concept of 'youth', a word which can have different meanings depending again, as with 'entrepreneurship', on the context in which it is used. Its definition changes with time, and with circumstances, in particular with changes in demographic, financial, and socio-cultural settings.

The United Nations (UN) General Assembly first officially defined 'youth' in 1985 as people between the ages of 15 and 24, but later acknowledged that the age range varies among different countries and societies. However, some agencies of the United Nations system, such as the United Nations Children's fund (UNICEF), and the World Health Organisation, define youth as persons between 10 and 24 years. These definitions differ with that of the African Youth Charter which has an age range of between 15 and 35 years.

The International Labour Organization (ILO) defines the youth labour force as including all persons between the ages of 15 and 24 who were either employed or unemployed over a specified period. The African Youth Charter of the African Union (African Union, 2006) has defined youth as those between the ages of 15 and 35.

In Sub-Saharan Africa, the term "youth" is associated with young men from 15 to 30 or even 35 years of age. However, each country in this region has its own age limit regarding the definition of youth, for example, Kenya (15-30); Nigeria (18-35); Morocco (15-29) etc.

In South Africa, the National Youth Policy (2009-2014) defines youth broadly as any persons between the ages of 14 and 35 years. This embraces various categories of youth who have been exposed to different socio-political, socio-economic, and historical experiences. The NYP 2020 still defines young people as those falling within the age range of 14 to 35. The motivation for the age limit of 35 is that historical imbalances in the country have not yet been fully addressed. This definition is in line with the definition of youth as found in the African Youth Charter which defines youth as those between 15 and 35 years.

Many people believe that, to bring about important changes in attitudes and behaviours of young people, it is important to begin this process at an early age. If it is a given that the youth are key agents for social change, economic development, and political change, it is important to attempt to influence the perceptions and attitudes of young people with respect to participation in entrepreneurship as an attractive career path at an early age – an educative process which is the focus of the current study. Their findings from studies conducted on youth in rural East Africa brought Namatovu *et al.* (2012) to the conclusion that, for young people, particularly those in rural areas in developing countries, self-employment has the potential to increase their self-confidence, help them achieve economic independence, and create

employment, not only for themselves but for others. Thus, according to studies such as those done by Namatovu *et al.* (2012), the youth are a major resource base for any country or government wanting to establish, or to be involved in, rural development projects through entrepreneurship. The kinds of skills the youth are exposed to and are able to master would be an important factor in determining how to go about developing these countries' rural areas economically. This study regards students aged 18-35 years as youths.

2.4 Attitudes of students towards entrepreneurship

According to Hussain *et al.* (2018), an attitude of a student towards entrepreneurship can be broadly seen in terms of the choice of the student to become self-employed rather than employed by an organisation. As such, students who choose to become entrepreneurs would imply their desire to be their own boss. Strydom *et al.* (2015) define attitude as a set of beliefs held by a person about an object or person, which can be positive, negative, or neutral. These beliefs are generally accepted to have three components: a cognitive component, an emotional (affective) component, and a behavioural component. The cognitive or knowledge component represents the information a person possesses about an object; this information includes an awareness of the existence of the object, beliefs, or perceptions about the attributes of the object, and judgment about the relative importance of each of the attributes. The cognitive component also refers to our thoughts, beliefs, and ideas about something. The affective (liking or disliking) component summarises a person's overall feelings towards an object, situation, or person on a scale of like / dislike, or favourable / unfavourable, and thus refers to the feelings or emotions – and the relative intensity thereof - that something evokes in a person. The intention (action) component refers to a person 's expectations of their future behaviour towards an object. This translates into the tendency or disposition to act in certain ways towards something.

Siragusa and Dixon (2009) see attitudes as originating in our beliefs and as influencing our behaviour. The authors view the attitude of an individual towards getting involved in the field of entrepreneurship as driven by several factors that can be categorized as push and pull factors. The push factors include frustration which results from limited opportunities, economic downturn, and dissatisfaction. Pull factors include psychology (cognitive/affective) and the expectation of profit. The authors further argue that entrepreneurial attitudes can be associated with five main factors: personal traits (need for achievement, internal control, risk-taking), personal environmental factors (family status/wealth, gender, having a business-owning-family), personal objectives (to be the owner of a business, obtain a financial guarantee, and vision), business environment (competition, societal attitudes towards new businesses, and accessibility to loans), and business ideas. According to this theory/model,

people who show positive as opposed to negative entrepreneurial attitudes are more likely to act as entrepreneurs and believe that entrepreneurship is not simply a method to make a living, but a way of achieving self-actualization (Yang, 2013). This study supports the view that the attitudes of individuals play an important role in their decision to pursue entrepreneurship as a career option, or deciding not to do so. Thus, in order for encouraging the students, such as those who constitute the population and sample of the current study, to seriously consider entrepreneurship as a career option, there could be a need to change their attitudes through entrepreneurship education. This is the focus of the investigation of the current study.

Chen and Lai (2010) define entrepreneurial attitudes in terms of four characteristics. First, they see attitude as an individual's tendency towards, or being drawn towards, a specific thing and environment. This is a person's inclination towards persistence and consistency, and it encompasses a person's general knowledge (cognitive, emotions, and actions). Second, the attitude must have a target, which might be a concrete/physical person or thing, but could also be an abstract idea or thought. Thirdly, attitude is analogous to inclination (towards thinking and/or behaving in certain ways). Fourthly, the person's cultural traditions, family environment, and educational environment are the environmental factors that affect the formation and persistence of an attitude. The authors see attitude as including three factors: cognitive composition, emotional composition, and behavioural composition. As was described in the previous chapter, the theory of planned behaviour (TPB) shows intention as being an antecedent to behaviour and that this intention is predicted by attitudes towards behaviour, subjective norms regarding the behaviour, and perceived behavioural control over the behaviour (Ajzen, 1991). The current study is underpinned by, and investigates, the assumption that, before a student contemplates becoming an entrepreneur they have to develop an intention to start an enterprise, which in turn is influenced by attitude.

Colakoglu and Gozukara (2016) conducted a comparative study on personality traits based on the attitudes of university students toward entrepreneurship. According to them, entrepreneurial attitude refers to the positive or negative intention of an individual toward creating a new business. They regarded entrepreneurial intention as the base of entrepreneurial actions

Based on studies they conducted in Najafabad, Isfahan, Iran. Bardeh *et al.* (2010) describe attitude towards business as a form of psychological preparation to perform a job, a process which could result in an individual acquiring a positive, negative, or neutral attitude. According to them, an individual can be regarded as having a positive attitude towards business when they view their job in business with love and interest and firmly believe that business is what will bring them personal and social success, and they draw a sense of satisfaction and

happiness from this kind of work. Based on their research, the authors concluded that an individual would tend to have a negative attitude towards business when they disliked performing the job for a reason, or number of reasons, and were inclined to shun the responsibility of performing the work. They found that a person's neutral attitude towards business indicate that the individual has neither a negative nor a positive feeling towards business, and valued the performance of the job as a task simply in return for the income that they received for its completion. This attitude research/model would suggest a need to develop and encourage students' entrepreneurial traits through entrepreneurship education in such a way as to develop positive attitudes in them towards choosing entrepreneurship as a career.

Adefokun *et al.* (2018) define attitude as a tendency to act or react in a certain manner when confronted with certain stimuli. These scholars regard stimuli as including an object, individual, idea, or anything else to which an individual can react positively or positively.

2.5 Entrepreneurship Awareness

Entrepreneurship awareness includes knowledge of what entrepreneurship involves, as well as knowing about the skills needed to become an entrepreneur. This includes knowledge/education about entrepreneurship. The study carried out by Abirami and Kumar (2014) in a rural district in India found that students with high entrepreneurial skills tended to start up a business of their own in the future. Their study highlights a need to create and generate entrepreneurial skills among students with the purpose of instilling awareness of all that entrepreneurship entails in practice. This is based on the assumption that, for the appropriate knowledge and awareness to be developed in an individual, the individual needs to receive information about the existence and nature of innovation before forming an opinion and an intention. Thus, building awareness is extremely important in entrepreneurship because, before an opportunity is identified and developed, and an intention formed, an individual must be aware, or be able to identify, that an opportunity exists, and the details and potential thereof. Thus, exposure to entrepreneurship in all its facets is an important factor in the sensitising of students to the existence and potential of entrepreneurial opportunities in the process of developing and fostering in them an entrepreneurial career. This suggests the possibility of creating a detailed awareness in students through entrepreneurial education, entrepreneurial campaigns, workshops, social networks, and entrepreneurial competitions. In this study, the researcher seeks to explore and assess the influence of entrepreneurial awareness/knowledge amongst a sample of undergraduate final year University of Venda students, and the specific effects of this awareness on their attitudes towards entrepreneurship as a career choice. The purpose of this investigation is for the study to ultimately make recommendations for integrating this across disciplines. As has been mentioned, the researcher considers this to be of importance given the rural context of the university and the

institution's commitment to the economic development of rural areas. Students - pre-and post-graduation - in this kind of rural context often have to contend with adverse socio-economic circumstances in addition to a lack of employment opportunities. Thus, I consider that the creation and raising of entrepreneurial awareness amongst these students is a potential strategy for solving the challenges of poverty, and un-/under-employment, particularly in rural areas.

The following sections present a review of the literature on various perspectives of awareness of entrepreneurship across various regions, and across both developed and developing countries/economies, including Europe, Asia, the Middle East, Sub Saharan Africa, and Southern Africa, showing the similarities and differences between these.

2.5.1 European perspective on awareness of entrepreneurship

Kirby (2003) argued that raising entrepreneurship awareness ranges from measures channelled through the education system to young people, to measures intended to encourage the unemployed to consider self-employment as an alternative to unemployment. This would suggest that an appropriate time for raising awareness in students would be during their school years, and that students need to be encouraged to consider entrepreneurship as a viable career option even at primary school level. Thus, according to this argument, a school curriculum which includes entrepreneurship is important for creating general knowledge and awareness about entrepreneurship as a career option, and this awareness can be further developed and encouraged at university level.

The European Commission (2008) echoes the argument that exposure to entrepreneurship in universities should not only be confined to business studies departments but should spread across other departments. The current study seeks to affirm this argument and to show that exposure to entrepreneurial courses across the campus would certainly, to some extent, encourage both students' awareness of entrepreneurship as an alternative to unemployment, and a positive attitude towards it.

Bridge *et al.* (2009) argue that the pursuit of entrepreneurship could be likened to choosing an occupation, and that, for this occupation to be successful, requires an initial awareness, an interest in it, and a desire to try it, together with the decision and the action to do it, followed by a sufficient degree of attainment in it to convince and encourage the entrepreneur to continue in this field. This implies that raising awareness is the initial trigger for this process, that it has the potential to stimulate students to develop a positive interest in, and to change their attitudes towards, entrepreneurship as a career option.

Franco, Haase and Lautenschlager (2010) conducted a combined study at universities in three European regions, one in Portugal and two in Germany. They explored the ‘entrepreneurial intentions’ of university students, focusing on the “regional dimension” and used a wide range of variables, such as demographic profile, social background, motives for occupational choice, and participation in entrepreneurship education. While they found demographic profile, social background, and participation in entrepreneurship education to be a none or weak influence, they argue that the underlying motives for occupational choice, as well as the “regional dimension”, are highly relevant, and the existence and fostering of students’ entrepreneurial motivation, knowledge, and skills to be potentially important factors determining their future career choices. They further indicated that, without an entrepreneurial conviction i.e. the right mind set, awareness, motivation and attitudes, the likelihood decreases that an individual will undertake sustainable efforts towards business creation. Their findings regarding the “regional dimension” have implications for the University of Venda’s rural context/region, as well as for the importance of encouraging entrepreneurship across disciplines, taking into consideration the nature of the region from which most of the students come and in which the university is situated.

Raposo and Paco (2011), in a literature review done on the positive link between entrepreneurial education and subsequent entrepreneurial activity on the part of the graduated student, maintain that education can create and foster an awareness in students of alternative career choices. The literature they reviewed suggested that, through effective entrepreneurship education, an individual is able to access the skills and knowledge needed to start and grow a new business. Thus, the view of these authors endorses the arguments already presented that educational institutions like universities have responsibilities to inform and expose under graduate and graduating students to a wide range of career options, including entrepreneurship. The authors argue that early formal entrepreneurship education affects the attitudes of students and influences them in the direction of their future career. They report that it has also been found to affect their propensity for entrepreneurship when they become adults.

The European Commission has long supported the development of entrepreneurship education at school level as a means of creating awareness among learners. This is suggested in the Eurydice report (2016), which states that entrepreneurship education at school and university contributes to the development of the appropriate skills, and, through this, the creation of an entrepreneurial culture that may ultimately lead to an increase in the number of business start-ups and the level of self-employment.

The literature review of some European perspectives on entrepreneurial awareness in this section highlights the important role an education system and institution can play in changing the attitudes of students towards considering entrepreneurship as a career option, as well as stimulating students' desires to embark on, and develop an interest in, such a career at an early stage in their lives.

2.5.2 Asian perspective on awareness of entrepreneurship

Over the last decade the Malaysian government has devised various policies, including the Ninth Malaysia Plan (2006-2010), to encourage young adults to run their own businesses (Moi *et al.*, 2011). This government introduced entrepreneurship courses in all public universities, considering these education institutions to be ideal places to promote an entrepreneurial culture in Malaysian societies. According to Mansor and Othman (2011), the purpose of teaching entrepreneurship in these institutions was to expose students to a comprehensive understanding of the concept of entrepreneurship, to nurture interest and awareness in business, and to help them discover various entrepreneurial possibilities and opportunities out in the business world. Regarding the method of imparting entrepreneurial skills to the students, Pihle and Sani (2009) proposed techniques such as developing business plans, presentation of case analysis, class discussion and running a real business, visits to business locations, and interviews with entrepreneurs, as the most important and effective teaching strategies for improving students' entrepreneurial awareness and skills. Their recommendation was that teachers presenting entrepreneurship courses in universities should consider teaching techniques that require students to have "hands on" enterprise experience as well as to practise an entrepreneurial directed approach in improving university students' entrepreneurial mind sets.

From an Indonesian perspective, Rahmawati *et al.* (2012) regard entrepreneurship education as important in assisting young people to develop entrepreneurial skills, attributes, and behaviours as well as to develop enterprise awareness, and to understand and to realize entrepreneurship as a career option. Thus, they consider that, at the university level, entrepreneurship education could play a role in developing entrepreneurial qualities in individuals, and encouraging self-employment amongst students after graduation.

The literature dealing with the Asian perspective on encouraging entrepreneurship in young people stresses the importance of effective teaching techniques that require students to have "hands on" enterprise experience in changing or developing their' mindset or attitudes towards entrepreneurship.

2.5.3 Middle East perspective on awareness of entrepreneurship

The findings of a study done by Hosseini and Ahmadi (2011) on entrepreneurial attitudes of students in Iran suggest the potential for entrepreneurship education in universities to enhance the skills of students in areas related to starting a business. This in turn was found to have the potential for creating more jobs and, in so doing, to achieve employment sustainability over time. In Israel, Aviram (2010), in an article which reviews the literature on the concept of entrepreneurial awareness, and attempts to make a clear distinction between entrepreneurial alertness and entrepreneurial awareness, sees awareness as including two components: first, the ability of a potential entrepreneur to evaluate the situation requirements according to specific indices that pertain to the particular situation, and second, to assess the resources that the evaluator possesses in order to be able to respond to these requirements. The author argues that, according to this concept, the establishment of a new venture would depend on the evaluator/potential entrepreneur possessing two personality traits, viz. alertness and awareness (to be discussed under 2.6.1). Without the first, a would-be entrepreneur would not discover the opportunity, and without the second, they would not have the power or ability to put their discovery to work.

Also from a Turkish perspective, Sanli and Hobikoglue (2015) identify innovative entrepreneurship policy and entrepreneurship training as the means to raise awareness about entrepreneurship in the youth. They claim that entrepreneurship policies when used correctly encourage the youth to establish their own businesses and to take risks as entrepreneurs. Furthermore, they consider training to be an important policy tool to disseminate awareness and practical experience of entrepreneurship.

Dogan (2015), in his Turkish study examined the factors affecting entrepreneurial intentions of the final year undergraduate students. He found a direct relationship between entrepreneurship education and entrepreneurial intention. This suggests that entrepreneurship develops entrepreneurial attitudes, skills, and behaviour of students towards entrepreneurship as a career option.

2.5.4 Sub-Saharan perspective on awareness of entrepreneurship

Gemechis (2007), from the results of a case study he conducted with students in Addis Ababa, Ethiopia, considered – in line with many of the WEF (2011) proposals - that awards, meeting successful entrepreneurs, being exposed to success stories, giving better media coverage, youth business events, campaigns, and promoting entrepreneurial culture could all be useful strategies for promoting entrepreneurship as a viable and attractive career path.

Uduak and Anieflok (2011), from a quantitative/survey study conducted at two universities in Nigeria, argued that being exposed to education about entrepreneurship has the potential to instil entrepreneurial drive in students. Their findings showed that entrepreneurship education can lead to an increase in the level of students' knowledge of entrepreneurial process. Therefore, they recommended that entrepreneurship education should be made compulsory at all levels of education.

Tsegaye (2015), in a study aimed at identifying attitudes of Ethiopian college students towards entrepreneurship, concluded that promoting entrepreneurship education assists young people in the development of entrepreneurial skills, attributes, and behaviours, as well as developing enterprise awareness. In other words, he concluded that entrepreneurship education can play an important role in making students aware that self-employment is important

Abebe (2015), in a study also conducted in Ethiopia, investigated the attitudes of graduating class students towards self-employment. The main finding of the study was that prior exposure to entrepreneurship education had had a positive effect on students' attitudes toward a career in entrepreneurship. Based on these findings, he argued that students who had taken entrepreneurship course were more likely to be interested in start-ups of their own businesses at some future point.

Adefokun *et al.* (2018) in a Nigerian study found that entrepreneurship education, if it is given the necessary attention and effectively implemented via appropriate teaching strategies, has the potential to produce quality graduates and that this kind of education could foster job creation and reduce unemployment and poverty. The researchers advocated for entrepreneurship education to be offered to interested individuals, both adults and students, through workshops, classes, and conferences, thereby enabling them to learn the basic ideas of starting their own businesses and managing these successfully.

The findings of a study carried out by Legas (2015) on the Sub-Saharan region echo those of other studies done in the region on the importance of not only offering entrepreneurship courses. but using appropriate teaching strategies. He concluded that the way to instil entrepreneurial awareness in the minds of students to encourage their belief in the possibility of their taking up entrepreneurship as a career option is through the development and integration of entrepreneurship courses across all disciplines, apart from/in addition to the business and economics fields.

In addition to formal tertiary education, the Sub-Saharan perspective on entrepreneurial awareness emphasised the importance of informal education/teaching resources and strategies related to entrepreneurship, such as media coverage, and conducting entrepreneurship campaigns as ways of changing the attitudes of students towards

entrepreneurship as a career option. In addition, compulsory education at all levels in this field was suggested, together with easier access to micro-credit.

2.5.5 Southern and South African perspectives on awareness of entrepreneurship

A quantitative/survey study conducted by Manuere *et al.* (2013), which was not confined to the business school, but – as with the current study - done with samples of students in all five departments at the Chinhoyi University of Technology in Zimbabwe, revealed an interest on the part of many students across departments in starting up their businesses soon after graduation. However, the study did show a gender bias, with male students being more inclined than female students to start up a business after graduation. From these findings, the authors argued that major issues concerning a way to create entrepreneurial awareness in students could include introducing entrepreneurship education into other disciplines, such as Engineering, Science etc., and adopting experiential learning approaches. They emphasised that government, universities, and educational planners all have a duty to stimulate, to demystify, and to raise awareness of, the entrepreneurial process. They argued that this could bring communities to the required level of readiness to accept entrepreneurship. They recommended that the education system should include compulsory entrepreneurship courses as early as primary school level.

In South Africa, Steenkamp *et al.* (2011) conducted a study whose sample was selected from Grade 10 learners at secondary schools in the Sedibeng District Municipality, Gauteng. The authors found that, while many students showed positive attitudes towards both entrepreneurship and opportunities for new venture creation, they seemed to have unrealistic expectations – or lacked knowledge - concerning their future academic qualifications and showed less interest than would be expected in starting their own businesses (Steenekamp *et al.*, 2011). The study also showed entrepreneurship education in the sample schools to be erratic and without depth or focus. The results indicated that exposure to entrepreneurship at school, and having self-employed parents, had not had the effect one would expect on motivating the learners in the sample towards a career in entrepreneurship. Thus, the authors emphasised the urgent need for quality entrepreneurship training programmes, and argued that transfer of enterprising knowledge and skills should be integrated in the goals of basic education if young people completing school are to be expected to participate meaningfully in economic activity. This finding also emphasises the importance of education at all levels, not only at university level, in creating awareness and realistic expectations of students contemplating starting their own businesses.

A quantitative study – in many ways similar to the current study - conducted in the Eastern Cape by Fatoki and Chindoga (2011) with final year learners at selected high schools, and also with final year students at Fort Hare and Walter Sisulu Universities, revealed that students' perceptions of what entrepreneurship would entail included, besides lack of capital and market support, a lack of encouragement and support for their potential choice of entrepreneurship as a career. Thus, the study suggested that educational institutions, both schools and universities, should introduce and strengthen entrepreneurial education and support at both school and university level. The reasons for this were, when learners are supported in, and oriented to, entrepreneurship from an early age, it becomes easier for them to develop positive attitudes and embark on successful ventures when their education is completed.

The other study carried out in South Africa, in the Eastern Cape province, by Mishi and Shaw (2014) found that entrepreneurship had not been formally introduced into the new curriculum nor the education system, leading to a severe lack of entrepreneurial skills amongst school learners and amongst students in tertiary institutions. This lack of entrepreneurial skills suggested that the level of participation of young people in entrepreneurial activities would be low. Hence this would result in a lower self-employment rate and lower levels of interest in self-employment among the youth after graduating, thus contributing to the youth unemployment crisis.

A study by Rudhumbu *et al.* (2016) in Botswana examined the attitudes of undergraduate fourth year students towards entrepreneurship education. Their findings revealed that many of the students who participated in the entrepreneurship education programme showed an interest in entrepreneurship after graduating. This finding implies that entrepreneurship education can improve the attitudes of students towards choosing entrepreneurship as a career option.

Nwokolo (2017), in his study in South Africa, investigating the role of entrepreneurship education in reducing dependency among university graduates, concluded that entrepreneurship education has the potential to promote an entrepreneurial culture among university graduates in South Africa. These findings suggest that exposing students to entrepreneurship education helps students to develop attributes such as diligence and confidence, risk-taking, internal locus of control, innovation, interpersonal skills, and the ability to set goals. All these have been found to be important in stimulating interest in entrepreneurship as a career option.

The Southern and South African perspective on entrepreneurial awareness thus emphasises the importance of extending entrepreneurship from business-related courses into other

disciplines at the university. The literature on this region also highlighted the importance of integrating entrepreneurship education in the goals of basic education and – of specific reference to the current study - that both high school and university students should be offered encouragement and support in their choice of entrepreneurship as a career.

The review of the literature on the various perspectives of research in a range of countries and regions shows that most researchers agree on the promotion of entrepreneurship education in a realistic and integrated way at both school and university level, particularly in developing countries, such as those in Sub Saharan Africa and, to some extent, in some of its regions, such as and including Limpopo Province, South Africa.

2.6 Personality Traits, Environmental factors, and their influence on Entrepreneurship

The literature on entrepreneurial research has identified several psychological/personality and environmental factors affecting individuals responsible for the emergence and success of new enterprises, factors which have been found to be related to those individuals who venture to set up enterprises (Chen & Lai, 2010). The current study seeks to investigate those personality factors/traits which influence attitudes towards entrepreneurship as a career. These include the need for achievement, locus of control, risk taking, tolerance of ambiguity, as well as the environmental factors which affect these, and which may include those related to the educational, social, political, and economic environments of both students and young people contemplating setting up businesses.

2.6.1 Personality characteristics linked to entrepreneurship

Personality traits, known in the field of Psychology as trait theory, in the current study refer to certain personal characteristics of entrepreneurs (Alam, 2018). The personality theory of entrepreneurship sees the personality of an individual as explaining the actions of an individual, and suggests that the possession by individuals of a particular trait or traits has the potential to predispose them towards 'entrepreneurial behaviour' (Bridge *et al.*, 2009; Beeka & Rimmington, 2011). According to Belete and Tekele (2018) personality traits have the ability to construct the attitudes of people on a regular and ongoing basis. The entrepreneurial traits most often proposed by this theory include risk-taking, locus of control, need for autonomy and independence, initiative and innovativeness, creativity, self-confidence, tolerance of failure, tolerance of ambiguity, and a need for achievement. The definitions of the identified entrepreneurial characteristics for this study are explained below.

2.6.1.1. Need for achievement

Tyagi (2014) defines the need for achievement as a tendency of a person to choose and persist at activities that hold a moderate chance of success, or maximum opportunity of

personal achievement satisfaction without undue risk of failure. A need for achievement is often associated with entrepreneurship. In a study on personality characteristics, Chavez (2016) found that entrepreneurs with a high need for achievement are goal-oriented and are determined to achieve the goals they have set. Thus, the need for achievement has to do with setting high standards for one's achievement. Merdeka *et al.* (2017) define the need for achievement as the motivation to succeed. Furthermore, they regard this need as one of the personality traits that possibly influences someone to engage in entrepreneurship and to start up a business. In another study, Zeffane (2013) examined the impact of the need for achievement and other personality traits on entrepreneurial intention. The results showed the need for achievement to be the most significant determinant of entrepreneurial potential. Previous studies have indicated a strong relation between need for achievement and entrepreneurial intention in the formation of new ventures (Ullah *et al.*, 2012; Hassan & Ghazali, 2016; Bello & Danjuma, 2017; Naushad, 2018). The findings of these studies, therefore, indicate that students with a high need for achievement are most likely to pursue entrepreneurship as a career option.

2.6.1.2. Locus of control

Karabulut (2016), in a study to explore the effects of personality traits on entrepreneurial intention, defined locus of control as the degree of control the person has over their life. There are two types of locus of control, viz. internal and external locus of control. According to Tyagi (2014), individuals with an internal locus of control believe that they are in charge of their own lives, while individuals with an external locus of control believe that life's events are the result of external factors, such as chance, luck, or fate. Tyagi (2014) indicates that entrepreneurs with a strong internal locus of control would tend to believe that they themselves can make things happen, and that the success or failure of their business is due to their own actions and agency. These individuals believe that results or achievements are the products of one's own will, abilities, and efforts (Hsaan & Ghazali, 2016). Previous studies have shown an internal locus of control to have more effect on entrepreneurial intention than external locus of control (Ngwoke *et al.*, 2013; Bux, 2016). Hence, according to these studies, internal locus of control is associated with the desire to become an entrepreneur.

2.6.1.3. Self-confidence

Tyagi (2014) defines self-confidence as a person's perceived ability to tackle situations successfully without leaning on others, and to have a positive self-evaluation. Gelaidan and Abdullateef (2016) examined the effect of relational support, educational support, and self-confidence on the entrepreneurial intentions of undergraduate business students in a Malaysian university. They argued that self-confidence is widely regarded as an important asset possessed by an individual and one which can help that individual achieve personal

success. Self-confidence, therefore, can be said to have to do with believing in oneself, and is considered by researchers in traits linked to entrepreneurial and other successes, such as Gelaidan and Abdullateef (2016) as a key to personal success. According to this view, to succeed as an entrepreneur one needs a high level of self-confidence. Thus, self-confidence and the choice to become an entrepreneur are seen by such scholars as inseparable. Self-confidence is related to the belief an individual has in his or her ability to start and complete a task. Baidi and Suyatno (2018), based on their findings of a study done with students in Indonesia, defined self-confidence as the belief in oneself and one's abilities, while self-efficacy is the belief that a person can achieve a predetermined goal. Nasip *et al.* (2017) investigated the relationship between individual psychological characteristics and entrepreneurial intention. Their findings indicated self-confidence to have a positive relationship with entrepreneurial intention. Furthermore, their findings indicate that, without confidence, one would find it difficult or impossible to be bold enough to explore uncharted business territories, take risks, and make difficult decisions. Hence, according to such research, self-confidence is the key entrepreneurial skill for success. According to the Baidi and Suyatno (2018) study, self-efficacy, and the need for achievement, together and simultaneously, have a positive effect on college students' entrepreneurial intentions. They further argue that the higher the level of self-efficacy towards entrepreneurship, the stronger the entrepreneurship intention.

2.6.1.4. Risk-taking propensity

Another important personality trait influencing attitudes to, and success, in entrepreneurship is seen by some researchers as a risk-taking propensity, which is described by Farrukh *et al.* (2018) as the tendency of an individual to get involved in risky event(s). Entrepreneurship is seen by recent researchers in entrepreneurship as one of those risky events (Farrukh *et al.*, 2018). Likewise, Chavez (2016), based on a literature review on entrepreneurial personality and its effects on the performance of a start-up business, explained that a risk-taker is an individual who pursues a business idea even when the probability of succeeding is not high. The amount of risk the aspiring entrepreneur is prepared to take will depend on the degree of uncertainty of a venture. In order to start a business, the potential entrepreneur faces a range of risks, including financial, social, failure, family, and mental risks. Hence, according to Chavez (2016), entrepreneurship is always associated with willingness to take risk. Tyagi (2014) in her thesis argued that the willingness to take risks is an entrepreneurial characteristic and those who are entrepreneurially inclined are expected to display a high propensity to take risk. Research conducted by Nasip *et al.* (2017), in a study conducted among university students in North Borneo, found that a propensity to take risk is positively related to entrepreneurial intention, thus emphasising the need for any potential entrepreneur to

calculate risk before taking any action, to start the process of becoming an entrepreneur. Merdeka *et al.* (2017), in their study which sought to understand the relationship between differences in personality characteristics and entrepreneurial intention, found that the risk-taking characteristic in amongst their study participant entrepreneurs had the potential to enable them to handle challenges in business and to strive for success. Herdjiono *et al.* (2017) examined the effects of family environment, self-concept, motivation, and risk taking propensity on entrepreneurship intention in Merauke. Their main finding was that risk-taking propensity had a significant and positive effect on the entrepreneurship intention of their study participants. They also noted the willingness and ability to take risk to be one of the main characteristics of successful entrepreneurs. This research would suggest that, without having the courage to take risk, it might be difficult for an individual to start a new venture. Previous studies also showed the positive relationship between risk-taking and entrepreneurial intention (Tagra and Akin, 2009; Bello and Danjuma, 201 Naushad, 2018).

2.6.1.5. Need for independence

The need for independence is another characteristic linked by researchers to entrepreneurship. Yimumu (2018) sees independence as involving the taking of responsibility for one's own life rather than living off, or depending on, the efforts of another. Independence also requires using one's own judgement instead of blindly following the assertions and ideas of others. In addition, Yimumu (2018) is of the view that an individual who has a strong need to achieve is driven, not only by financial gain, but by the possibility of achieving satisfaction. This definition therefore implies that individuals who have a strong desire for independence like to be their own boss. In other words, they do not want to work under the control of somebody. Evidence from empirical research has shown that entrepreneurs have a strong need for independence (Tagraf & Akin, 2009; Uddin & Kanti 2013; Awang *et al.*, 2014). Research in the field of personality traits has thus found that having a strong need for independence is one of the key characteristics that motivates individuals to initiate the establishment of new ventures. Thus, the possibility exists that people's attitude to, or desire for, a need to be independent can affect their career choice in entrepreneurship. The current study sought to explore whether this was the case amongst a sample of under graduate students.

2.6.1.6. Innovation/creative thinking

Innovativeness is another characteristic associated with entrepreneurship. Colakoglu and Gozukara (2016) define innovation as the process of making new ideas a reality i.e. the application of new ideas into products, services, and processes. Similarly, Ozaralli and Rivenburgh (2016), in their study, which investigated the antecedents of entrepreneurial behaviour, defined innovation as the process of turning ideas and knowledge into new value

through creative thinking. According to Schumpeter (1998), creativity and innovation work together. This means that the one cannot exist without the other. Abdul (2018) explained that creativity conceals within it ideas and innovation together with the implementation of new and creative ideas. Furthermore, she believed that, through creative thinking, an entrepreneur does not simply have ideas but also assesses the requirements involved in executing and establishing the success of those ideas. Recent studies have constantly reported an association between innovativeness and entrepreneurship (Targhizadeh *et al.*, 2016; Colakoglu & Gozukara, 2016)

Taking into account and utilising the personality theory, universities could play an important role in helping to foster emerging entrepreneurial personality traits in students and in providing the necessary networking support for entrepreneurs, as well as providing legitimacy for their endeavours (Agbim *et al.*, 2013).

Based on the literature reviewed on this, the current study takes into consideration the assumption that certain personality traits influence an individual to consider entrepreneurship as a career option, and that these traits can in fact stimulate an individual's attitude to having the intention to start a business.

Although researchers in the field cite agree, many personality traits in common that entrepreneurs may have, they also differ widely. It can, therefore, be said that no universal characteristic(s) distinguish entrepreneurs from other mortals (Rwigwema & Venter, 2008). In addition, these authors emphasise that mere possession of so-called entrepreneurial traits does not constitute an entrepreneur. Blundel and Locket (2011) offer many criticisms of generalisations about personality characteristics. First, they argue that there are plenty of people who possess many of what have been categorised by researchers as entrepreneurial characteristics, yet there are individuals who prove to be either unsuccessful entrepreneurs or who apply their talents in other ways or in other fields. Secondly, there are problems with the measurement of entrepreneurship as an outcome from these traits, whether this measurement takes the form of evaluating actual behaviours, intentions, or potential. Observed behaviours are themselves a product of multiple – and interrelated - factors, influences, and contexts, so that founding a new venture, for example, cannot be explained simply in terms of an interaction involving several people in a particular context. The 'entrepreneurial personality traits' cannot be said to cover the total – or all facets of – a student's personality, and thus these dependent variables lose a potential explanatory power. Despite criticisms of the personality traits theory, these so-called entrepreneurial characteristics remain popular and influential amongst researchers and educators/educationalists, but it is important to be aware of their limitations. Kabui and Maalu (2012) argue that, while this theory has received criticism, it has highlighted

some of the activities associated with an entrepreneurial career and attitude that can be usefully seen to advance entrepreneurship. Similarly, Tagraf and Akin (2009) argue that it is necessary to closely associate these personality characteristics with entrepreneurship because entrepreneurship behaviour is behaviour which is associated by many researchers and educators with the desire and determination to start a new business and to carry on the work needed to develop it.

Using the works cited in the literature review of this section, and taking into consideration the various criticisms and cautions, this study focuses on the following personality traits in order to investigate whether these traits influence, or are perceived by the respondents in the study to influence, or stimulate an individual to consider entrepreneurship as a career option: need for achievement, self-confidence, risk-taking, and the need for independent, innovative or creative thinking. Hence, this study attempts to explore and assess the possible influence of personality traits on students' attitudes towards pursuing entrepreneurship as a career option. Table 2.2 summarises some of the personality traits seen by researchers in the field – in terms of the personality theory of entrepreneurship – to determine an individual's choice of entrepreneurship as a career.

Table 2.2 Personality characteristics determining entrepreneurship as a career option.

Author	Factor	Description
Fatoki , 2010 Remeikiene <i>et al.</i> ,2013 ; Boilaa, 2011	Risk taking	Lack of willingness to take risks prevents graduates from choosing entrepreneurship as a career option. Individuals who tolerate higher risks are more inclined to entrepreneurship, while those who tolerate lower risks would be less inclined to choose entrepreneurship. The attitude toward risk of an individual is a precursor of entrepreneurial activity.
McClelland, 1961; Gorji and Rahimian, 2011; Remeikiene <i>et al.</i> , 2013	Need for achievement	Individuals having a high need for achievement are more likely to choose entrepreneurship as a career option. The need for achievement is one of the indicators of a person being inclined towards entrepreneurship or not.
Othman and Ishak, 2009 Remeikiene <i>et al.</i> , 2013	Locus of control	Attitude that is based on an internal locus of control, monetary value, and autonomy has a positive impact on graduates in choosing a career in entrepreneurship. Locus of control, together with other attitudes, differentiates potential entrepreneurs from non-entrepreneurs.
Bezzina, 2010	Need for autonomy	Self-sufficient individuals are those independent persons who want to be their own bosses, be able to make their own choices, and set their own constraints.
Schumpeter, 1934 Nadkani, 2013 Nieuwenhuizen, 2019	Creative thinking / innovativeness	Innovation is the key force in creating a new demand and thus new wealth. Creativity is the seed that inspires and grows into entrepreneurship. Creativity is the fundamental basis for the development of new initiatives, products, or services

2.6.2 Environmental characteristics

According to Abebe (2015), environmental factors as influencing factors are those environmental features particular to the place where a person lives which influence an individual's behaviour, and these environmental factors can facilitate or hinder entrepreneurial activity. They can both weaken and strengthen the intentions of people to create a new business. Abdulrahman *et al.* (2017), on the other hand, views environmental factors as consisting of all factors external to an individual in addition to residential context factors, such as family and friends, government legislation, government support factors, and the state of the economy. For purposes of the current study, environmental factors refer to all factors that affect survival of economic growth area. Thus, unlike personality attributes, environmental factors according to this more comprehensive view, are understood to be external to the individual and include political stability, education, government policies, entrepreneurial and business skills available or taught to the individual, financial assistance for setting up a business venture, role models, and societal/cultural values and behavioural norms. The 'environmental cognition' in this study is taken to constitute the family, educational, social, and economic environments. The study by Islam *et al.* (2018), for example, explored those factors which influence female students to choose entrepreneurship as a career choice and concluded that environmental factors, in this case, including cultural/gendered factors, play an important role in influencing students to start a business.

Fereidouni *et al.* (2010) conducted a study in Iran to examine the importance of the business environment, social status of entrepreneurs, as well as external conflicts in the country of residence as predictors of a potential entrepreneur's motivation to start a business in a particular environment. Their findings showed the business environment and external conflicts in the country to contribute significantly to levels of entrepreneurial motivation. Furthermore, they indicated that, in a social system that places a high value on the formation of new ventures, more individuals are likely to choose the entrepreneurial career path. Thus, their conclusions indicate the possibility that an environment can encourage or discourage potential entrepreneurs from starting their own ventures.

Hafid (2016) examined some identified factors based on preliminary observation of entrepreneurship education in a campus environment and workshop on entrepreneurial attitudes of a Students' Entrepreneurial Programme. His main finding was that entrepreneurship education in a campus environment, together with an entrepreneurship workshop both simultaneously influenced participating students' entrepreneurial attitudes positively and significantly. From such findings, can be concluded the likelihood that such attitudes, together with some knowledge of entrepreneurship, can develop an entrepreneurial mindset and the tendency in a student to start something new; this would include the ability to

create a new business. A study by Herdjiono *et al.* (2017) examined the effects of family environment, self-concept, motivation, and risk-taking propensity on entrepreneurship intention amongst a group of Indonesian students contemplating becoming entrepreneurs. They concluded that family environment has a strong effect on encouraging university students' interest in embarking on entrepreneurship. This suggests the likelihood of students whose parents are entrepreneurs to pursue entrepreneurship as a career option. These findings would suggest that families can have a significant influence on their children's choice of a career path in entrepreneurship.

Similarly, Ali (2016) noted that, the existence of a positive or high social valuation of entrepreneurship in an environment contributes to the formation of a positive attitude in a member of a society, community, or family towards entrepreneurship. Thus, the opinions of significant others (i.e. family, friends, partners etc) can be an important factor in influencing or changing the attitude of students to consider entrepreneurship as a career choice. Chavez (2016), in a study on the influence of different personality characteristics on the choice of entrepreneurship as a career, concluded that government assistance schemes and venture capital opportunities appeared to encourage individuals to consider and start their business. This conclusion points to the role that the government can play to promote entrepreneurship as a career among graduates. Potishuk and Kratzer (2017) conducted research on the factors affecting entrepreneurial intentions and entrepreneurial attitudes in higher education. Their results concur with those of past studies that show entrepreneurship education to play an important role in developing, fostering, and promoting entrepreneurial activity. Thus, the body of literature on the positive effect of educational programmes in entrepreneurship on students' attitudes towards entrepreneurship as a career choice would seem to point to the strong likelihood of this as a factor influencing students' career choices. Furthermore, the findings of studies such as that done by Potishuk and Kratzer (2017) also provide evidence of role models, and contact with professionals, increased students' entrepreneurial intention and inspired students, who in turn would be likely to adopt the behaviour of inspiring role models. Thus, it is worth taking into consideration the positive effect that role models can have on the attitudes of students towards entrepreneurship as a possible career option.

This study set out, amongst other influences, to assess the influence of the environmental factors on the attitudes of student respondents towards pursuing entrepreneurship as a career option. Table 2.3 presents a summary of some of the environmental factors researchers have found to determine the formation of entrepreneurship as a career choice according to the personality theory of entrepreneurship.

Table 2.3 Environmental factors determining the formation of entrepreneurship.

Author, Year	Factor	Description
Qureshi <i>et al.</i> , 2011 Rahmawatt <i>et al.</i> , 2012	Family environment	There is a positive relationship between family business exposure and the entrepreneurial intention of Business Studies students. Parents are the nurturers of those values, emotions and experience which encourage students towards self-employment.
Raposo and Paso, 2011 Kew <i>et al.</i> , 2013	Political environment	Legislation and educational systems influence the rate of entrepreneurship. Political-legal and political-economic conditions, and infrastructure development, influence the development of entrepreneurship/ entrepreneurship opportunities.
Gelard and Saleh, 2011; Ullah <i>et al.</i> , 2012; Kew <i>et al.</i> , 2013 Remeikiene <i>et al.</i> , 2013 ; Tsegaye (2015) Islam <i>et al.</i> 2018	Educational environment	Entrepreneurship education has the strongest positive relationship with entrepreneurial intention. There exists a positive link between education and personal decision to become an entrepreneur. Adequate education might foster the entrepreneurial intention of a person.
Blundel and Locke, 2011	Social environment	Entrepreneurial ethical practices could also be learned from mentors and role models, including family members and others in students' social circles.
Rahmawati <i>et al.</i> 2012	Economic environment	Access to finance is important for all individuals to achieve their business objectives

2.7 Constraints/barriers/Obstacles to Entrepreneurship as a career

A constraint is defined as something that limits your freedom to do what you want to do, hence the constraints that the business environment presents to a career in business might be viewed as barriers to entry into that field. Thus, the constraints students perceive to their embarking on a career in entrepreneurship might deter them from starting their own business. Fatoki and Chidonga (2012) define such barriers, or perceived barriers, as those factors which prevent individuals from engaging in entrepreneurship. Authors, such as Fatoki and Chidonga (2012), Rahmawati *et al.* (2012), and Shambare (2013), identify several constraints or barriers to entrepreneurship promotion experienced by students. These include students' lack of exposure to business and entrepreneurship, lack of entrepreneurial support, lack of business skills, lack of capital/finance, fear of failure, and lack of an entrepreneurial culture. The authors found these barriers to exercise a measurable impact on the attitudes of students towards entrepreneurship.

2.7.1. Students' lack of exposure and support

In his study conducted at the Tshwane University of Technology, Shambare (2013) observed that many students in the study experienced a lack of exposure to business and were not being fully supported by institutions of higher learning to develop their business ideas towards putting them into practice. Despite the introduction of new policy and institutional frameworks like the National Youth Development Agency (NYDA) in 2008, whose primary objective is that of improving entrepreneurship and reducing youth and graduate unemployment, most youths are not aware of the available government support schemes (Kew *et al.*, 2013). This view is supported by the reality of low levels of entrepreneurial activity in South Africa. According to Fatoki and Chidonga (2012) the general belief amongst Grade 12 and final year Fort Hare University students in their study was that there was no government support for entrepreneurship in South Africa.

2.7.2. Lack of business experience and skills

Successful entrepreneurs need to acquire and possess a high degree of technological knowledge, managerial skills and financial management skills. Fatoki (2010) found that graduate entrepreneurs, be they technicians, accountants, or social researchers, require skills in the field of management, and that these skills, especially technical skills, seem to be lacking in both school and university curricula when it comes to business development over the long term.

Nyanga (2013) conducted a study in Zimbabwe amongst young entrepreneurs who were in the process of establishing, or had already established, their businesses (SMEs) and were struggling to survive and thrive. He identified a lack of marketing skills and market knowledge, together with inadequate management and entrepreneurial skills, as some of the constraints

that were causing serious impediments to the start, growth, and survival of the businesses of the young entrepreneurs in his study.

Vukovic *et al.* (2015) examined the impact of exposure to entrepreneurship education on student entrepreneurial intentions. They argue that an individual will tend to form attitudes about entrepreneurial intention based on the experience gained in direct contact with the object of an attitude, and through a learning process based on the information one is exposed to in the immediate and broader environment. This implies that lack of business experience has a negative effect on the formation of students' attitudes towards entrepreneurship as a career option.

2.7.3. Lack of capital/finance

Access to finance is important for all would-be entrepreneurs in order for them to achieve their business objectives, particularly for start-up, as well as for businesses that need to invest and grow (Rahmawati *et al.*, 2012). The study of Kwong *et al.* (2008) in the UK found out that by far the most significant barrier faced by youths was getting finance for their businesses, and that this was a particularly serious problem for the 18-24 age group. The authors argue that several reasons account for this being regarded as a particularly serious barrier. These include the fact that this age group has a relatively a short time in which to accumulate wealth, has a less well-developed social network than older entrepreneurs, has a poor knowledge of the finance market, and significantly greater difficulties in convincing lenders that they constitute a genuine investment proposition. The literature review and assessment done by Panda and Dash (2014) on the constraints faced by entrepreneurs in developing countries found that financial constraints and constraints due to unfavourable business, economic and political influences to be the most important constraints from an entrepreneur's perspective

Similarly, several studies found lack of capital / finance to act as an impediment to graduate entrepreneurship (Fatoki & Chindoga, 2011; Kuttim *et al.*, 2012; Kew *et al.*, 2013; Nyanga, 2013). This current study assumes that their perceived lack of capital has a negative effect on students' attitude to pursuing entrepreneurship as a career after graduation. This perception reinforces students' thinking that being employed is a better/safer option than starting a business/being self-employed.

2.7.4. Fear of failure

Fear of failure is closely related to the risk factor. Ekore and Okekeocha (2012), in their study done with university graduates in Nigeria of the role of psychological factors in students' motivation to pursue entrepreneurship, in particular, fear of failure as an entrepreneur, found these students' fear of failure to be related to the feeling that leaves a person discouraged and afraid that he or she will not succeed, even before making the attempt. In the view of Fatoki

and Chidonga (2011), one of the obstacles perceived by would-be entrepreneurs to the success of an enterprise is the lack of willingness to take a risk. Furthermore, they argue that fear of failure and of embarrassment can prevent people with potentially innovative and creative ideas both from exploring them and venturing into the competitive stage of business. In a study done in Indonesia, Rahmawati *et al.* (2012) noted that the social taboo against failure and bankruptcy further alienates young people from choosing entrepreneurship. This suggests that being a member of a society whose cultural norms do not allow an individual to fail can act as a hindrance to graduate entrepreneurship.

Cacciotti *et al.* (2016) conducted research on the reconceptualization of fear of failure in entrepreneurship. The purpose was to examine fear of failure as it is experienced in the entrepreneurship. They concluded that fear of failure both inhibits and motivates entrepreneurial behaviour and therefore represents a rich opportunity for better understanding entrepreneurial motivations. Thus, perceptions of fear of failure can not only negatively influence a person to start a business but can also drive an individual to strive for success to avoid shame or humiliation.

2.7.5 Inappropriate and/or outdated teaching methods, content, and curricula as preparation for entrepreneurship as a career

Shambare (2013), as was mentioned in 2.7.1, is of the view that, in order to promote entrepreneurship, universities should employ teaching methods that allow for practical application of learning material as well as holistic development of the skill-sets required.

Terfa (2007), in a study conducted at an Addis Ababa university in Ethiopia, distinguished between key educative constraints to entrepreneurship as a career choice, and the specific key constraints to young people obtaining start-up finance. According to the author, key educative constraints to entrepreneurship include:

1. inadequate curricular and study programmes at both secondary and tertiary levels: the teaching of entrepreneurial skills and attributes and behaviours is often not properly integrated into school curricula or not adequately taught;
2. inadequate and/or inappropriate learning methods: education systems and curricula which lack practical and experiential learning as well as team/cooperative learning;
3. lack of trained/educated teachers'/quality teachers: teachers often have limited experience and understanding of small business and self-employment;
4. lack of career information and business possibilities: school environments often do not offer their learners a sufficiently comprehensive introduction to the concept of entrepreneurship and self-employment as a career option;

5. lack of business and education linkages: relationships between education institutions and the business community are either non-existent or poorly developed: these could and should include school-industry partnerships, together with a combination of classroom learning and structured on-the-job experience;
6. negligence on the part of those people in students' immediate personal environment (parents and family members): entrepreneurship education initiatives often disregard the important role of a young person's family members and their parents in particular;
7. lack of Information Communication Technology (ICT) infrastructure/capability: inadequate ICT infrastructure and training constrain the development of the ICT capabilities of young people.

Tsegaye (2015) echoes the claim that inappropriate and/or inadequate learning and teaching strategies are key educative constraints to entrepreneurship. She regards experiential learning as the most powerful way of learning entrepreneurship. The author advocates for experiential learning being done by having more lectures on specific fields of business, conducted by a practising entrepreneur and should include practical examples from real companies, case studies, and networking.

2.7.6. Lack of entrepreneurial culture

Every country, or group of people in a country, has its own culture in the form of its values, norms, beliefs, and practices, and this culture affects the entrepreneurial intention of potential young entrepreneurs (Sajjad *et al.*, 2012). The author argues that cultures where people are risk averse, and do not attach importance to hard work and persistence, are not conducive to entrepreneurship. Kume *et al.* (2013), from a study done in Albania, are of the opinion that universities which create an entrepreneurial culture, particularly one which subscribes to the belief in the value of hard work and persistence, across the campus, one which has the effect of influencing students' decisions and motivation to create their own businesses, would generate a considerable influential factor.

Based on the literature reviewed in this section regarding constraints, and/or their perceived constraints, militating against students' opting for entrepreneurship careers, much current research has focused on the following perceived constraints: the challenge of raising financial resources, fear of failure, fear of tough competition, and general lack of finance.

2.8. Integration of Entrepreneurship into school and university Curricula

While much of the literature has shown that the inclusion of entrepreneurship as a course in school and university curricula is regarded worldwide as of great importance and value in terms of supplying and empowering students with skills such as self-employment, management of finances etc., it is seldom found in any undergraduate curriculum of higher

education institutions outside of Business Studies/Management or Economics curricula. Many studies reviewed have recommended a well-thought out, holistic, integrated, experiential orientated entrepreneurship curriculum as having the potential to assist students in an in-depth and realistic understanding of business, as well as encouraging creative thinking and enhancing the ability of students to recognise opportunities. Given that the essence of entrepreneurship education is to equip an individual to be self-employed rather than having to be a job-seeker, the importance of integrating entrepreneurship across disciplines at all education levels should be acknowledged. However, despite its importance to the economy and to the reduction of unemployment, entrepreneurship as a course or module in many institutions is taught only in Business and Economics programmes. In 2008 the European Commission reported on this situation, stating a concern that the teaching of entrepreneurship is not yet sufficiently integrated in higher education institutions as, at that time of the survey, the data showed that the majority of entrepreneurship courses were in fact being offered in Business and Economics studies. This report also proposed that public authorities need to offer an introduction to entrepreneurship and self-employment to all undergraduate students during their first year and give all students from all disciplines the opportunity to attend seminars and lectures in this subject.

Kilasi (2013), who conducted a study at a university in East Africa, endorses the view that early entrepreneurship education initiatives have been explicitly dominated by the business/commercial oriented disciplines, thus pointing to a great need for entrepreneurship to be promoted throughout the university so as to increase its desirability among stakeholders and potential stakeholders. For the purpose of increasing the opportunity for students to be exposed to entrepreneurship, some experts have supported the idea of integrating entrepreneurship across disciplines (Roberts, 2013; Tengeh *et al.*, 2015). Roberts (2013) calls this approach 'infusing entrepreneurship', a process which could be achieved by the modification of learning objectives in disciplinary courses, supported by lesson/lecture plans that adopt and include entrepreneurship knowledge and skills. He further argues that infusing entrepreneurship across disciplines could be achieved by developing modules of information, knowledge, skills, and abilities. Kilasi (2013), Tengeh *et al.* (2015), and Roberts (2013) all indicate that it is essential to integrate entrepreneurship education with other disciplines in order to provide the much needed knowledge, and entrepreneurial skills to students to both encourage and equip them for entrepreneurship as a career option.

Nigerian scholar Efe (2014), in a literature review/survey of entrepreneurship education as a functional education which can be used to reduce unemployment, supported presidential directives in his and other countries, which make entrepreneurship compulsory for all students of higher education institutions, irrespective of their areas of specialisation. He sees this as

helping to ensure prospects of economic growth, equitable economic distribution, social cohesion, alleviation of poverty, and as helping to guarantee national security.

Abdulwahed *et al.* (2013) supported the idea that students at a Qatar university who took one course on entrepreneurship in Engineering Entrepreneurship', which was integrated in the Engineering and Technology curriculum, were able to explore engineering entrepreneurship as a career as well as developing positive entrepreneurial attitudes and intentions, Hence, the authors concluded that the development of a positive attitude towards entrepreneurship is significantly dependent on the awareness of entrepreneurship as an alternative, and that this is achieved through entrepreneurship education being integrated into existing curricula across disciplines and departments in a university.

Bernstein (2011), in a study of educational self-efficacy amongst high school learners, and university undergraduates, specifically entrepreneurship career self-efficacy, found a positive correlation between self-efficacy in students for having successful entrepreneurial careers and interest in entrepreneurship education. Thus, he maintained that integration of entrepreneurship education components into non-entrepreneurship undergraduate curricula could lead to students' increased interest in entrepreneurship careers and in entrepreneurship education as a precursor to embarking on an entrepreneurial career. Based on Bernstein's 2011 findings it could be argued – as with the findings from a number of other studies discussed in this review - that making entrepreneurship education compulsory for undergraduate students might go a long way towards increasing their future employability and towards supplying them with the knowledge, skills, and confidence necessary for starting a new venture.

Radipere (2012) describes entrepreneurial courses, where they exist in South African universities. He observes that they, "in terms of content and methods, do not appear to achieve the desired outcomes", and are stuck in old "traditional teacher-centred methods. He argues for "... newer delivery methods [that] require participation and interaction on the part of students" (Radipere, 2012). Since entrepreneurship education is widely considered to benefit both society and individuals, he sees it as both necessary and reasonable that everybody should have access to it. This means making entrepreneurship education accessible to all students at a university, an initiative which has the potential to create and/or improve an entrepreneurial culture on that campus and increase students' awareness of, and their ability to utilise, entrepreneurial opportunities. In the long run students, may be encouraged to consider entrepreneurship as a career option, and this in turn has the potential to ultimately reduce the high rate of unemployment and levels of poverty in the country. Radipere's 2012 study is a further endorsement of the importance of entrepreneurship education being included in non-business disciplines at all institutions of learning (Tengch *et al.*, 2015). The current

study, in line with the literature reviewed on the importance of entrepreneurship education, suggests that entrepreneurship education needs to be offered to every student in higher education, irrespective of the course or discipline they are studying, with a view to changing students' attitudes towards entrepreneurship.

The European Commission (2008) firmly recommended that higher education institutions should embed entrepreneurship in all faculties. This translates into entrepreneurship education being accessible to students in the Arts and Humanities as well as to those in Business, Social Sciences, and the Natural Sciences, thus exposing all students in all fields of studies to entrepreneurial knowledge and skills, and enabling them to apply the theory learnt in the classroom to the practical world of work in their respective careers.

Based on studies conducted at Finnish universities, Heinonen and Hytti (2008) see the goal of education as being to provide non-business students with general business competence within their given context or prospective careers. This could be achieved through both curricula and extra-curricular activities. Extra-curricular entrepreneurship activities would ensure that students can gain exposure to entrepreneurship in a real-life context. However, the authors argue that the most effective way to ensure every student receives entrepreneurial education is one in which entrepreneurship education is embedded in each academic department or school. The view of these authors is that extra-curricular activities, such as those offered if students are members of ENACTUS, are important in the process of changing the attitudes of students to pursuing entrepreneurship as a career option.

For Kilasi (2013), based on studies he conducted in East Africa, the inclusion of broad entrepreneurial approaches across disciplines remains a major challenge within universities. According to the author there are many factors that hinder the effective integration of entrepreneurship across disciplines at various universities. He cited as major factors a lack of cooperation between departments, weak links between universities and industry, lack of information about essential entrepreneurial skills, lack of effective implementation of entrepreneurship education strategies, contradictions regarding the university's role in enhancing professional and entrepreneurial skills for a knowledge economy, the dominance of entrepreneurship in business and engineering disciplines, a narrow perception of entrepreneurship education, and a general lack of resources. Furthermore, even though most higher education institutions have integrated – or claim to have integrated - entrepreneurship education across several disciplines, some deans in higher education institutions are not willing or motivated to promote such education (European Commission, 2008). Heinonen and Hytti (2008) found in a number of Finnish universities that another challenge is that existing curricula have limited scope for expansion, which means that introducing entrepreneurship courses would mean that other courses would have to be dropped. Despite these challenges,

integrating entrepreneurship is seen to have some substantial benefits. Kilasi (2013), in his argument for the importance of inclusion of entrepreneurship education in all disciplines in higher education, sees this as leading to the development of capacities in students which involve the ability of graduates to use the knowledge and experience that they have acquired at university to search for opportunities to create new ventures, to be innovative in designing new products, and to be internationally competitive. In this sense entrepreneurship education enhances students' ability to venture into various types of employment.

The literature reviewed in this section described and discussed the various perceptions – their similarities and differences - of academics and ENACTUS students on the integration of entrepreneurship across disciplines.

2.9 Overview of legislative framework on youth in South Africa

The design and implementation of government policies involving the youth are important in addressing the current specific challenges and needs of the youth. These policies play a role in creating an environment that enables young people to reach their potential and can affect the youth both positively and negatively in their pursuit of entrepreneurship as a career. Youth as agents of innovation require an environment which is entrepreneurship friendly, and which actively and effectively promotes entrepreneurship.

Whether these legislative frameworks for the youth have been successfully implemented is a subject for debate. Among all such structures the National Youth Development Agency (NYDA) is the main government agency responsible for the implementation for the National Youth policy in South Africa. It was established by government in 2008 with the goal of facilitating youth development and mainstreaming youth concerns in all spheres of government. Despite such interventions by government, the perception of the researcher is that young people continue to face the problem of unemployment, together with a lack of skills, capabilities to be employable, and a lack of entrepreneurial skills to start and develop their own businesses. While some youth have been assisted by these youth structures in improving their quality of life, others, especially those in rural areas, feel and are left out as they know little about this agency. Table 2.4 presents a summary of the policies and the legislative framework concerning youth in South Africa.

Table 2.4 Policies and legislative framework on youth in South Africa.

Policies/legislations	Propositions
The Constitution of the Republic of South Africa of 1996.	As the supreme law of the country it lays the foundation for youth development in that it calls for redress of economic imbalances of the marginalized members of the South African population, which is inclusive of the youth (Chapter 13, Section 217).
National Skills Development Act of 1998	This establishes Sector of Education and Training Authorities (SETAs) aimed at providing market-related skills that are intended to benefit the people including young women and men.
The White Paper on National Youth Service of 1999.	It calls for the implementation of the National Youth Service. Among other things, this intervention was designed to contribute not only to skills development, but also to the economic development of young women and men.
The Broad Based Black Economic Empowerment (BBBEE) Act of 2003	This addresses the imbalances of the past by creating a platform for the participation of black people in the economic mainstream of the country. Two elements, Preferential Procurement and Enterprise Development, are of importance for young people, and require explicit provision of targets for enterprises owned by young women and men.
The National Youth Development Agency (NYDA) Act of 2008.	Its mandate is to provide business development support (financial and non-financial) and to close the identified gaps and limitations confronting the youth development sector.
The National Youth Policy 2009-2014.	The policy proposes for specific interventions for youth that promote their development in four pillars: education, health and wellbeing, economic participation, and social cohesion.

2.10 Summary and Conclusions

A reconciliation of all the literature reviewed strongly supports the importance of quality and experiential/practical entrepreneurship education at all education levels for both changing and developing positive attitudes of students towards entrepreneurship as a career option, as well as equipping them for such a career. This initiative on the part of higher education institutions has the potential to create employment, which, in turn, can contribute towards much needed economic growth and stability in our country, including social stability. Comparison of various studies done in this field, and in a variety of countries and regions, shows a high degree of agreement for the promotion of entrepreneurship at all education levels, and its integration across disciplines. Many of the studies advocate for innovative curricula which are participatory, and which expose students to the real world of work, as well as for partnerships between universities/higher education institutions and government agencies. Table 2.5 shows a summary of the literature review per research objective:

Table 2.5 Summary of literature review for each objective.

Objective	Major findings	Gaps emerging from research questions
1. To explore and assess the attitudes of students towards entrepreneurship as a career option	Attitudes play an important role in the process of students considering pursuing entrepreneurship as a career option	What are the attitudes of sampled students the University of Venda to an entrepreneurship career?
2. To explore and assess the influence of entrepreneurial awareness on students' attitudes towards entrepreneurship as a career option;	Entrepreneurship education stimulates students' interest in entrepreneurship. Other factors are role models, campaigns, competition and awards, media coverage, and youth business campaigns.	Is the University of Venda creating entrepreneurial awareness amongst its final year students?
3. To explore and assess the influence of personality traits and environmental factors on final year students' attitudes towards entrepreneurship as a career option	Environmental factors and personality factors like risk-taking, need for achievement, locus of control, and tolerance for ambiguity influence students to consider entrepreneurship as a career.	Is the University of Venda an enabling environment for students to venture into entrepreneurship? Is the University of Venda doing enough to educate students towards considering an entrepreneurship career?
4. To explore, assess, and determine the constraints to an entrepreneurship career as perceived by final year students at the University of Venda	Constraints or barriers like lack of exposure, lack of finance, lack of business skills, fear of failure influence students to consider entrepreneurship as a career.	What constraints do final year University of Venda students face, or perceive themselves to face?
5. To explore and assess the attitude of academics and ENACTUS to the integration of disciplines	Integrating entrepreneurship across the campus increases employability and influencing students to start a venture.	Is entrepreneurship integrated across the campus at the university?

CHAPTER 3 : RESEARCH METHODOLOGY

3.1 Introduction

The focus of this study is to explore and assess the factors that influence the attitudes of a sampled group of final year University of Venda students towards entrepreneurship as a career option. It seeks to assess the influence of various factors on these attitudes, including entrepreneurial awareness, personality traits, environmental factors, and the effect of these students perceived constraints to embarking on entrepreneurship on their attitudes towards entrepreneurship as a career option. In addition, it seeks to assess the attitudes and views of academics and ENACTUS students on the integration of entrepreneurship across disciplines at the university. A combination of quantitative and qualitative approaches or methods was used to investigate these phenomena. These approaches were considered appropriate and necessary because the researcher wanted first to survey a large number of students in order to assess the range of factors that influence their entrepreneurial attitudes, and then to conduct face-to-face interviews with a small number of those students who participate in ENACTUS activities, as well as deans, lecturers, and HODs in order to conduct an in-depth investigation of their perceptions and views. The two approaches were intended to complement each other. Research design, population and sampling procedures, data collection, and data analysis are explained in this chapter. The research design indicates the type and structure of the study to be undertaken to provide acceptable answers to the research problem or questions. The term population in the study refers to the total group of people from whom a sample of participants is selected and from whom the required data in the form of information/views/perception is obtained.

3.2 Description of the Study Area/setting

The University of Venda is situated in Thohoyandou in the Vhembe District of Limpopo Province in South Africa. Thohoyandou is the administrative centre of Vhembe District and Thulamela Local Municipalities (Figure 3.1). It is found on the northern side of the main road linking Makhado Municipality with the Kruger National Park.

The University is a public higher education institution established in 1982 during Apartheid when Venda was a 'homeland'. Currently, the number of students stands at about 14000, enrolled in eight schools, viz. Agriculture, Education, Environmental Sciences, Health Sciences, Human and Social Sciences, Law, Management Sciences, and Mathematical and Natural Sciences. Students at this university are mainly from rural settings, and some of their parents are involved in small-scale farming.

The vision of the University of Venda is "To be at the centre of tertiary education for rural and regional development" (University of Venda Annual Report, 2016). In order to achieve this,

the following mission was adopted by the university:” The University of Venda, anchored on the pillars of excellence in teaching, learning, research and community engagement, produces graduates imbued with knowledge, skills and qualifications which are locally relevant and globally competitive” (University of Venda Annual Report, 2016). These vision and mission statements clearly indicate the commitment of the university to improving the quality of life and economic well-being of people living in relatively isolated and sparsely populated rural areas. Being a rural-based university, means that a large proportion of the institution’s student population lives in the rural areas. This, together with its vision and mission statements, makes it important for the university to help to accelerate economic development in the area.

The Academic Division of this university consists of eight schools and four directors. These schools offer various programmes as indicated in its vision and mission. These programmes lead to qualifications in undergraduate certificates, diplomas, professional degrees, postgraduate diplomas, honours, masters, and doctoral degrees. According to the Univen strategic plan 2016-2020, these schools are mandated to develop the critical performance indicators of the academic project: teaching, learning, and research and community engagement. In terms of this strategic plan, the university has planned to introduce the relevant soft skills, work integrated learning, entrepreneurship, and assertiveness considered essential for the employability of the students. Furthermore, the institution has planned to introduce non-credit bearing modules on soft skills to final year undergraduate students as well as to undertake regular three-yearly alumni surveys, including collecting information on the employment status of its graduates with the purpose of influencing and informing curriculum innovation. The foregoing indicates the importance the university management attaches to entrepreneurship with the purpose of addressing issues of employability of its graduates.

Currently the University of Venda students participate in extra-curricular activities to do with entrepreneurship under the auspices of ENACTUS. ENACTUS is an international non-profit organisation of students which helps promote local businesses in the communities to grow and become sustainable. These students form teams on the university premises and assist local businesses with business and bookkeeping skills. These teams participate in annual competitions with other institutions where they present the outcomes of their community projects. According to Tshikovhi and Shambare (2015), the focus of ENACTUS is to encourage students to identify entrepreneurial solutions to socio-economic challenges within their communities and to tackle them by designing entrepreneurial projects that seek to improve both the quality of life and standard of living of people in need.

Apart from imparting entrepreneurial skills and knowledge to local businesses, ENACTUS students themselves gain valuable skills and experience that are not offered in formal classes.

It is expected that, through participation in ENACTUS projects, these students would develop an interest in entrepreneurship. While it is commendable for students to engage in extra-curricular entrepreneurial activities, a sizable number of students at the university are not members of ENACTUS. This implies that the majority of students at the institution lack the entrepreneurial skills, attitudes, and behaviour both valuable and necessary for an individual to start, develop, and grow the business. Shambare and Tshkovhi (2015) in their study found that personal attitude and entrepreneurial knowledge were the most important factors to motivate students to 'think and act entrepreneurially'.

The university environment, like any other environment, has its own particular effect on the entrepreneurial inclinations of its students. One way for a university to attempt to grow its students' entrepreneurial attitudes is through entrepreneurship education and training. According to Welsh *et al.* (2016), entrepreneurship education creates in students the right attitudes, motives, intentions, and grit to meet and overcome failure with a determination to start over again and to win. Currently in this university, entrepreneurship is taught in the school of Agriculture and Management. This implies that, apart from those registered in this school, many students generally do not have the entrepreneurial attitudes that has the potential to urge them to start a business after graduating. It further means that many students are unaware of, or do not have knowledge about, the role that entrepreneurship education can play in generating employment opportunities, fostering economic growth, and enhancing economic development in their area and in the country.

In addition, entrepreneurship is not even compulsory in those schools which are currently offering it. While it is commendable that entrepreneurship has been integrated into the curriculum of a few schools, at this university the challenge is to find a way to integrate across all disciplines. This would ensure that each student develops entrepreneurial attitudes which have the potential to stimulate their intention to start and grow a business. This in turn may influence them to consider choosing entrepreneurship as a career option immediately after graduating. One way to create entrepreneurial drive (and to provide role models – see 2.6.2) is to bring entrepreneurs, especially alumni of the university, into the classroom to speak to students and to teach courses. This would help demystify the entrepreneurial process and make that option feasible. Currently in the University of Venda one seldom sees alumni of the university come onto the campus to speak to the students about entrepreneurship as a career option. In addition, most entrepreneurial courses continue to be taught via lecture methods instead of action-based methods. Usually these methodologies hinder critical thinking and individual initiatives among students. On the other hand, action-based methodologies enable students to actively spot opportunities. These not only raise the entrepreneurial spirit of the students, but also facilitate experiential learning about entrepreneurship.

Thulamela Local Municipality Map

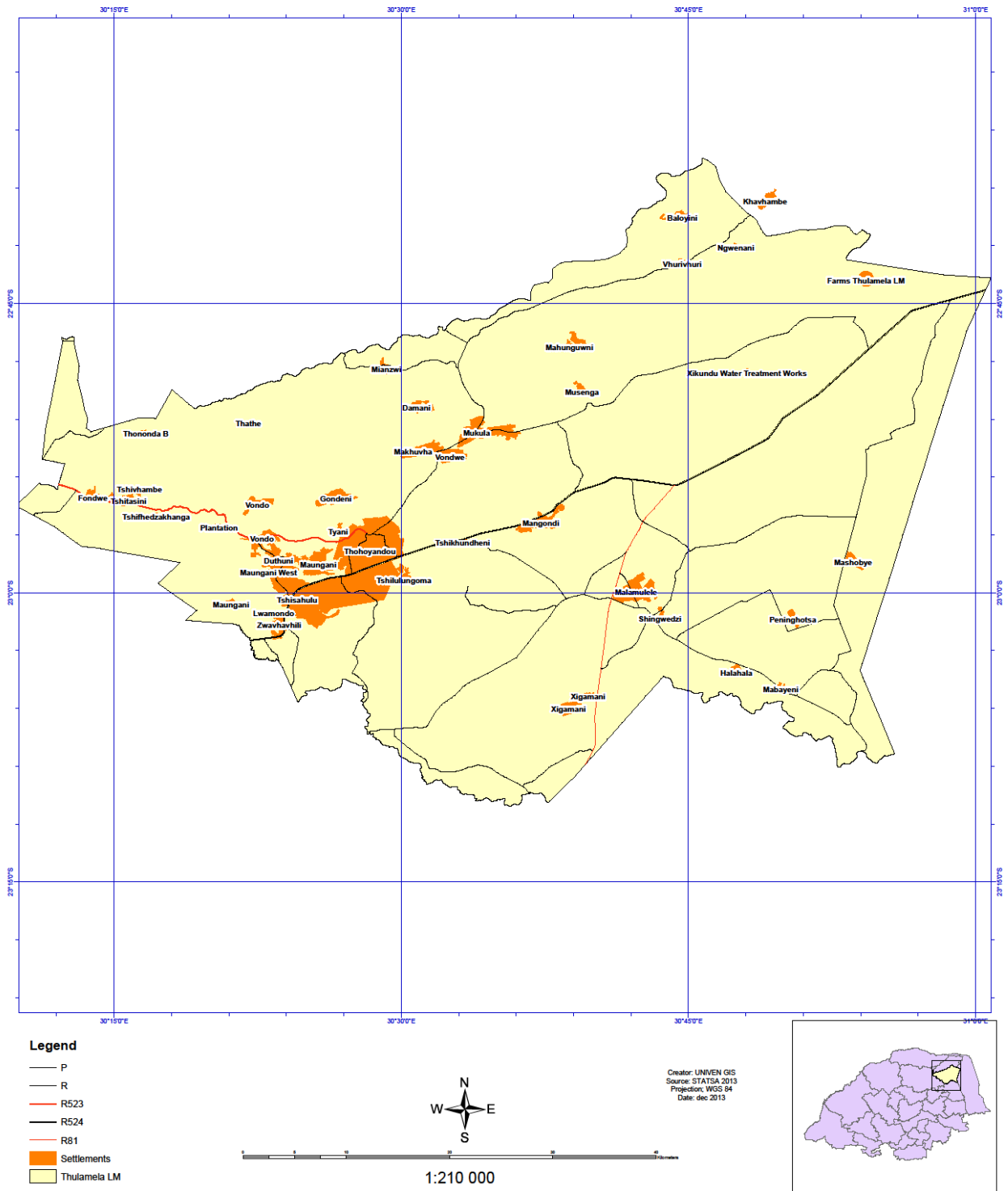


Figure 3.1 Thulamela Local Municipality (Source: University of Venda GIS Unit, 2013)

3.3 Research Design

The descriptive survey research design that applies both quantitative and qualitative approaches (triangulation) was used in order to conduct an in-depth exploration of the research topic. In a survey-based design data are collected either by using questionnaires and/or through personal interviews. In the case of this study both of these data collection instruments were used and involved students and members of ENACTUS, lecturers, HODs, and the deans of schools or faculties. In the quantitative approach, the researcher used a questionnaire in order to collect data from students, while the qualitative approach involved using an interview schedule to obtain information, perceptions, and views from the ENACTUS students, lecturers, HODs and the deans from various schools. In this study the independent variables identified were entrepreneurial awareness, environmental factors, personality traits, and constraints. The dependent variable was the attitude of students towards entrepreneurship as a career option. Table 3.1 shows the research design for each objective on entrepreneurship as a career option.

Table 3.1 Research design for each objective on entrepreneurship as a career

Objective	Research design	Reason for the choice
1. To explore and assess the attitudes of students towards entrepreneurship as a career option.	Descriptive	Describe and understand the attitudes of students towards entrepreneurship as a career option.
2. To explore and assess the effect of the level of students' entrepreneurial awareness on students' attitudes towards entrepreneurship as a career option;	Descriptive	Describe and understand students' awareness of entrepreneurship as a career option
3. To explore and assess the influence of personality traits on students' attitudes to pursuing entrepreneurship as a career option	Descriptive	Conduct in-depth analysis of personality traits and their effect on students' intention to become entrepreneurs
4. To explore and assess the influence of environmental factors on students' attitudes towards pursuing entrepreneurship as a career option	Descriptive	Describe and understand the extent and effects of environmental factors on students' intention to become entrepreneurs
5. To explore and assess the constraints university students face and perceive themselves to face regarding entrepreneurship as a career option	Descriptive	Describe and understand the constraints as perceived by students.
6. To explore and assess the attitudes of academics and ENACTUS to the integration of entrepreneurship across disciplines	Empirical inquiry	Gather data on their opinions of the integration of entrepreneurship across the disciplines

3.4 Population and Sampling Procedures

The target population of the study was 3096 students, 192 lecturers, 118 HODs and the eight Deans of the university's eight schools. The sample frame for undergraduate final year students was obtained from the Department of Postgraduate students, while those of the lecturers, HODs and the Deans were obtained from the Department of Human Resources at the University. The study was limited to the respondents from the various schools at the University of Venda. For the purpose of this study, the respondents were final year undergraduate students, lecturers, HODs, the Deans and ENACTUS from the eight schools. Undergraduate final year university students were considered by the researcher to be potential entrepreneurs since they were approaching a career decision point for entering into employment or seeking self-employment.

The study used both probability and non-probability methods. The non-probability method was used to select the ENACTUS students, lecturers, HODs, and the deans from every school, using the convenience sampling method. This sampling method relies on data collection from population members who are conveniently available to participate in the study. This technique was preferred because it is fast, inexpensive, easy and the participants are readily available. Probability sampling was applied to draw the sample of undergraduate students from eight schools at the university. In this method, each element of the population has known non-zero probability of being selected. Stratified sampling was used to select the sample of the study from 3096 final year undergraduate students. This method was preferred because it ensures that each subgroup within the population receives proper representation within the sample. The various eight schools in the university were regarded as strata. These schools, or strata, were then divided into three categories: the management group, which comprises of the School of Management Sciences and the School of Law; the science group, which comprises of the School of Environmental Sciences, School of Agriculture, School of Health sciences, School of Mathematics and Natural sciences; lastly the Humanities group, which comprises of the School of Humanities and Social Sciences, and the School of Education. Within each stratum, a proportional allocation of sample size was done to determine a sample size of 310 [10 % of 3096] of the undergraduate final year university students. The formula for the proportional allocation of the sample size was as follows: $n_i = \left(\frac{h_i}{N}\right) n$ Where n_i =sample size of i th stratum, n = sample size, h_i = population size of the i th stratum, N = Population size, n = Sample size. For example: Management sciences: $n_i = (591/3096) \times 310 = 59$. Table 3.2 shows the population sizes of students, lecturers, HODs, and the ENACTUS. Conventional sampling procedure was then employed within the department in the school. Prior arrangement was made with the respective class lecturers to use their classes for research purposes

Table 3.2 Table 3.2 Population and sample sizes of participants

Name of school	Classification category	Number of final year students		Number of HODs in school		Number of academics/Lecturers		Deans	ENACTUS
		Total	Study sample	Total	Study sample	Total	Study sample		
Management Sciences	Management	591	59	16	2	30	3	1	6
Law	Management	514	51	13	1	9	1	1	
Mathematics and Natural Sciences	Science	365	37	25	3	39	4	1	
Environmental Sciences	Science	423	42	10	1	16	2	1	
Agricultural Sciences	Science	162	16	12	1	16	2	1	
Human and Social Sciences	Humanities	395	40	20	2	42	4	1	
Health Sciences	Science	217	22	7	1	28	3	1	
Education	humanities	429	43	15	2	12	1	1	
TOTAL		3096	310	118	13	192	19	8	

3.5 Data Collection

The study largely relied on primary data collected from students and academic staff. The study used a closed-ended structured questionnaire and interview schedules as measuring instruments. Data were collected from a self-administered questionnaire which was distributed among undergraduate final year students at the University of Venda. The unit of analysis was the final year undergraduate students from various schools at the university. The questionnaire was adapted from various sources and comprised of 67 closed-ended questions (Appendix 7.4). The objective of the questionnaire was to measure the factors influencing students' attitudes towards entrepreneurship as a career option. The questionnaire was divided into six close-ended sections with questions designed to measure demographic profiles, entrepreneurial awareness, entrepreneurial attitudes, personality traits, environmental factors, and perceived constraints to starting a business. About 310 questionnaires were distributed to all sampled final year undergraduate students from the eight schools with the help of the respective lecturers in the lecture halls. Respondents were asked to respond to each item on a 5-point Likert scale ranging from 1= (strongly disagree) 2= (disagree) 3= (unsure) 4= (agree) 5= (strongly agree). Responses of strongly agree, agree, unsure, disagree, and strongly disagree were weighted as 5, 4, 3, 2 and 1, respectively. The sum of the weights was divided by 5 to get a criterion mean of 3 so that responses with a mean of less than 3 were not accepted, and taken to indicate negative attitudes towards entrepreneurship as a career option, and those with mean scores of 3 to 5 were accepted as representing marginal to very high positive attitudes of students towards entrepreneurship as a career option. Table 3.3 shows the data collection instrument for each objective.

The qualitative interview schedule was comprised of statements for the of collecting data by eliciting views and perceptions from ENACTUS students, lecturers, HODs, and the deans. In-depth interviews were conducted on a one-to-one (face-to-face) basis to probe ENACTUS members, lecturers, HODs and deans on their perceptions of entrepreneurship education across disciplines, and their views on its position within their own academic programmes. Participants in these interviews were guided through a series of open-ended questions. The researcher planned different interview schedules for different groups of respondents, while schedules for HODs and deans were the same. Despite having different schedules for different groups of respondents, some thematic statements which were presented as questions to be responded to were the same in all schedules. All interview sessions for lecturers, HODs, and the deans took place in their offices. The researcher made prior appointments with the relevant respondents. A Master's student who also served as a statistician, and an Honours student, both assisted in the collection of data, the data capturing, transcription, and analysis of the data.

Table 3.3 Data collection techniques and instruments for each objective

Objectives	Respondents: data collection techniques					Variables	instruments
	students	lecturers	HODs	Deans	Enactus		
1. To explore and assess the attitudes of students towards entrepreneurship as a career option	Administering written questionnaires	n/a	n/a	n/a	n/a	Measured with 8 items	Structured questionnaires based on a five-point Likert Scale with: 1= Strongly disagree and 5= Strongly agree.
2. To explore and assess the level of entrepreneurial awareness affecting students' attitudes towards entrepreneurship as a career option	Administering written questionnaires	n/a	n/a	n/a	n/a	Entrepreneurship education; Entrepreneurial campaigns; Entrepreneurial competition	Structured questionnaires based on a five-point Likert Scale with: 1= Strongly disagree and 5= Strongly agree.
3. To explore and assess the influence of personality traits on students' attitudes towards entrepreneurship as a career option	Administering written questionnaires	n/a	n/a	n/a	n/a	Need for achievement; Locus of control; Creative thinking; Risk-taking; Need for autonomy and Family; Political;	Structured questionnaires based on a five-point Likert Scale with: 1= Strongly disagree and 5= Strongly agree.
4. To explore and assess the influence of environmental factors on the attitudes of students towards entrepreneurship as a career option	Administering written questionnaires		n/a	n/a	n/a	Educational; political; Social; Economic environment	Structured questionnaires based on a five-point Likert Scale with: 1= Strongly disagree and 5= Strongly agree.
5. To explore and assess the constraints final year University of Venda students perceived themselves to be facing regarding entrepreneurship as a career option	Administering written questionnaires	n/a	n/a	n/a	n/a	Lack of exposure and support, lack of finance, Fear of failure; Lack of entrepreneurial culture and government regulations	Structured questionnaires based on a five-point Likert Scale with: 1= Strongly disagree and 5= Strongly agree.
6. To explore and assess the attitude of academics and Enactus on entrepreneurship education across the disciplines	Administering written questionnaires	Face-to-face interview	Face-to-face interview	Face-to-face interview	Face to face interview		Qualitative interview schedule with open-ended questions

The research instrument was pilot- tested. According to Bryman *et al.* (2014), pilot testing helps in identifying questions that make respondents feel uncomfortable and assists in detecting any tendency for respondents' interest to be lost at certain junctures, as well as general clarity and comprehensibility of questions. Pilot testing was done with 20 respondents from the Department of Business Management who were selected using convenience sampling technique.

3.6 Data Analysis

After having collected all the data, the researcher conducted an analysis of the data. Data analysis involves reducing accumulated data to a measurable size, developing summaries, looking for patterns / themes, and applying statistical techniques (Cooper & Schindler, 2001). In this study two kinds of data were obtained, one set from the closed-ended questionnaires. and the other from the responses to interview schedules with open-ended questionnaires. The responses were subjected to quantitative and qualitative analysis techniques.

Quantitative data analysis

Quantitative data are data that can be measured numerically. According to Sefiani (2013), the process of analysing quantitative data involves preparing data, descriptive analysis, inferential analysis, and content analysis. Data preparation consists of four steps, viz. editing the data, coding the data, capturing the data, and cleaning the data. In the present research, quantitative data analysis was used to analyse data as per research objectives 1-5. Given that the quantitative method is more scientific and is useful when the sample size is large, the researcher is able to make generalisation from a larger population. Mvula (2018) suggests using the quantitative method where the subjects being investigated are subject to scientific validation, when the sample size is large, and the study can be easily replicated. The data collected for this study were analysed using IBM SPSS 25.0 through descriptive techniques (frequency distribution, mean, percentages and standard deviation), and inferential techniques (Mann Whitney test). SPSS was used to analyse the data from the questionnaires. Descriptive statistics transform a set of numbers into a single number, or a few numbers that describe the data (Bertram and Christiansen, 2014). These involve the calculation of frequencies and percentages, measurement of central tendency, and measurement of dispersion of data using standard deviation. On the other hand, inferential statistics are used to make inferences or predictions about the similarity of a sample to the population from which it is drawn, and samples or population can be compared and tested to determine the significance of the findings (Bertram & Christiansen, 2014). In the present study, descriptive statistics were used to summarise sample data distribution, while the non-parametric Mann Whitney test was used to determine the significance of association of gender and academic discipline on participants'

perceptions of entrepreneurial awareness, personality traits, environmental factors, and constraints as determinants of attitude towards entrepreneurship as a career.

Qualitative data analysis

A qualitative method was used to answer objective 6. The researcher used the interview method of data collection based on an interview schedule. ATLAS ti.8 (the version available at the time) was used to facilitate the analysis of these data. Atlas ti is a computer-assisted qualitative data analysis software (CAQDAS). Apart from Atlas ti, content analysis was also used to supplement this analysis. All four (4) individual interviews were imported into one Hermeneutic Unit (HU). Using the available list of coding functions - such as open coding, code by list, and code in vivo - available in ATLAS.ti, data were coded accordingly. Precoding was done, and eleven codes were identified (“attitude towards entrepreneurship”, “awareness of entrepreneurship”, “environmental factors”, “integrated entrepreneurship components”, “integrated entrepreneurship education”, “integration of entrepreneurship”, “obstacles of entrepreneurship”, “personality traits”, “status of entrepreneurship education”, and “tracking of students’ employment”. Again, use was made of the Network View Manager (NVM) to see if there were any relationships amongst the codes. Two networks were formed: “awareness of entrepreneurship” and “integration of entrepreneurship”. Related functions were linked under NVM, using nodes imported to create categories of concepts for making sense of the data and drawing logical patterns that could explain how entrepreneurship was viewed by the different segments of respondents in the study. This procedure was followed for all individual documents.

3.7 Validity and reliability

Before being administered, the questionnaire was subjected to reliability and validity testing. Cooper and Schindler (2001) define validity as the extent to which a test measures what we actually wish to measure. Validity is therefore concerned with the integrity of the findings and conclusions from a piece of research (Bryman *et al.*, 2014). In the case of the current study therefore, validity has to do with maximum accuracy of the questionnaire and its appropriacy for this study. Face validity was established by following the process to evaluate the ability of the questionnaire to measure what the researcher intended it to measure with maximum accuracy. To ensure content validity, the questionnaire was subjected to expert opinions and evaluations, and their recommendations were considered and / or incorporated.

Reliability is concerned with whether the results of the study are repeatable (Bryman *et al.*, 2014). This refers to the extent to which the data collection or analysis procedures are able to secure consistent results. Reliability was established by using the Cronbach’s Alpha test for internal reliability. The alpha coefficient varies between 0 (no internal consistency) and 1

(complete internal consistency). A result of 0.8 and above usually implies an acceptable level of internal reliability (Bryman *et al.*, 2014). The calculated alpha test was found to be equal to 0.8. Thus, the questionnaire was considered sufficiently reliable for the study.

3.8 Ethical Considerations

To ensure ethical considerations were established and followed regarding all participants, high ethical standards were applied. Cooper and Schindler (2001) defined ethics as norms or standards of behaviour that guide moral choices about our behaviour and our relationships with others. Before distributing copies of the questionnaire, every effort was made to obtain clearance from the university's Ethics Committee. Students registered with the University of Venda included in the study population were contacted by letter to request their willingness to participate in the study. The researcher obtained verbal as well as written informed consent from potential participants before administering the questionnaire. A brief explanation of the purpose and potential benefits of the research was given to respondents to put them at ease and to motivate them to answer questions truthfully. Respondents were also informed of their rights to refuse to answer any question or participate in the study, or to withdraw from participation at any stage without fear or favour.

The researcher ensured that participants were not exposed to physical or psychological harm in the course, or as a result, of the study. During the study, the researcher made every effort to be honest, respectful, and sympathetic towards all participants. Participants were assured that all information and responses shared during the study would be kept confidential and that their anonymity would be ensured in the presentation and documentation of the results in order to protect their identities. For this purpose, the names of participants in the interviews are not given in the summary of the findings, each participant being assigned a code name (see Chapter 4).

CHAPTER 4 : PERCEPTIONS OF FINAL YEAR UNDERGRADUATE STUDENTS REGARDING CHOICE OF ENTREPRENEURSHIP AS A CAREER

4.1 introduction

The factors that appeared to influence the perceptions and attitudes of the sample of final year students at the University of Venda towards choosing entrepreneurship as a career option were investigated in this study. Chapter 3 described the research approach, design and method used to collect the data to be analysed. In this chapter the findings from the quantitative and qualitative phases of the study are presented. Biographical details of the student respondents, ENACTUS, Lecturers, HOD and deans are first presented, and thereafter, the results of the descriptive and inferential analysis of the data.

4.2 Description of Results

4.2.1 Biographical details of the respondents

As reported in Chapter 3 (see Table 3.2), a sample of 310 respondents were interviewed, of which approximately 61% were females. Seventy-two percent of the total number of students interviewed, were 18-24 years old. Almost 14 % were 25-29 years old. The remainder (7% each) were aged 30-34, and over 35. Approximately 57 % of the respondents indicated that they had no relatives who were involved in business.

Participants in the study were drawn from the Schools of Management Sciences (19 %), Law (17 %), Education (14 %), Environmental Sciences (14 %), Human and Social Sciences (13 %), Mathematics and Natural Sciences (12 %), Health Sciences (7 %), and Agricultural Sciences (5 %).

When further pooled into disciplinary fields, it was observed that students pursuing degrees in commerce and law constituted almost 36 % of the total. An almost equal proportion of students was made up of students pursuing degree qualifications in the Natural Sciences (38 %). The remaining 27 % of the students were in the humanities.

The survey was supplemented by an interview with 14 (74%) lecturers, 11 (85 %) Heads of Departments, 7 (88 %) deans and 6 (100 %) members of ENACTUS (An international non-profit organisation dedicated to inspiring students to improve the world through entrepreneurial action). For the qualitative phase, the findings are presented to reflect the main themes that were investigated and those that emerged from the interviews: attitude towards entrepreneurship, entrepreneurial awareness, personality traits, environmental factors, entrepreneurial constraints, and integration of entrepreneurship across disciplines

4.2.2 Attitude of students towards entrepreneurship as a career option

The purpose in this section is to explore and assess the attitudes of students towards entrepreneurship as a career option, as they emerged from the collected data. The description in this section answers the following research question: What is the nature of the various attitudes of students towards entrepreneurship as a career option? Table 4.1 summarises the responses to the questionnaire, showing the most common attitudes in descending order of prevalence to be “I would like to be my own boss one day”, “I am happy to learn entrepreneurial skills”, and “I will be a successful entrepreneur if I try”. The perception responders reported having: “I have a negative attitude towards entrepreneurship as a career” had fewer responses. The proportion (%) of responses of male and female students in the sample regarding attitudes towards entrepreneurship as a career were the same ($P > 0.05$). Although differences in most of the attitudes of the students (Table 4.1) varied significantly across academic disciplines ($P < 0.001$), this was not so for “I have a neutral attitude towards entrepreneurship as a career”, and “I have a negative attitude towards entrepreneurship as a career” ($P > 0.05$).

ENACTUS participants revealed their interest and intentions in starting their own business after graduating. This evidence was clear from the following quote:

I need to have my own company as I want to be my own boss’

I have my own small business and I still want to start my own business after graduating; however it is not easy to start business because of risk involved.

4.2.3 Awareness of entrepreneurship as a determinant of choice of career

The purpose of this section was to explore and assess the influence of entrepreneurial awareness/knowledge on students’ attitude towards entrepreneurship as a career option. The descriptions in this section are based on the answer to the following questions: ‘What is the influence of entrepreneurial awareness on students’ attitude towards choosing entrepreneurship as a career option? Table 4.2 shows the most common awareness variables in descending order of prevalence to be: “Entrepreneurial courses should be made compulsory in order to stimulate entrepreneurial spirit in campus”, “I am aware that entrepreneurship is a career option for me”, “Entrepreneurial or business related examples are used in classroom teaching.”

In contrast, the perceptions, “Government conducts entrepreneurship campaigns in my area”, and “I took entrepreneurship education as one of my course” received the fewest affirmative responses. Highly significant differences due to academic disciplines ($p < 0.001$) were found with respect to, “ Entrepreneurial courses should be made compulsory in order to

stimulate an entrepreneurial spirit on campus; “I am aware that entrepreneurship is a career option for me,” and “I took entrepreneurship education as one of my courses”. Significant differences were also found across disciplines ($P < 0.05$) with respect to the views of respondents: “There are student clubs on campus which promote entrepreneurship.” The only significant difference due to gender was, “Students are encouraged to pursue entrepreneurial ventures in the university”.

Evidence from ENACTUS participants shows their dissatisfaction with the way in which the university is supporting entrepreneurship. Most of them, however, felt that being members of ENACTUS equipped them with skills to start their business. The following quote serves as an illustration:

Entrepreneurship is important and students need information about entrepreneurship; however not enough exposure is being done.

The above evidence reveals the perception on the part of ENACTUS participants that students see entrepreneurship as a necessity to address graduate unemployment, and thus would like the university to increase awareness and knowledge of entrepreneurship among all students. This also suggests, through the lens of the ENACTUS students, that most students at the time of the study were not completely aware of entrepreneurship as a possible career option.

4.2.4 Personality traits as determinants of attitudes towards entrepreneurship as career option

The purpose of this section was to explore and assess the influence of personality traits on students’ attitudes towards pursuing entrepreneurship as a career option. The description in this section answers the following question: To what extent do the personality traits defined and explored in Chapter 2 influence students’ attitudes to their becoming entrepreneurs? Table 4.3 summarises responses to the questions in the questionnaire which have to do with personality traits, such as self-confidence, the need to achieve, and creative thinking, showing the most commonly perceived traits of a successful entrepreneur in descending order of prevalence to be, “I am confident of my abilities and feel good about myself “ (self-confidence), “I push myself, and feel real satisfaction when my work is among the best work of others” (need for achievement),’ and, “ I believe it is important to continually look for new ways to do things in a business” (innovation or creative thinking). The perceptions, “I am tolerant of high risk” had the fewest responses. The most prominent personality trait that appeared to determine students’ possible choice of entrepreneurship as a career option was self-confidence, with a mean score of 4.6, and standard score of 0.67. Need for achievement ($M=4.5$ and $s=0.76$), innovation/creative thinking ($M= 4.4$ and $s=0.85$), locus of control ($M=4.4$ and $s= 0.81$ need for independence ($M=4.3$ and $s=0.95$), and risk- taking ($M=3.6$ and $s=1.09$),

were some of the important personality traits identified that appeared to determine students' possible choice of entrepreneurship as a career.

Table 4.3 also shows significant gender differences ($p < 0.05$) observed in perceptions of personality traits on the part of respondents as determinants of their attitudes towards pursuing entrepreneurship as a career option after graduating to be, "Need for achievement", "Locus of control", "Risk-taking". Significant differences across disciplines ($P < 0.05$) were also found with respect to the sub-themes: "Self-confidence", "Innovation / creative thinking" and "Risk-taking".

In the interviews, the majority of ENACTUS participants in the study felt that the workshop on entrepreneurship they had attended equipped them with the requisite skills and confidence to start and manage an entrepreneurial enterprise. The following view was expressed by one participant on the value of the workshop:

I have skills and capabilities to become an entrepreneur. I attended a workshop where I have been taught about skills to become entrepreneurs.

I attended SEDA training on entrepreneurship. As member of ENACTUS I have learnt about how to start and run the business.

The preceding two quotes, from one ENACTUS participant, suggest that student participants now have, or have developed, those psychological traits such as risk-taking, self-confidence, achievement motivation, internal locus of control, that can render them more likely to become industrialists after graduation. Other sampled ENACTUS participants also echoed this sentiment.

4.2.5 Environmental factors as determinants of attitudes towards entrepreneurship as a career option

The purpose of this section was to explore and assess the influence of environmental factors on the attitudes of students participating in the study towards pursuing entrepreneurship as a career option. The description in this section answers the following question: To what extent do environmental factors influence the students' attitudes to becoming entrepreneurs? Table 4.4 summarises the responses to the questions on perceived environmental factors influencing the participants' choice of career in the questionnaire, showing the most common environmental factors to be perceived by them to be: "Family, friends and society believe being an entrepreneur is good for me" (social factors), "Students are encouraged to pursue entrepreneurship ventures in the university" (educational), and, "In South Africa the economy provides many opportunities for entrepreneurs (economic). The perceptions, "Government, laws, policies, rules, and regulations encourage new venture creation" (Political). The most

prominent environmental factor perceived by study participants to determine their possible choice of entrepreneurship as a career option was the social environment (3.9 ± 0.96). Educational (3.7 ± 1.09), economic (3.6 ± 1.10), and political (3.5 ± 1.01) factors were some of the environmental factors that appeared to determine the student participants' choice of entrepreneurship as a career option. Table 4.4 shows significant differences for political factors due to gender ($P < 0.05$) in students' perceptions of environmental factors as determinants of their attitudes towards starting a business as a career option after graduating. Significant differences were also found across disciplines ($P < 0.05$) with respect to the influence of entrepreneurship education on choosing entrepreneurship as a career. In addition, there was significant difference linked to academic disciplines ($P < 0.01$) with respect to social and educational factors.

The evidence from the interviews with ENACTUS students indicated that they considered a favourable environment (including experiential learning) such as a university might play an important role in promoting an entrepreneurial spirit among students. Below is a quote from one of the participants regarding the role of ENACTUS helping to provide practical knowledge and experience:

The university must support organisation like ENACTUS so that students are aware of entrepreneurship as a career option through inviting entrepreneurs after hours to inspire young entrepreneurs, partner with organisation like NYDA to inform students on how to get funding for start-ups.

This view/suggestion shows that ENACTUS participants consider that graduating students would like to hear from established entrepreneurs in order to learn more about entrepreneurship. This sentiment also indicates the importance of role models in shaping students' intentions to engage in entrepreneurship as a career.

Lecturer participants were asked to give their opinions on the role a university should play to promote entrepreneurship on the campus. These participants expressed some dissatisfaction with the way in which the university currently supports, or does not support students to become entrepreneurs. The following views and perceptions of some lecturer participants are worth noting:

Currently, my perception is that the university discouraged students to start and run the businesses as it does not allow students to sell their products in the campus. University must allow students to sell their products in the campus.



The University is not doing enough to motivate students to become entrepreneurs as it is mainly concerned with community engagement. University must start with awareness campaign but this need not be confined to a particular school'.

What can be interpreted from the preceding views is that some lecturers agreed that a favourable entrepreneurial environment is a necessity to capacitate students to start and run a business successfully and sustainably.

Table 4.1 Significance of association of gender and academic discipline on students' perceptions influencing their attitudes, and the actual attitudes of students towards entrepreneurship as a career option (n=310)

Perception (Attitude)	Extent of agreement with the perception			Significance of effect of	
	Rank means	Standard deviation	Rank	Gender	Academic discipline
1. I would like to be my own boss one day	4.6	0.82	1	ns	***
2. I am happy to learn entrepreneurial skills	4.4	0.86	2	ns	***
3. I will be a successful entrepreneur if I try	4.3	0.93	3	ns	***
4. I am determined to create a firm in the future	4.2	0.97	4	ns	***
5. I have a positive attitude towards entrepreneurship as a career	4.1	1.02	5	ns	***
6. Being an entrepreneur will give me more satisfaction than being an employee in a big company	4.1	1.14	6	ns	***
7. A career in entrepreneurship is attractive to me	4.1	0.99	7	ns	***
8. Entrepreneurship education should be included in the syllabi of non-business programmes	4.0	1.01	8	ns	***
9. I have a neutral attitude towards entrepreneurship as a career	2.8	1.34	9	ns	ns
10. I have a negative attitude towards entrepreneurship as a career.	1.8	1.15	10	ns	ns

Key: ns= not statistically significant ($P > 0,05$) * = $P < 0,001$**

Table 4.2 Significance of association of gender and academic discipline on perception of entrepreneurial awareness as determinants of attitude towards entrepreneurship as a career (n=310)

Awareness variable	Extent of agreement with perception			Significance of effect of	
	Rank mean	Standard deviation	Rank	Gender	Academic discipline
1. Entrepreneurial courses should be made compulsory in order to stimulate an entrepreneurial spirit on campus.	4.0	1.88	1	ns	***
2. I am aware that entrepreneurship is a career option for me.	3.8	1.65	2	ns	***
3. Entrepreneurial or business related examples are used in classroom teaching.	3.5	1.25	3	ns	ns
4. Students are encouraged to pursue entrepreneurial ventures in the university.	3.4	1.17	4	***	ns
5. I know how to start a firm and make it successful.	3.3	1.15	5	ns	ns
6. There are student clubs on campus which promote entrepreneurship.	3.3	1.22	6	ns	*
7. The university encourages me to make entrepreneurship my career choice.	3.1	1.25	7	ns	ns
8. The university organises entrepreneurs to address students in the campus.	3.1	1.20	8	ns	ns
9. The university provides resources to assist student entrepreneurs.	2.9	1.14	9	ns	***
10. Government conducts entrepreneurship campaigns in my area.	2.8	1.34	10	ns	ns
11. I took entrepreneurship education as one of my courses.	2.8	1.45	11	ns	***

Key: ns= not statistically significant (P>0,05) * = P<0.05 * = P< 0.0**

Table 4.3 Significance association of gender and academic discipline on perceptions of personality traits as determinants of attitudes towards entrepreneurship as a career (n= 310)

Traits	Personality traits categories	Extent of agreement with perception			Significance of effect of	
		Rank mean	Standard deviation	Rank	Gender	Academic discipline
1. I am confident of my abilities and feel good about myself	Self-confidence	4.6	0.67	1	ns	*
2. I push myself, and feel real satisfaction when my work is among the best	Need for achievement	4.5	0.76	2	*	ns
3. I believe in looking for new ways to do things in a business	Innovation/Creative thinking	4.4	0.85	3	ns	*
4. I am in total control of my destiny	Locus of control	4.4	0.81	4	*	ns
5. I find that I can think well only when I have guidance and advice from others	Need for independence	4.3	0.95	5	ns	ns
6. I am tolerant of high risk	Risk-taking	3.6	1.09	12	*	*

Key: ns= not statistically significant (P>0,05) * =P<0.05 ** = P< 0.01 * = P< 0.001**

4.2.6 Constraints, real and perceived, students face in pursuing entrepreneurship as a career option.

In this section, the purpose is to describe the results of the data collected in order to explore and assess the constraints students are aware they will face, and/or perceive they are likely to face regarding entrepreneurship as a career option. The description in this section answers the following question: 'What are the constraints students face in choosing entrepreneurship as a career option?' Table 4.5 shows the most common constraints in descending order of prevalence to be, "I have challenges in getting and raising financial resources for start-ups. "I am afraid to start a business because I do not have enough experience", and " It is difficult to obtain licences and certificates for businesses". The perceptions, "I have a fear of tough competition in business", and "I fear that I shall fail if I start a new business", had the fewest responses.

Table 4.5 shows a significant difference due to gender ($P < 0.01$) in participants' perceptions of constraints as determinant of attitude towards establishing business as a career option post-graduation for variable: "I have a fear of tough competition in business".

The interview with ENACTUS students revealed the following obstacles to entrepreneurship: students were not given the opportunity to be exposed to entrepreneurship; fear of failure, lack of support by the university community and potential sponsors, competition among businesses, and finance. One participant mentioned the following as the major obstacle

Lack of information about entrepreneurship and lack of funds are the major constraints.

Table 4.4 Significance of association of gender and academic discipline on perception of environmental factors as determinants of attitude towards entrepreneurship as a career.

Factors	Factors	Extent of agreement with perception			Significance of effect of	
		Rank mean	Standard deviation	Rank	Gender	Academic discipline
1. Family, friends, and society believe my being an entrepreneur would be good for me.	Social	3.9	0.96	1	ns	ns
2. Students are encouraged to pursue entrepreneurship ventures in the university.	Educational	3.7	1.09	2	ns	*
3. In South Africa the economy provides many opportunities for entrepreneurs.	Economic	3.6	1.10	3	ns	ns
4. Government laws, policies, rules, and regulations encourage new ventures creation	Political	3.5	1.01	4	*	ns

Key: ns= not statistically significant (P>0,05) * = P < 0.05 ** = P < 0.01 * = P < 0.001**

Table 4.5 Significant association of gender and academic discipline with students' perceptions of constraints they may face when choosing entrepreneurship as a career option.

Variable Constraints	Extent of agreement with perception			Significance of effect on their deciding to choose entrepreneurship as a career?	
	Rank mean	Standard deviation	Rank	Gender	Academic discipline
1. I have challenges in getting and raising financial resources for start-ups.	3.7	1.19	1	ns	ns
2. I am afraid to start a business because I do not have enough experience.	3.1	1.27	2	ns	ns
3. It is difficult to obtain licences and certificates for businesses.	3.0	1.23	3	ns	ns
4. I have fears of tough competition in business.	2.8	1.27	4	**	ns
5. I fear that I shall fail if I start a new business.	2.7	1.25	5	ns	ns

Key: ns= not statistically significant ($P>0,05$) *= $P<0.05$ **= $P< 0.01$ * = $P< 0.001$**

4.2.7 integration of entrepreneurship across disciplines

The purpose in this section is to explore and assess the attitudes of academics and ENACTUS students on developing knowledge of, and integration of, entrepreneurship across the disciplines, as revealed by the data. The description in this section is: What are the attitudes of Deans, HODs, lecturers and ENACTUS students towards developing entrepreneurial knowledge and skills in students, and towards the integration of entrepreneurship across the disciplines at the university? A summary of participants' opinions on integration and/or on introducing a compulsory entrepreneurship module across disciplines or degree programmes is presented in Figure 4.1. Students participating in ENACTUS agreed that entrepreneurship must be integrated into degree programmes. They argued that this would make it possible to positively change the mindsets of students and equip potential entrepreneurs with the necessary knowledge on how to start a business after graduating. Two ENACTUS interviewees spoke about the poorly attended NDYA workshops for students and offered suggestions for what the university needs to do to increase students' knowledge and encourage positive perceptions of entrepreneurship:

I attended one workshop organised by NYDA about entrepreneurship, but only 30 students attended; therefore, university need to do awareness campaign for the students to take entrepreneurship seriously. (Respondent E6).

Inclusion of a module on entrepreneurship across disciplines is a good idea to make all students aware of the benefits of entrepreneurship. (Participant E5).

Apart from one lecturer, all those who were interviewed supported the idea of introducing an entrepreneurship module into all degree programmes. One considered that this would equip students to start businesses sooner rather than later:

The idea of including entrepreneurship education is a good idea because it will help students to gain skills and not wait to be employed but will become employers themselves. (Participant LEC 11).

One disagreed about the benefits of this:

It is irrelevant in our school or department. (Participant LEC 9).

Although the HODs welcomed the idea of integrating entrepreneurship into all degree programmes, some suggested that it be made an elective module. As reflected in the quotes below drawn from one interview, the HODs were mainly of the view that infusion of entrepreneurship into the curriculum would be likely to help reduce the rate of unemployment among graduates by rendering them employable:

On the idea of introducing a compulsory module on entrepreneurship across the disciplines, it is necessary when we think that people must be able to live by selling their skills. Every person in the university must be able to know a little about entrepreneurship. (Respondent H2).

It should be offered comprehensively, but now is not happening. Is necessary because the overall aim of the university is not to teach students and end up being unemployed, but to be employed; hence entrepreneurship as a course will help them to start their businesses and become employers instead of being unemployed. (Respondent H7).

The deans were generally in agreement with HODs, although all of the deans who supported the idea of integrating entrepreneurship module into the curriculum, as with some of the HODs, preferred this to be an elective offering:

Entrepreneurship education is not taught directly in our school, as our courses depend on what is offered in other schools. Since we are not business inclined it would be difficult to teach it. It should not be compulsory, rather be optional so that students are made to be aware of entrepreneurship and must be done as an elective. (Respondent D7)

I support the idea of introducing a module of entrepreneurship across disciplines 100% as we don't want to teach students and [they] remained unemployed. (Respondent D2).

Various obstacles were cited by these respondents as constraints to introducing entrepreneurship into degree programmes. These included heavy workloads, lack of coordination, possible resistance from students and lecturers, extra cost resulting in increased fees, and lack of preparedness or willingness on the part of the university to offer entrepreneurship because more resources would be needed. Reservations expressed during the interviews regarding the introduction of entrepreneurship across disciplines included the lack of qualified lecturers – and lecturers not wanting to give up their specialisations - and resistance from students:

Regarding some challenges in integrating entrepreneurship education across the disciplines, some people will say that entrepreneurship belongs to Business Management and thus outside their scope. On the side of the students, they will say that it is wasting their time of completing their degree on time. They will regard it as an extra burden. (Respondent H2).



The major obstacle is that many academics would like to protect their focus / perspectives. They wouldn't like to move away from the comfort zones. Another obstacle is the university policy which now talk little about the career of entrepreneurship. (Participant LEC 2).

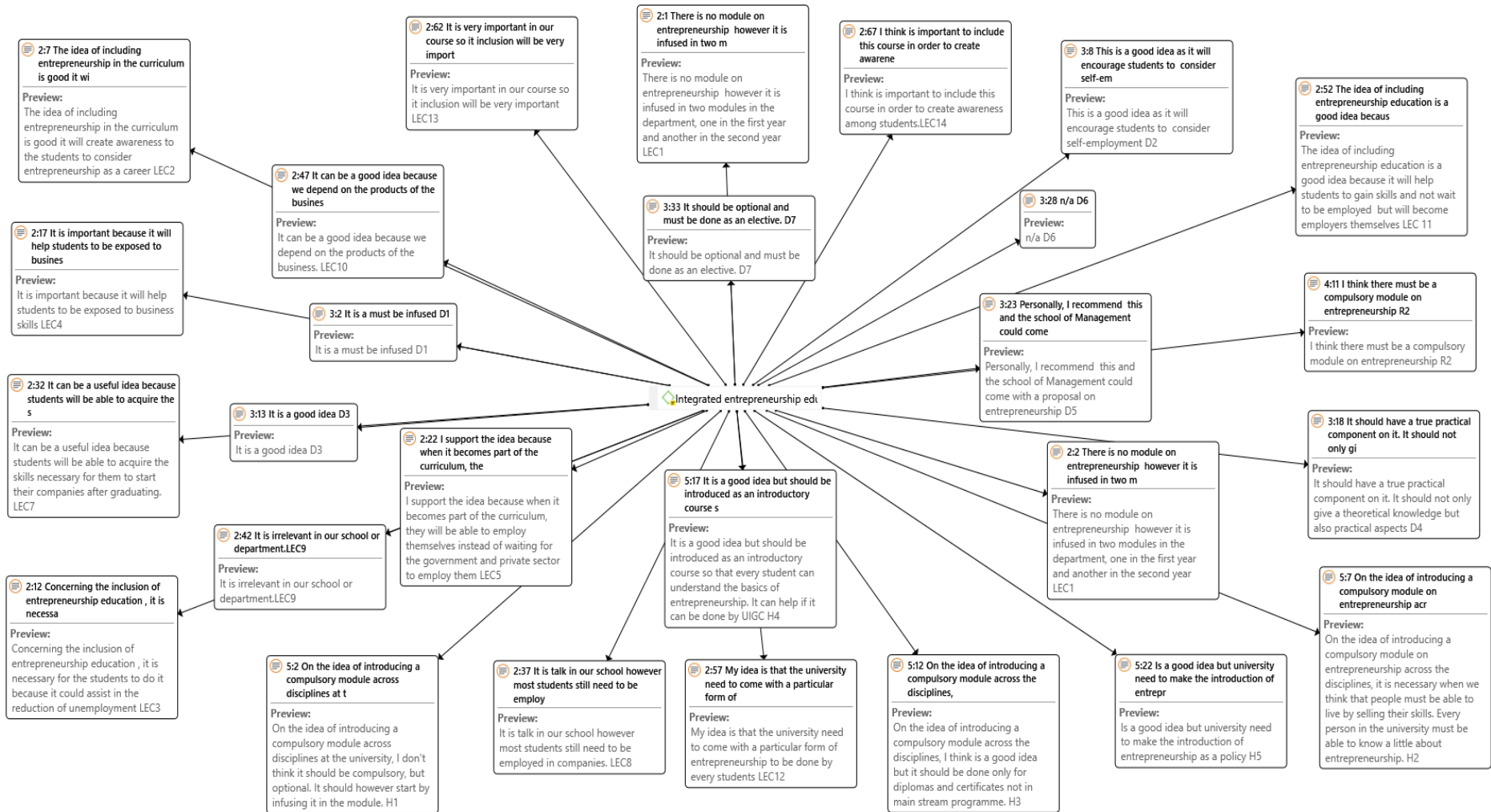


Figure 4.1 Visual representation of the integration of entrepreneurship across disciplines.

4.3 Discussion

This study sought to explore and assess the various factors that could influence the attitudes of final year undergraduate university students to choose entrepreneurship as a career option. This research was conducted in order to propose and inform a potential institutional intervention for inculcating and integrating entrepreneurship into various disciplines. This section presents the discussion of the findings as per the research objectives of the study.

Most students who participated in the current study were females. This indicates that there were more female students registered than males at the university. This has implications for female graduates regarding entrepreneurship, as they constitute a large pool to be tapped for business start-ups. Oseifuah *et al.* (2014) report this same trend at the University of Venda over the years. Student participants in the study were youths aged 18 to 24 years. This indicates that the largest range of students registered at the university was the 18-24 years' group/cohort. The Report by Global Entrepreneurship Monitor (2014) suggests that globally young people aged 18-34 are more likely to start a new venture than those at age 35-64. Taking this into account, it can be argued that many students at the University of Venda are at the right age to start, or to consider starting, their own businesses after graduation.

Approximately 57 % of the respondents who participated in this survey had no relatives involved in business. This implies that fewer than 45 % of the respondents had been exposed to business activities, and therefore had the skills, knowledge and first-hand information that could influence them towards choosing entrepreneurship as a career. Studies carried out in the United Kingdom (Tarling *et al.*, 2016), and in South Africa (Muofhe & du Toit, 2011; Niewenhuizen and Nieman, 2019) indicate that growing up in a family with self-employed family members has a considerable influence on one's attitude to considering entrepreneurship as a career choice. Hence, most of the students at the University of Venda had not been exposed to entrepreneurship at the time of the study.

The first objective was to explore and assess the attitudes of students towards entrepreneurship as a career option. Most students participating in the study were shown to have a generally high positive attitude towards entrepreneurship as a career option. Their having a high positive attitude towards entrepreneurship would suggest that these students possessed self-confidence in starting their own businesses. Hence, the possibility exists that, upon graduation, they will start their own businesses (Isah & Garba, 2015). Studies by Kabui and Maalu (2012), Rudhumbu *et al.* (2016), and Fada *et al.* (2017) all support the view that those students who show positive as opposed to negative entrepreneurial attitudes are more likely to want to be and to act as entrepreneurs. The current study revealed the student participants to strongly believe in the idea of being their own boss. This implies that they would

like to work independently and make their own decisions rather than being employed and answerable to a boss. Independence is considered by several researchers to be one of the traits required for one to become an entrepreneur. The study by Bezzina (2010) saw independent individuals as those wanting to be their own bosses, make their own choices, and be responsible for managing their own constraints. Therefore, according to such research, individuals with these characteristics can be considered more likely to become entrepreneurs than those without these traits. The current study also revealed that the final year undergraduate students participating in the study agreed with the view that entrepreneurship education should be included in the curricula of non-business as well as business programmes. Entrepreneurship education has been found to play a role in supporting students to be more entrepreneurial inclined and aware. It has been found to promote entrepreneurial behaviours through awareness creation. This view is consistent with that emerging from previous studies conducted in the last decade (Radipere, 2012; Kilasi, 2013; Roberts, 2013; Tengeh *et al.*, 2015) that support the idea of integrating entrepreneurship across disciplines in higher institutions. Successful entrepreneurship has always been associated with education appropriate to this field and career (Niewenhuizen & Nieman, 2019). Thus, introducing entrepreneurship as a field of study to all students can cultivate an entrepreneurial mindset and entrepreneurship knowledge, skills, and practices among students. This, then has the potential to promote a culture of entrepreneurship. In an environment where there is a culture of entrepreneurship, it is likely to generate an increase in entrepreneurial ventures.

The non-parametric Mann Whitney test was used to find out whether the gender of students participating in the study was an important factor influencing students to follow entrepreneurship as a career after graduation. The findings confirmed no significant association of gender with perceptions or attitudes of students towards entrepreneurship as a career option. This finding contradicts an earlier study done by Rudhumbu *et al.* (2016), which found gender to have an influence on the attitudes of students towards entrepreneurship education. The current study also showed a significant influence of academic discipline in all statements on the attitudes of student participants towards entrepreneurship as a career option, except for statements 9 and 10 (Figure 4.1). These results align with the results of an earlier study by Shaikh (2015), which found that engineering students were more likely to venture into entrepreneurship than their Management and Natural Science counterparts. This would, however, vary depending on whether the context is a developing or a developed (industrialised) country.

The second objective was to explore and assess the influence of entrepreneurial awareness/knowledge on students' attitudes towards entrepreneurship as a career option. The overall influence of entrepreneurial awareness of participating student r towards entrepreneurship as a career option was marginally high. This implies that some respondents were aware of, and knowledgeable about, the concept of entrepreneurship, while others were not. This, therefore, suggests that those who were lacking in knowledge and awareness lacked the information and relevant skills needed for a better understanding of the concept of entrepreneurship, an awareness and store of knowledge which would help them be alert to and discover possibilities out there in the business world. Previous studies indicate the importance of having access to relevant information and training in entrepreneurship (Haase & Lautenschlager, 2010; Raposo & Paso, 2011; Brown *et al.*, 2011; Uduak & Aniflok, 2011) as a means of raising awareness of, and being open to, entrepreneurship as a career option. Access to information and training in entrepreneurship can take place formally through entrepreneurship education, and/or informally through direct exposure to role models and mentors, together with involvement in workshops such as those mentioned by ENACTUS students. These can help individuals who do not see themselves as potential entrepreneurs to gain a better understanding. The marginally positive high level of student participants' entrepreneurial awareness is perhaps an indication that most of them understood the importance of considering entrepreneurship as a career option. Students strongly agreed with the view that entrepreneurial courses should be made compulsory across disciplines. This view is in line with previous studies (European Commission, 2008; Moi *et al.*, 2011; Manuere *et al.*, 2013), all of which recommended that an education system should include compulsory entrepreneurial courses in primary, secondary, and vocational schools, as well as at universities. This would obviously help to develop and enhance learners' entrepreneurial knowledge and skills, as well as their attitudes towards entrepreneurship at an early stage of their lives. From the findings of the current study the student participants showed themselves to be aware that entrepreneurship is an option for them as a career. This suggests that they have a firm belief in themselves and ready to take on a challenge. To be an entrepreneur one has to have the kind of attitude that can change your outlook towards a chosen career. However, the students were of the view that government is not doing enough to raise entrepreneurial awareness amongst young people. The government is a key state institution that should be playing a major role in promoting a positive image of entrepreneurship for students such as those participating in the study. Government has the resources and power to assist in creating an c environment conducive to successful entrepreneurs, allowing private ownership of business, promoting financial help to potential entrepreneurs, promoting the establishment of incubators, and crafting policies that encourage an entrepreneurial culture in the country, in particular on university campuses. This view is consistent with the study of

Rutgers *et al.* (2017), which found that, in order to foster entrepreneurship, a government needs to enact laws and regulations that are favourable to, and support, entrepreneurs. What emerges from this study is that most of the participating students had never taken entrepreneurship education as a course during their years of secondary or tertiary study. Fada *et al.* (2017) define entrepreneurship education as education whose aim is to develop the entrepreneurial attitude, competence and skills that will equip an individual with the wherewithal to set up and successfully manage a business enterprise. This, therefore, means that the students in the current study lacked the skills and, to a lesser or greater extent, the attitude necessary for them to start and manage a business. Past studies (Muofhe & du Toit, 2011; Rudhumbu *et al.*, 2016) indicate a direct relationship between entrepreneurship education and starting a business. Thus, the findings of the current study, together with those of previous studies would suggest that entrepreneurship education should be encouraged as early as the primary school level so as to promote a culture of entrepreneurship among learners.

The third objective was to explore and assess the influence of personality traits on students' attitudes towards pursuing entrepreneurship as a career option. The majority of students' participants reported a high influence of personality traits on their own attitudes towards entrepreneurship as a career option. Self-confidence was a key entrepreneurial personality trait, followed by the need for achievement and innovativeness/creative thinking. Self-confident individuals are better prepared to start and succeed in a new business. The current study's findings support those of Baidi and Suyatno (2018) and Tyagi (2014) which seem to indicate that self-confidence and the need for achievement, together and simultaneously, have a positive effect on college students' entrepreneurial intentions. Furthermore, or Baidi & Suyatno and Tyagi perceive innovativeness/ creative thinking to have a high influence on their attitude towards entrepreneurship as a career choice, followed by the need for independence, locus of control, and, lastly, risk-taking. Creativity and innovation are seen by researchers in the field as the most important ingredients for starting a new venture or creating new products and/or services in existing businesses, and to determine a venture's competitive edge (Van Aardt *et al.*, 2000). This finding concurs with that of the study conducted by Dionco-Adetayo (2006), which revealed innovativeness and industriousness to be highly perceived to be personality traits influencing the attitudes of the young people in his study. Findings such as this suggest that training students in creative thinking and/or innovation should be given priority in order to positively influence their attitudes towards entrepreneurship. In addition, the current study is also consistent with those previous studies (Bezzina, 2010; Gorji & Rahimian, 2011; Remeikiene *et al.*, 2013; Nadkami, 2013) which indicate that students with high a need for achievement, a willingness to take risks, internal locus of control, a need for autonomy, the

ability to think creatively, and tolerance for ambiguity were more likely to choose entrepreneurship as a career option than those lacking these personality traits. These entrepreneurial characteristics influence individuals not only to start a business but to manage it successfully. The current study also looked at the influence of gender and academic disciplines on perceptions of personality traits as determinants of attitude towards entrepreneurship as a career. What emerged was that gender had no significant influence on self-confidence, creative thinking and the need for independence as personality characteristics. These findings contradict those of an earlier study by Abebe (2015), which found female students to have less interest in self-employment as compared to the male students. The current study also revealed a significant influence of academic discipline on the respondents' need for achievement, creative thinking, and risk-taking as a personality traits. These findings align with those of a previous study by Colakoglu and Gozukara (2016), which suggested that entrepreneurial intention is significantly related to certain personality traits. This suggests a need to foster entrepreneurial personalities in order to foster in students the intention to start their own businesses after graduation.

The fourth objective was to explore and assess the influence of environmental factors on students' attitudes towards pursuing entrepreneurship as a career option. The current study showed environmental factors to have had a marginally high influence on the participating students' attitudes towards entrepreneurship. The results reveal that social environmental factors were perceived by the respondents to have a marginally high influence on the attitudes of these students towards entrepreneurship as a career choice, followed by educational factors, economic factors, and, lastly, political factors. This finding suggests that family, friends, and society, in comparison to other environmental factors, has a high influence on these students' attitude towards entrepreneurship as a career choice. This finding is supported by past studies (Blundel & Locke, 2011; Bettinelli *et al.*, 2014; Herdjiono *et al.*, 2017) whose findings indicated that family values can significantly affect family members' values, attitudes, and behaviours, and if the entrepreneurs so decide, they can also affect the family business social system. Furthermore, the current study revealed educational environment to be the second most important factor which influenced these students towards considering entrepreneurship as a career option. These findings point to the importance of entrepreneurship education in the creation of awareness of the possibility of self-employment as a career option. Awareness of entrepreneurship, in turn, can be said to increase the number of individuals who have knowledge and skills about entrepreneurship as a rational viable choice. This finding is consistent with past studies (Remeikiene *et al.*, 2013; Tsegaye 2015, Islam *et al.*, 2018) which found entrepreneurship education to have the strongest positive relationship with entrepreneurial intention. Somewhat surprisingly, the political factor was

rated negative which implies that government laws, policies, rules, and regulations have an insignificant influencing on students considering becoming an entrepreneur. The current study also looked at the influence of gender and academic disciplines on students' participants' perceptions of environmental factors as determinants of attitudes towards entrepreneurship as a career. The findings indicate no significant differences existing between male and female students in terms of the influence of families on one's choice to become an entrepreneur.

The fifth objective was to explore and assess the constraints students face, or perceive themselves to face, when considering entrepreneurship as a career. The current study showed a marginally positive affirmation of the influence of perceived constraints to becoming an entrepreneur on the attitudes of students towards entrepreneurship as a career option. Challenges in getting and raising finances was the initial perceived barrier for most of the participants, followed by lack of entrepreneurial experience. Capital in the form of money is obviously important for start-up entrepreneurs. Lack of finance typically prevents new ventures from investing in innovative projects, improving their productivity, financing their growth, covering working capital requirements, and meeting market demand (Atiti, 2016). For this reason, shortage of funds prevents students from choosing entrepreneurship as a career option. This finding was consistent with those of previous studies (Fatoki & Chidonga, 2012; Ogochukwu & Okekeocha, 2012; Shambare, 2013; Nyanga, 2013), which mention the following perceived constraints: lack of exposure to entrepreneurship, lack of support on the part of government and university, lack of business skills, lack of capital, fear of failure, and lack of entrepreneurial culture as the main perceived obstacles to entrepreneurship development. Lack of business experience was the second constraint for most of the participants in the current study. Generally, young people have less experience of conducting business than do older people. This limits their ability to understand how a business should be run. Furthermore, difficulties in obtaining licences was ranked by participants as the third constraint. Usually, difficulty in obtaining licences and certificates is mainly due to government's rigid bureaucracy and regulations. This kind of bureaucratic environment stifles competitiveness and entrepreneurship. This finding is consistent with the Swaziland United Nations report on opportunities and constraints to youth entrepreneurship (2013), which clearly indicates that a rigid regulatory environment delays the opening of new establishments, impedes their expansion, and consequently discourages all types of entrepreneurship. The current study found a significant difference between male and female participants on the variable "I have a fear of tough competition in business".

The sixth objective was to explore and assess the attitudes of a sample of academics and ENACTUS students to developing knowledge of, and integration of entrepreneurship across the disciplines. With regard to the integration of entrepreneurship across disciplines, the study

revealed all ENACTUS study participants to be in favour of the introduction of a compulsory entrepreneurship module across disciplines in the university. These current findings resonate with the findings of previous studies (Kilasi, 2013; Roberts, 2013; Anho, 2014; Tengeh *et al.*, 2015) all of which indicate and recommend that all students, irrespective of their field of study or chosen career, should be exposed to those entrepreneurial skills which would enable them to apply the theory they have learnt in the classroom to the practical world of work in their respective careers. Evidence from the responses by lecturers participating in the current study shows substantial support for the inclusion of entrepreneurship across disciplines in the university. This was in line with previous studies (Bernstein, 2011; Seattle, 2015) that affirmed that integration of entrepreneurship carries the potential to prepare students to start their own companies based on their own ideas and innovations. The lecturers, however, revealed the following obstacles they perceived to be challenges to the integration of entrepreneurship across schools: non-collaboration on the part of lecturers in other disciplines, lack of interaction across disciplines, lack of coordination of programmes, lack of implementation of these programmes by management, lack of expertise in, and knowledge of, entrepreneurship, and resistance to change among both lecturers and students. The response from the HODs and the deans revealed generally enthusiastic support for the idea of integrating entrepreneurship across disciplines in the university. However, there were differences of opinion as to whether entrepreneurship should be compulsory or optional. In comparison to the deans, the HODs reacted positively to the idea of it being compulsory, while the deans wanted it to be optional. These views are in line with previous studies and findings, such as those by the European Commission (2008) that indicated that some deans in higher education institutions have shown themselves to be unwilling or not sufficiently motivated to promote such education programmes.

Evidence from the interviews with ENACTUS students, lecturers, HODs, and the deans revealed many perceived challenges to the integration of entrepreneurship across disciplines. These included lack of trained lecturers, resistance to change by many of the academic staff, lack of funding, lack of capacity, and an extra-burden for academics. This finding is consistent with various studies, such as those done by the European Commission (2008), Heinonen and Hytti (2008), and Kilasi (2013), all of which indicate the reality that existing curricula have limited scope for expansion, which means that introducing entrepreneurship courses would result in other courses having to be dropped. Despite these perceived and real challenges, the participants acknowledged the importance of integrating entrepreneurship across all disciplines and schools.

This chapter presented a detailed discussion of the findings from the quantitative questionnaire phase of the study, as well as those from the qualitative interview phase.



Chapter 5 presents a detailed general discussion of, and conclusions drawn from, the findings of the study, together with recommendations for integrating entrepreneurship programmes across disciplines in higher education. It also outlines recommendations for future research and limitations of the study.

CHAPTER 5 GENERAL DISCUSSION, CONCLUSION AND RECOMMENDATIONS

. This chapter presents the general discussion, conclusions of the study and recommendations emerging from the findings for future research in the study's area.

5.1 General Discussion

The study attempted to explore and assess the factors that influence the attitudes of undergraduate final year university students at the University of Venda towards choosing entrepreneurship as a career option. Most students who participated in the study were females between 18 and 24 years old with little background in business activities. This shows that more females were registered by the university. This has been a trend at the University of Venda as indicated by the study of Oseifuah *et al.*, (2014). The fact that most respondents had no relatives who were involved in business activities implies that they do not have sufficient information on starting and running their own businesses.

This thesis showed the majority of the respondents to have a very high positive attitude towards entrepreneurship as a career choice. This suggests that these respondents were willing to pursue entrepreneurship as a career option. This result is consistent with those of previous studies conducted by Kabui and Maalu (2012), Isah and Garba (2015), Rudhumbu *et al.*, (2016) and Fada *et al.* (2017). The current study also revealed that most respondents agreed that entrepreneurship education should not be confined to the business school, but be included in the curricula of non-business programmes. This view is consistent with the findings of previous studies, such as that of The European Commission (2008), and with those of Radipere (2012), Kilasi (2013, Roberts (2013), and Tengeh *et al.* (2015). The findings also indicate no significant influence of gender on the respondents' perceptions of, and attitudes towards, entrepreneurship as a career option. The results of the current study contradict those of the study by Rudhumbu *et al.* (2016).

Based on the finding of the mean score of variables, most student respondents showed that the overall influence of entrepreneurial awareness towards entrepreneurship as a career option was marginally high. This result is consistent with many similar studies, such as those conducted by Uduak and Aniflok (2011); Manuere *et al.* (2013), Rudhumbu *et al.* (2016), and Shen *et al.* (2017). These studies emphasise the importance of having access to relevant information as well as to entrepreneurship education as the means of creating an awareness of entrepreneurship as a career option. It was also found that there were significant differences across disciplines ($P < 0.05$) with respect to the views of respondents: "There are student clubs on campus which promote entrepreneurship." The only significant difference due to gender was, "Students are encouraged to pursue entrepreneurial ventures in the university".

The researcher considers the findings of the current study to have pointed to the influence of personality traits on the participating students' attitudes towards entrepreneurship as a career option as being high. In this study, self-confidence and need for achievement were perceived by student respondents to have a high influence on their attitudes towards entrepreneurship as a career choice. This finding is consistent with the study of Gelaidan & Abdullateef (2016) which indicates self-confidence as key to personal success. The study shows significant gender differences ($p < 0.05$) in perception of personality traits on the part of respondents as determinants of their attitudes towards pursuing entrepreneurship as a career option after graduating were observed for personality traits, "Need for achievement", "Locus of control", "Risk-taking". Significant differences across disciplines ($P < 0.05$) were also found with respect to the sub-themes: "Self-confidence", "Innovation / creative thinking" and "Risk-taking".

Based on the finding of the mean score of variables, the current study shows that environmental factors have a marginally high influence on students' attitudes towards entrepreneurship as a career option. Social factors, such as role models and family background, and economic/financial circumstances, were found to have a prominent influence on the attitudes of student respondents towards entrepreneurship as a career. This finding shows a consistency with the studies of Debale and Masese (2014) and Rockman and Ahamed (2015), whose findings point to a strong link between social factors and entrepreneurship as a career choice. The findings indicate no significant differences exist between male and female students in terms of the influence of families on one choosing to become an entrepreneur.

The current study reveals a marginally positive affirmation of the influence of certain constraints on the attitudes of students towards entrepreneurship as a career option. The following were identified as key constraints operating on and preventing the student respondents from considering or taking up, entrepreneurship as a career: challenges getting financial resources for start-ups, lack of experience, difficulty in obtaining licences and certificates, and fear of failure. Significant differences in terms of gender was found with respect to the variable "I have a fear of tough competition in business".

Evidence from the study shows that ENACTUS members, lecturers, HODs and deans were almost unanimously in favour of the integration of entrepreneurship into the curricula across disciplines of the university, and students considering it as a career option: All ENACTUS members (100%), lecturers (93%), HODs (82%) and Deans (86%) showed their preference for it to be compulsory.

5.2 Conclusions from the findings

The interest in conducting this study was triggered by my own observation of the extremely low number of graduates who involve themselves in entrepreneurial activities after graduation. I began to speculate on some of the possible reasons for this, whether it was because of the attitude of students to these activities, or a lack of entrepreneurial awareness and knowledge, or a lack of the appropriate personality traits for successful and sustained entrepreneurship, or whether it was environmental factors and/or social or economic/financial barriers to their considering taking up entrepreneurship after graduating. The study therefore set out to attempt to explore and assess the possible factors influencing the attitudes of final year undergraduate University of Venda students towards choosing entrepreneurship as a career. As was described in Chapter 3, primary data were collected from a sample of 310 students, 19 lecturers, 13 HODs, eight deans, and six ENACTUS students from different schools at the University of Venda. The majority of the student participants were females and fairly young/under 25 (18 to 24 category) and came from backgrounds where their relatives were not involved in business.

The results of my study turned out to be consistent with those of other similar studies in terms of the role played by entrepreneurial awareness, personality characteristics or traits, environmental factors, and barriers to entrepreneurship, as perceived by these students, in influencing students to become entrepreneurs, or to choose not to do so. The results seem to show the need for a change of mind-set and attitudes towards self-employment among students with a view to raising their awareness of, and interest in, entrepreneurship as a viable career choice. The results showed that self-confidence was perceived by the student participants as having a major influence on their attitudes towards entrepreneurship as a career option, followed by their need for achievement, the need for independence, locus of control, and risk-taking. These findings would suggest the need for educational institutions to consider introducing courses to substantially develop these traits in order to increase the skills and knowledge related to entrepreneurship, and, by doing so, increasing the confidence of students, and changing their attitudes towards entrepreneurship as a career option. The study also showed that social factors were a major contribution to their attitudes towards entrepreneurship as a career option, followed by political factors, educational factors, and, lastly, economic factors. While the study indicated a high positive attitude on the part of these students towards entrepreneurship as a career option after graduation, the following emerged as major constraints, as perceived by them, to engaging in entrepreneurship: getting and raising finances, lack of experience, difficulty obtaining licences and certificates, and fear of failure.

With reference to the integration of entrepreneurship in the curriculum, evidence from the students, lecturers, HODs, and the deans from various schools showed almost unanimous support for the inclusion of entrepreneurship in curricula across disciplines in the university. However, opinions differed with regard to whether entrepreneurship should be compulsory or optional. It is interesting to note that the HOD respondents were of the view that it should be compulsory, while the deans showed a preference for it to be optional. Many of the participants in this group also raised issues which could possibly militate against this move, including lack of resources, time, and resistance of some university staff to this idea.

5.3 Recommendations

5.3.1 Recommendations for policy and practice

1. The findings revealed that the influence of entrepreneurial awareness among all schools of the university was marginally high as the school of Management Sciences and the School of Agriculture were the only schools which were offer entrepreneurship as a course at the time of conducting the study. It is therefore recommended that university management and other policy- makers consider the introduction of a compulsory entrepreneurial module across schools and disciplines with the aim of creating positive perceptions and attitudes towards entrepreneurship as a career option through increasing students' knowledge about entrepreneurship as well as developing practical entrepreneurial skills. This introductory entrepreneurial module would need to be introduced to first year students so that they might develop the attributes and attitudes necessary for entrepreneurship at an early stage of their academic studies.

2. Currently, few students participate in extracurricular activities, such as ENACTUS, and it appears that the university rarely organises guest speakers specifically on the topic of entrepreneurship. Extracurricular activities linked to entrepreneurship would have the potential to enhance learning and to educate, inspire and encourage entrepreneurial interest through organising guest speakers on entrepreneurship, making contacts with role models who are ex-students, and making presentations, to mention a few extracurricular activities. Hence, it is recommended that the university and other role players encourage students who are interested in entrepreneurship to get involved in entrepreneurial extra-curricular activities. This could go a long way towards creating the kinds of conditions under which entrepreneurship, could flourish.

3. The study has shown, what have been described in the literature as 'entrepreneurial characteristics', to have a measurable influence on entrepreneurial attitudes. The study revealed that self-confidence was perceived by participants to be the primary personality trait influencing their attitudes towards entrepreneurship as a career choice. It is therefore

recommended that formal and informal training in all aspects of entrepreneurship be provided across disciplines at universities to foster self-confidence, the need for achievement, innovativeness/creative thinking, the need for independence, locus of control, and risk-taking, as research has found that students with these characteristics tend to realise their business ideas in the future. These entrepreneurial skills, in particular self-confidence, also serve as means for solving the challenge of fear of failure.

4. The study revealed that social factors, such as like family support, were perceived by student participants to be the major environmental contributor to attitude towards embarking on entrepreneurship as a career. It is therefore recommended that government, university, and other policy makers consider the role of the family in influencing the attitudes of students towards this career option. This may be done by encouraging families to start their own small, medium, and micro-enterprises. Family environment has a major effect on encouraging university students' interest in doing entrepreneurship (Herdjiono *et al.*, 2017)

5. One of the main constraints to embarking on entrepreneurship which emerged from student participants' perceptions was the difficulties or challenges in getting or raising start-up finance. Based on this finding, therefore, university and government agencies should provide proper, well-informed guidance to students with regard to institutions, or government departments such as the Department of Trade and Industry, which provide financial assistance to potential entrepreneurs, and how to apply for this. In addition, university management and other policy makers should again consider a budget for start-up financing for students who would like to consider entrepreneurship as a career option after graduation.

6. University curriculum designers need to consider the integration of entrepreneurship into curricula of a broad range of programmes and disciplines. Furthermore, they need to explore possibilities of offering short learning programmes to students whose programmes do not include any entrepreneurship module.

5.3.2 Recommendations for further research

One of the limitations of the study was that it was conducted among final year undergraduate University of Venda students only, and thus did not include students from other universities in South Africa. This would suggest that future research, including comparative research, be conducted in a range of different higher education contexts and / or using a different higher education sample group(s) such as groups from TVET Colleges or secondary school students

Secondly, the study addressed only some of the factors that affect students' attitudes towards entrepreneurship as a career option. Other factors, or a wider range of possible factors, or variables, influencing students' attitudes towards entrepreneurship as a career, were not

considered or included in the study. Hence further research could usefully be conducted to include a wider range of factors, which might vary according to social, economic, or cultural context. However, despite these limitations, the study is intended to contribute greatly and uniquely to the field of education and youth employment as this is one of the few studies addressing the inculcation of entrepreneurship at a rural university in South Africa and Africa in general.

Further tracer or longitudinal studies could investigate the barriers faced by actual entrepreneurs (i.e. young people, or recent graduates, who have started their businesses). This kind of research has the potential to help reduce the high failure rate of small entrepreneurial firms in South Africa by exploring the reasons for their failure.

5.4. Limitations of the study

One of the limitation of this study is that the sample sizes of some of the categories in Table 3.2 are too small, normally sample sizes of unity (1) are not appropriate since they have zero degrees of freedom ($n=1$).

5. 5 Contribution of the study to the state of knowledge in the field

The study presents new knowledge of some of the factors that influence the attitudes of a group of students from a rural area in Africa, and, in particular students registered at a South African university situated in a rural area, towards self-employment as a career option. This study should motivate the managers of universities, academicians, and other policy makers to provide all students with useful and practical knowledge of entrepreneurship, and to develop activities and programmes that could have a positive impact on the attitudes of students towards considering self-employment as a career option.

This is one of the few pioneering empirical studies attempting to position entrepreneurship across disciplines, especially in light of the increasing demand for a new calibre of graduates who can create employment not only for themselves but on the cohort of young people coming after them, and help grow an economy that absorbs youth and fulfils the potential of young people in our country.

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7. APPENDICES

Appendix 7.1: Letter to university

UNIVERSITY OF VENDA

Private Bag x5050

Thohoyandou

The Registrar

University of Venda

P/ Bag x5050

Thohoyandou

Dear Sir

APPLICATION FOR CONDUCTING RESEARCH IN THE UNIVERSITY

On behalf of myself, Mr. T.R. Netshilinganedza, and the rest of the research team, I wish to apply for permission to conduct research in the UNIVERSITY OF VENDA. The permission is thought to conduct interviews with final year students aged between 15 and 35 to distribute questionnaires among them.

Thank you for your attention.

Yours sincerely

Mr. T.R. Netshilinganedza

Appendix 7.2: Letter to the respondents

Dear respondent

Good day. My name is Tendani Robert Netshilinganedza. I am a PHD candidate in Rural Development at the University of Venda. I would like to invite you to participate in my research project which is entitled "Entrepreneurship as a career option: A case of the University of Venda students in Limpopo Province, South Africa." (Job no. SARDF/15/IRD/09/01212). Note that your participation is voluntary which implies that you are at liberty to withdraw at any time during the course of the study should you feel uncomfortable to continue to participate in it. I would like also to assure you that your name will not be divulged to any one nor will what you say be linked to you directly. I assure you that all information collected will be strictly for academic purposes and will be kept confidential. Names of all participants in this study will be in the form of codes and will not reveal the identity of everyone.

The results of the study will be used to prepare my PHD. In addition, the same research material will be used to write papers for possible publication in various journals, conference proceedings, book chapters and policy plus media briefs

Should you require any further information on this research, do not hesitate to contact me at 0159628192 Or 0733243193. You may also contact my main promoter at 0729777064. I will be grateful if you may spend a few minutes of your time to complete the questionnaire. Note, only the final year university students must complete this questionnaire

Researcher: _____ Date _____

Respondent: _____ Date: _____

Appendix 7.3: Ethics certificate

**RESEARCH AND INNOVATION
OFFICE OF THE DIRECTOR**

**NAME OF RESEARCHER/INVESTIGATOR:
Mr TR Netshilinganedza**

**Student No:
11629993**

**PROJECT TITLE: Entrepreneurship as a career
option: A case of University of Venda students in
Limpopo Province, South Africa.**

PROJECT NO: SARDF/15/IRD/09/0212

SUPERVISORS/ CO-RESEARCHERS/ CO-INVESTIGATORS

NAME	INSTITUTION & DEPARTMENT	ROLE
Dr MJ Mudau	University of Venda	Promoter
Prof J Francis	University of Venda	Co- Promoter
Mr TR Netshilinganedza	University of Venda	Investigator - Student

**ISSUED BY:
UNIVERSITY OF VENDA, RESEARCH ETHICS COMMITTEE**

Date Considered: December 2015

Decision by Ethical Clearance Committee Granted

Signature of Chairperson of the Committee:

Name of the Chairperson of the Committee: Prof. G.E. Ekosse




University of Venda

PRIVATE BAG X5050, THOHOYANDOU, 0950, LIMPOPO PROVINCE, SOUTH AFRICA
TELEPHONE (015) 962 8504/8313 FAX (015) 962 9060

"A quality driven financially sustainable, rural-based Comprehensive University"

Appendix 7.4: Quantitative research questionnaire

SECTION A: Demographic information

Below are several questions dealing with your personal background? Answer each question by placing an "X" in the space that best reflects your personal views and attitudes.

1. What is your gender?

Male

Female

2. What is your age group

18-24

25-29

30 - 34

35

3. In which school are you?

Management

Health

Agriculture

Environmental sciences

Natural science & Mathematics

Education

Humanities

Law

4. Which degree are you studying?

Business degree

Economics degree

- Natural sciences degree
- Health degree
- Agriculture degree
- Environmental sciences degree
- Law degree
- Education degree
- Humanities degree

5. Is any of your relatives involved in business

- Yes
- NO

If YES, please mention the relation with the person-----

SECTION B. Entrepreneurial awareness

This entrepreneurial awareness section consists of a statement followed by a 5-point scale asking how much you agree or disagree. Answer each question by placing an "X" in the space below a number that best reflects your personal views. Work as quickly as you can and indicate your first thought about the issue. Please answer all the questions.

Indicate your level of agreement with statements pertaining to entrepreneurial awareness.	Strongly Disagree 1	Disagree 2	unsure 3	Agree 4	Strongly agree 5
6. I am aware that entrepreneurship is a career option for me					

Indicate your level of agreement with statements pertaining to entrepreneurial awareness.	Strongly Disagree 1	Disagree 2	unsure 3	Agree 4	Strongly agree 5
7. The university encourages me to take entrepreneurship as a career choice.					
8. Entrepreneurial or business related examples are used in classroom teaching					
9. The university provides resources to assist student entrepreneurs					
10. There are student clubs on campus which promote entrepreneurship					
11. I know how to start a firm and make it successful					
12. Students are encouraged to pursue entrepreneurial ventures in the university					
13. I took entrepreneurship education as one of my course					
14. Entrepreneurial courses should be made compulsory to stimulate spirit in campus					

Indicate your level of agreement with statements pertaining to entrepreneurial awareness.	Strongly Disagree 1	Disagree 2	unsure 3	Agree 4	Strongly agree 5
15. The university organises entrepreneurs to address students in the campus					
16. Government conducts entrepreneurship campaign in my area					

SECTION C: Entrepreneurial attitude questionnaires

This entrepreneurial attitude section consists of a statement followed by a 5-point scale asking how much to agree or disagree with each statement. Answer each question by placing an "X" in the space below a number that best reflects your personal views. Work as quickly as you can and indicate your first thought about the issue. Please answer all the questions.

Indicate your level of agreement with statements pertaining to the attitude to entrepreneurship	Strongly disagree 1	Disagree 2	unsure 3	Agree 4	Strongly agree 5
Attitude towards entrepreneurship					
17. I have a positive attitude towards entrepreneurship as a career.					
18 I have a negative attitude towards entrepreneurship as a career.					
19. I have a neutral attitude towards entrepreneurship as a career.					

Indicate your level of agreement with statements pertaining to the attitude to entrepreneurship	Strongly disagree 1	Disagree 2	unsure 3	Agree 4	Strongly agree 5
20. Being an entrepreneur will give me more satisfaction than being an employee in a big company.					
21. I will be a successful entrepreneur if I try					
22. A career in entrepreneurship is attractive to me					
23. Entrepreneurship education should be included in the syllabi of non-business programmes					
24. I am determined to create a firm in the future					

Indicate your level of agreement with statements pertaining to the attitude to entrepreneurship	Strongly disagree 1	Disagree 2	unsure 3	Agree 4	Strongly agree 5
25. I am happy to learn entrepreneurial skills					
26. I like to be my own boss one day					

SECTION D: Personality traits questionnaires

This personality traits section consists of a statement followed by a 5-point scale asking how much to agree or disagree with each statement. Answer each question by placing an "X" in the space below a number that best reflects your personal views. Work as quickly as you can and indicate your first thought about the issue. Please answer all the questions.

Indicate your level of agreement with statements pertaining to personality traits.	Strongly disagree 1	Disagree 2	unsure 3	Agree 4	Strongly agree 5
Need for achievement					

Indicate your level of agreement with statements pertaining to personality traits.	Strongly disagree 1	Disagree 2	unsure 3	Agree 4	Strongly agree 5
27. I push myself, and feel real satisfaction when my work is among the best.					
28. I am driven to ever-greater efforts by an unquenched ambition.					
29. I hardly get a sense of pride and accomplishment from my work.					
Locus of control					
30. I am in total control of my destiny.					
31. I am ultimately responsible for my own business success.					
32. I do not want to be told what to do by somebody else					
Self-confidence					
33. I am confident of my abilities and feel good about myself.					

Indicate your level of agreement with statements pertaining to personality traits.	Strongly disagree 1	Disagree 2	unsure 3	Agree 4	Strongly agree 5
34. I worry about what my business associates think of me					
35. I frequently have doubts about myself or my abilities when making business proposals.					
Risk-taking					
36. I am willing to risk my personal and family's material well-being for the sake of business.					
37. I enjoy the uncertainty and risks of business since they energize me more than circumstances where there are predictable outcomes.					
38. I am tolerant of high risk					
Need for independence					
39. I find that I can think well when I have guidance and advice from others.					
40. I like a job in which I don't have to answer to anyone.					

Indicate your level of agreement with statements pertaining to personality traits.	Strongly disagree 1	Disagree 2	unsure 3	Agree 4	Strongly agree 5
41. Independence at work is important to me					
Innovation/creative thinking					
42. I believe it is important to continually look for new ways to do things in a business					
43. I believe that to succeed, one must conform to accepted business practice					
44. I tend to be more innovative than others					

SECTION E: Environmental factors questionnaires

This environmental factors section consists of a statement followed by a 5-point scale asking how much to agree or disagree with each statement. Answer each question by placing an "X" in the space below a number that best reflects your personal views. Work as quickly as you can and indicate your first thought about the issue. Please answer all the questions.

Indicate your level of agreement with the statements pertaining to environmental factors.	Strongly disagree 1	Disagree 2	Unsure 3	Agree 4	Strongly agree 5
Political environment					
45. The government policies and procedures encourages new venture creation					
46. State laws are favourable to running a business					
47. State laws (rules and regulations) are adverse to running a business					
Social environment					
48. My family thinks being an entrepreneur is good for me					
49. Entrepreneurship is respected in my society					
50. My friends see entrepreneurship as a logical choice for me					
Educational environment					
51. Students are encouraged to pursue entrepreneurship ventures in the university.					
52. Entrepreneurial activities are limited only to business students.					

Indicate your level of agreement with the statements pertaining to environmental factors.	Strongly disagree 1	Disagree 2	Unsure 3	Agree 4	Strongly agree 5
53. It is always easy to access the education programs on entrepreneurial information and business skills for me at the university					
Economic environment					
54. It is easy to get financial investment from venture capitals.					
55. Banks and other investors are benevolent to individuals who create new companies					
56. In South Africa, economy provides many opportunities for entrepreneurs					

SECTION F: Obstacles in starting a business

This obstacles section consists of a statement followed by a 5-point scale asking how much to agree or disagree with each statement. Answer each question by placing an "X" in the space below a number that best reflects your personal views Work as quickly as you can and indicate your first thought about the issue. Please answer all the questions.

Indicate your level of agreement with statements pertaining to obstacles in starting a business.	Strongly disagree 1	disagree 2	unsure 3	Agree 4	Strongly agree 5

57. My family and relatives support me to become an entrepreneur					
58. I am afraid to start a business because I do not have enough experience					
59. I face the difficult to get some money to start a new business					
60. I fear that I shall fail if I start a new business					
61. Entrepreneurship is well supported by the government					
62. I think the regulations are not favourable to people who want to start the business.					
63. The infrastructure of the society is favourable for doing start-ups					
64. I have fear of tough competition in business					
65. Entrepreneurship is excessively binding and time consuming					
66. It is difficult to obtain licenses and certificates for businesses					
67. I have challenges to raise financial resources for start-ups					

Appendix 7.5: Interview schedules for ENACTUS

The purpose of this guide is to find out the perceptions and attitudes of the members of ENACTUS

Background information

Name of the student

Name of the school

Gender

Age

Degree

Are you completing this year?

1. Discussion on the students' exposure to entrepreneurship as a career option
2. Explanation on the thought of an entrepreneurship as a career option after graduating
3. Explanation on the availability of skills and capabilities that are required to succeed as an entrepreneur
4. Discussion on the role a university should play to promote entrepreneurship in the campus
5. Discussion on the difficulties students face in starting a new business
6. Discussion on the integration of entrepreneurship in your programme

Appendix 7.6: Interview schedules for lecturers

The aim of this schedule is to provoke and understand the attitudes and perceptions of lecturers in selected department in different schools. The interview schedules also aim to find out their views on the inclusion of entrepreneurship in their existing programme.

Background information

Name of the lecturer

Name of the school

Name of the department

1. Discussion on mainstreaming entrepreneurship education within your Institution or School / department
2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university
3. Discussion on the required personality traits by your students to start their own businesses after graduating
4. Discussion on the role a university should play to promote entrepreneurship in the campus
5. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines
6. Discussion on the status of entrepreneurship education in your school/ department

Appendix 7.7: Interview schedules for HOD's and Deans

The aim of this schedule is to find out the perceptions of school deans and heads of departments towards entrepreneurship education in their respective schools. It also aims to understand the status of entrepreneurship education from different schools and challenges that they have in promoting entrepreneurship education in their schools.

Background information

Name of the Dean/ HOD

Name of the school

Name of the Department

1. Discussion on mainstreaming entrepreneurship education within your Institution or School / department
2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university
3. Discussion on the required personality traits by your students to start their own businesses after graduating
4. Discussion on the idea to design a programme with entrepreneurship components
5. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines
6. Discussion on tracking your student's employment status after graduation

Appendix 7.8. Summary of responses by academics and Enactus

Response by lecturers

Respondent 1

1. Discussion on the status of entrepreneurship education in your school/ department [Status of entrepreneurship education]

- There is no module on entrepreneurship however it is infused in two modules in the department, one in the first year and another in the second year

2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university [Theme: Integration of entrepreneurship education]

- There is no module on entrepreneurship however it is infused in two modules in the department, one in the first year and another in the second year

3. Discussion on the required personality traits by your students to start their own businesses after graduating [Theme: Personality traits]

- The entrepreneurial module is very important for the students; we have talked about the inclusion of the module in the department

4. Discussion on the role a university should play to promote entrepreneurship in the campus [Theme: Environmental factors]

- University is not doing enough to encourage students to take entrepreneurship as a career option as we don't see more projects that are managed by students. University must formalise entrepreneurship across discipline in the campus in order to encourage students to start and run their businesses in the campus.

5. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines [Theme: obstacles to entrepreneurship]

- The obstacle in the integration of entrepreneurial module across discipline is that schools need to sacrifice another module. Another obstacles is the shortage of expert who will teach the module

Respondent 2

1. Discussion on the status of entrepreneurship education in your school/ department

- There is no specific module on entrepreneurship, however one could not teach economics without talking about entrepreneurship
- 2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university
- The idea of including entrepreneurship in the curriculum is good it will create awareness to the students to consider entrepreneurship as a career
- 3. Discussion on the required personality traits by your students to start their own businesses after graduating
- It is a good idea because as we speak it is not only commercial students who start and run business
- 4. Discussion on the role a university should play to promote entrepreneurship in the campus
- Currently, my perception is that the university discouraged students to start and run the businesses as it does not allow students to sell their products in the campus. University must allow students to sell their products in the campus
- 5. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines
- The major obstacle is that many academics would like to protect their focus /perspectives. They wouldn't like to move away from the comfort zones. Another obstacle is the university policy which now talk little about the career of entrepreneurship

Respondent 3

1. Discussion on the status of entrepreneurship education in your school/ department
 - It is not part of the curriculum
2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university
 - Concerning the inclusion of entrepreneurship education, it is necessary for the students to do it because it could assist in the reduction of unemployment
3. Discussion on the required personality traits by your students to start their own businesses after graduating

- It's a good idea to introduce a compulsory module on entrepreneurship as it will help students to attain skills to start their businesses
4. Discussion on the role a university should play to promote entrepreneurship in the campus
 - University must introduce entrepreneurship module in order to help students to have entrepreneurial skills. In addition, workshops on entrepreneurship should be initiated which are conducted by role models.
 5. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines
 - Its introduction will result in the increase of workload. Another obstacle is finance. Lastly, some students might think is not part of the curriculum and as a result would not take it seriously

Respondent 4

1. Discussion on the status of entrepreneurship education in your school/ department
 - Entrepreneurship education is not part of the curriculum in our department
2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university
 - It is important because it will help students to be exposed to business skills
3. Discussion on the required personality traits by your students to start their own businesses after graduating
 - I support this idea because of high employment among the youth. If they are trained, it will help to change their mindset and who knows they will consider starting their own businesses after graduating
4. Discussion on the role a university should play to promote entrepreneurship in the campus
 - The role of the university is to design first the course on entrepreneurship, however it should be discipline specific e.g. we need to have entrepreneurship in Maths or entrepreneurship in Agriculture
5. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines

- Lack of expertise to teach this course and finance could be the major obstacles

Respondent 5

1. Discussion on the status of entrepreneurship education in your school/ department
 - Not part of the curriculum in the department
2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university
 - I support the idea because when it becomes part of the curriculum, they will be able to employ themselves instead of waiting for the government and private sector to employ them
3. Discussion on the required personality traits by your students to start their own businesses after graduating
 - I support the idea 100% because if students are empowered with entrepreneurial skills they will not depend on the external employers
4. Discussion on the role a university should play to promote entrepreneurship in the campus
 - University must introduce this course so that students are exposed to this kind of skills
5. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines
 - I consider the major obstacles to be infrastructure and the resources in general

Respondent 6

1. Discussion on the status of entrepreneurship education in your school/ department
 - Not part of the curriculum
2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university
 - Good idea because students will be able to consider self-employment
3. Discussion on the required personality traits by your students to start their own businesses after graduating
 - It should be compulsory as it will help students to be self-employed

4. Discussion on the role a university should play to promote entrepreneurship in the University

- It must introduce a one year module on entrepreneurship. It should also allow students to start their businesses in the campus.

5. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines

- The problem is the mindset of the stakeholders.

Respondent 7

1. Discussion on the status of entrepreneurship education in your school/ department

- It is not part of the curriculum.

2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university

- It can be a useful idea because students will be able to acquire the skills necessary for them to start their companies after graduating.

3. Discussion on the required personality traits by your students to start their own businesses after graduating

- The idea of introducing a module on entrepreneurship across the campus is a good idea because it could make students to be aware of entrepreneurship at an early stage

4. Discussion on the role a university should play to promote entrepreneurship in the campus

- The aim of the university is to make sure students get jobs after graduation hence the introduction of this module will help reduce the number of entrepreneurship

5. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines

- Major obstacle would be staffing problems and financial implications

Response 8

1. Discussion on the status of entrepreneurship education in your school/ department

- It is taught and very relevant in the school but not enough effort is being done to expose students to consider entrepreneurship as a career option.

2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university

- It is talk in our school however most students still need to be employed in companies.

3. Discussion on the required personality traits by your students to start their own businesses after graduating

- Its inclusion across the schools could eventually solve the problem of unemployment. It will also make students to be aware of self-employment as a career

4. Discussion on the role a university should play to promote entrepreneurship in the campus

- University could help students with starting packages. It can also provide students with mentorship. In addition, it needs to create awareness to students by inviting role models on entrepreneurship in order to change the mindset of students.

5. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines

- One of the major obstacles in integrating entrepreneurship across disciplines is the resistance to change among students and lecturers, thinking that they will have extra burden by introducing a new course
- Resopondent 9

1. Discussion on the status of entrepreneurship education in your school/ department

- Topic on entrepreneurship is irrelevant to our students; however, because of high unemployment rate we encourage students to start their businesses.

2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university

- It is irrelevant in our school or department.

3. Discussion on the required personality traits by your students to start their own businesses after graduating

- It can be a good idea to the students as they will be able to gain skills on how to be entrepreneurs

4. Discussion on the role a university should play to promote entrepreneurship in the campus

- University must motivate students to take this course seriously. University is trying to reskill the students after graduating; however, is not doing enough to remedy the problem of unemployment.
5. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines
- The major problem is that of staffing and the shortage of finance

Respondent 10

1. Discussion on the status of entrepreneurship education in your school/ department
- Not in our curriculum but students are encouraged to start their businesses
2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university
- It can be a good idea because we depend on the products of the business.
3. Discussion on the required personality traits by your students to start their own businesses after graduating
- This is good but it may be introduced as an elective
4. Discussion on the role a university should play to promote entrepreneurship in the campus
- The university should start entrepreneurship course as an elective. The university can use different media to promote entrepreneurship.
5. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines
- No business no life

Respondent 11

1. Discussion on the status of entrepreneurship education in your school/ department
- Entrepreneurship education is not emphasised enough in our department or school in general
2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university

- The idea of including entrepreneurship education is a good idea because it will help students to gain skills and not wait to be employed but will become employers themselves
- 3. Discussion on the required personality traits by your students to start their own businesses after graduating
 - It will help to reduce the number of unemployed youth
- 4. Discussion on the role a university should play to promote entrepreneurship in the campus
 - University must take seriously the issue of awareness and have a fund to assist would-be entrepreneurs to start their businesses.
- 5. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines
 - One of the major problems will be little knowledge.

Respondent 12

1. Discussion on the status of entrepreneurship education in your school/ department
 - Entrepreneurship is not emphasised in our school or department.
2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university
 - My idea is that the university need to come with a particular form of entrepreneurship to be done by every student
3. Discussion on the required personality traits by your students to start their own businesses after graduating
 - I think is a good idea
4. Discussion on the role a university should play to promote entrepreneurship in the campus
 - University should assist those who would like to become entrepreneurs by providing them with funds 'in addition; it must have a policy on entrepreneurship.
5. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines

- I think the major obstacles would be the creation of tension among schools

Respondent 13

1. Discussion on the status of entrepreneurship education in your school/ department
 - Entrepreneurship I can say is taught partly at our department I that we infuse it when teaching our modules
2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university
 - It is very important in our course so its inclusion will be very important
3. Discussion on the required personality traits by your students to start their own businesses after graduating
 - Looking at the current environment, entrepreneurship is a skill that everybody needs to have.
4. Discussion on the role a university should play to promote entrepreneurship in the campus
 - University must introduce small projects that students should do to stimulate their interest in entrepreneurship.
5. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines
 - Resistance from the top management down up to the lecturers could be the major obstacles, lecturers may think is not important

Respondent 14

1. Discussion on the status of entrepreneurship education in your school/ department
 - It is not part of the curriculum but students are encouraged to teach at winter schools
2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university
 - I think is important to include this course in order to create awareness among students.
3. Discussion on the required personality traits by your students to start their own businesses after graduating

- The idea is good but it may be included in the foundational level as they need skills on how to become entrepreneurs.
4. Discussion on the role a university should play to promote entrepreneurship in the campus
- The university is not doing enough to motivate students to become entrepreneurs as it is mainly concerned with community engagement. University must start with awareness campaign but this need not be confined to a school.
5. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines
- I think the following are the major obstacle: non-collaboration; lack of interaction across disciplines; lack of coordination and lack of implementation by management; lack of expertise on entrepreneurship.

Response by HODs group

Respondent 1

7. Discussion on the status of entrepreneurship education in your school/ department
[Theme: Status of entrepreneurship education]
- Entrepreneurship education is part of the curriculum in the department of business management. Entrepreneurship is regarded as important in the department. It is always infused in the teaching process
8. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university [THEME: Integration of entrepreneurship education]
- On the idea of introducing a compulsory module across disciplines at the university, I don't think it should be compulsory, but optional. It should however start by infusing it in the module.
9. Discussion on the idea of designing a programme with entrepreneurial component
[THEME: Integration of entrepreneurship education]
- It is a good idea to infuse it in each module
10. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines [Theme: obstacles in entrepreneurship]

- Some of the obstacles would be: resistances from the students and lecturers, thinking that it will add extra burden on their side; secondly it will add cost to the students; lecturers need to be trained to gain skills on the course.
11. Discussion on tracking your student's employment status after graduation [Theme: Tracking of students' employment]
- It is a good idea to track students 'employment status, I tried it but it is difficult thing to do.

Respondent 2

Discussion on the status of entrepreneurship education in your school/ department

- It is necessary for an entrepreneurship to be part of the curriculum so that individuals are able to sell their skills. In the department, we do teach entrepreneurship but not as part of the curriculum. I think it is important to teach youth about entrepreneurship.
1. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university
- On the idea of introducing a compulsory module on entrepreneurship across the disciplines, it is necessary when we think that people must be able to live by selling their skills. Every person in the university must be able to know a little about entrepreneurship.
2. Discussion on the idea to design a programme with entrepreneurship components
- On the idea to design a programme with entrepreneurial components, I think entrepreneurship need to be a subsidiary module in each module.
3. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines
- Regarding some challenges in integrating entrepreneurship education across the disciplines, some people will say that entrepreneurship belongs to Business Management and thus outside their scope. On the side of the students, they will say that it is wasting their time of completing their degrees on time. They will regard it as an extra burden
4. Discussion on tracking your student's employment status after graduation. With regard to the tracking of students 'employment status after graduation, I do try to track them,

and know most of them got promotion. Generally, the university is not doing enough in this regard.

Respondent 3

1. Discussion on the status of entrepreneurship education in your school/ department
 - Entrepreneurship is something that haven't been explicitly taught in our department
2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university
 - On the idea of introducing a compulsory module across the disciplines, I think is a good idea but it should be done only for diplomas and certificates not in main stream programme.
3. Discussion on the idea to design a programme with entrepreneurship components
 - No comment
4. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines
 - Some may be reluctant to co-operate; there will not be appropriate staff to teach it; it is best suited to programme which are professional
5. Discussion on tracking your student's employment status after graduation
 - With regard to the tracking of student 'employment status, we would like to do that, but the logistics are not favourable

Respondent 4

1. Discussion on the status of entrepreneurship education in your school/ department
 - We do apply entrepreneurial concepts in teaching but not much i.e not formally.
2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university
 - It is a good idea but should be introduced as an introductory course so that every student can understand the basics of entrepreneurship. It can help if it can be done by UIGC
3. Discussion on the idea to design a programme with entrepreneurship components

- It is a good idea but should be introduced as an introductory course so that every student can understand the basics of entrepreneurship. It can help if it can be done by UIGC
4. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines
 - Major challenges will be lack of manpower and infrastructure
 5. Discussion on tracking your student's employment status after graduation
 - We do although not formally. However almost 90% of them we know where they are.

Respondent 5

1. Discussion on the status of entrepreneurship education in your school/ department
 - We do apply entrepreneurial concepts but is not part of the curriculum. I normally advise students not to be job seekers but employers.
2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university
 - Is a good idea but university need to make the introduction of entrepreneurship as a policy?
3. Discussion on the idea to design a programme with entrepreneurship components
 - No comment
4. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines
 - Major challenges could be lack of resources like manpower
5. Discussion on tracking your student's employment status after graduation
 - We do but not formally. As a department, we are trying to do it formally

Respondent 6

1. Discussion on the status of entrepreneurship education in your school/ department
 - Need to be streamlined
2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university

- Need to be streamlined
- 3. Discussion on the idea to design a programme with entrepreneurship components
- Good
- 4. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines
- Major obstacles will be trying to bring in some of the entrepreneurial concepts within the teaching process. Another problem will be an increase in the workload
- 5. Discussion on tracking your student's employment status after graduation
- We have database and through the e-mails we are able to know where they are working.

Respondent 7

1. Discussion on the status of entrepreneurship education in your school/ department
 - Is part of the curriculum in the department i.e. there is a module on entrepreneurship
2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university
 - Should be offered comprehensively, but now is not happening. Is necessary because the overall aim of the university is not to teach students and end up being unemployed but to be employed hence entrepreneurship as a course will help them to start their businesses and become employers instead of being unemployed
3. Discussion on the idea to design a programme with entrepreneurship components
 - A good idea, should be integrated from the first year up to the third year
4. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines
 - I do not see any obstacles, and the only obstacles are the will of those responsible to implement. What needs to be done is to change the mindset of the management and the staff.
5. Discussion on tracking your student's employment status after graduation

Respondent 8

1. Discussion on the status of entrepreneurship education in your school/ department

- It is an important idea for the students especially if it is done from the first year
- 2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university
- Regarding the introduction of a compulsory module on entrepreneurship, I think it should be done as soon as possible.
- 3. Discussion on the idea to design a programme with entrepreneurship components
- It is long overdue
- 4. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines
- Funding and lecturers who must teach students are major problems
- 5. Discussion on tracking your student's employment status after graduation
- Funding and lecturers who must teach students are major problems

Respondent 9

1. Discussion on the status of entrepreneurship education in your school/ department
- It is an important idea for the students especially if it is done from the first year
2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university
- Regarding the introduction of a compulsory module on entrepreneurship, I think it should be done as soon as possible
3. Discussion on the idea to design a programme with entrepreneurship components
- It is long overdue
4. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines
- Funding and lecturers who must teach students are major problems
5. Discussion on tracking your student's employment status after graduation
- Funding and lecturers who must teach students are major problems

Respondent 10

1. Discussion on the status of entrepreneurship education in your school/ department
 - Not formally but informally we do teach students to start their own businesses
2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university
 - It must come as an elective so that students are more exposed
3. Discussion on the idea to design a programme with entrepreneurship components
 - No comment
4. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines
 - Major problems will be extra workload on the students' side and staff; unpreparedness by the university to go that route as it needs more resources
5. Discussion on tracking your student's employment status after graduation
 - We do but it is not easy, our wish is to know where students are but it is not easy.

Respondent 11

1. Discussion on the status of entrepreneurship education in your school/ department
 - It is not part of the curriculum in our department and have never applied entrepreneurial components in the teaching process.
2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university
 - I think it is an excellent idea and can assist students in terms of skills to start their own companies and ultimately reduce unemployment. In addition, students could become self-reliant
3. Discussion on the idea to design a programme with entrepreneurship components
 - Is a good idea
4. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines
 - Major obstacle will be staffing
5. Discussion on tracking your student's employment status after graduation

- It is very difficult to track students' employment status. In addition, it will be difficult to come up with a database.

Response by Dean's group

Respondent 1

1. Discussion on the status of entrepreneurship education in your school/ department [Theme: Status of entrepreneurship education]
 - Currently we have not put entrepreneurship fully in the curriculum as it is found only in business management, but I think is a must. It must be infused in any programme. It is ideal that it must be infused, the policy, however is not clear
2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university [Theme: integration of entrepreneurship education]
 - It is a must be infused
3. Discussion on the idea to design a programme with entrepreneurship components [theme: integration of entrepreneurship education]
 - A module with practical aspects which interact with students is worthwhile
4. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines [Theme: Obstacles to entrepreneurship]
 - One needs a capital/finance to implement it; another obstacle would be lack of support from top management and lack of spirit and will.
5. Discussion on tracking your student's employment status after graduation [Tracking of students 'employment']
 - Is a very good idea, but we don't do it in our school

Respondent 2

1. Discussion on the status of entrepreneurship education in your school/ department
 - Entrepreneurship is not part of the curriculum; however, we do encourage potential graduates to open their offices after graduating.
2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university

- I support the idea of introducing a module of entrepreneurship across disciplines 100% as we don't want to teach students and remained unemployed
- 3. Discussion on the idea to design a programme with entrepreneurship components
 - This is a good idea as it will encourage students to consider self-employment
- 4. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines
 - Major obstacles may be differences in the disciplines which may bring up resistance and financial implications
- 5. Discussion on tracking your student's employment status after graduation
 - We do and we don't. We do try to find out where our students are in terms of employment but we don't do it formally.

Respondent 3

1. Discussion on the status of entrepreneurship education in your school/ department
 - We don't teach it formally but it is very important for the students as they have to think outside the box. Teaching entrepreneurship is the way to go.
2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university
 - Making entrepreneurship compulsory could be a good idea. I will support this wholeheartedly.
3. Discussion on the idea to design a programme with entrepreneurship components
 - It is a good idea
4. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines
 - There are no challenges envisaged
5. Discussion on tracking your student's employment status after graduation
 - No , I have tried but it is difficult

Respondent 4

1. Discussion on the status of entrepreneurship education in your school/ department

- It is part of the curriculum in one of the department
- 2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university
 - Some academics would be very difficult to accept as they do not have a background on entrepreneurship
- 3. Discussion on the idea to design a programme with entrepreneurship components
 - It should have a true practical component on it. It should not only give a theoretical knowledge but also practical aspects
- 4. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines
 - Very few lecturers were trained on entrepreneurship and this could be problem in the implementation
- 5. Discussion on tracking your student's employment status after graduation
 - It is a difficult part as we don't know how

Respondent 5

1. Discussion on the status of entrepreneurship education in your school/ department
 - It is not relevant, however is important as it encourages students not to become job seekers.
2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university
 - It is necessary as a module but not to be compulsory
3. Discussion on the idea to design a programme with entrepreneurship components
 - Personally, I recommend this and the school of Management could come with a proposal on entrepreneurship
4. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines
 - The major challenge would be that many academics are still glued to the mentality that this is not their area of specialisation and I don't want to be disturbed
5. Discussion on tracking your student's employment status after graduation

- We don't track students' employment status; however, it is very necessary to do that. If we do it, it would help us a lot in modifying and improving our courses.

Respondent 6

1. Discussion on the status of entrepreneurship education in your school/ department
 - We don't deal with entrepreneurship; however, we have programmes where a person could be able to start a business
2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university
 - We don't deal with entrepreneurship; however, we have programmes where a person could be able to start a business
3. Discussion on the idea to design a programme with entrepreneurship components
4. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines
 - The major challenge will be that of capacity. In addition, there will be difficult in funding competent people
5. Discussion on tracking your student's employment status after graduation
 - We don't have a programme where we track students' employment but it is a good idea.

Respondent 7

1. Discussion on the status of entrepreneurship education in your school/ department
 - Is not taught directly, however our courses depend on what is offered in other schools. In view of the fact that we are not business inclined it would be difficult to teach it
2. Discussion on the idea of introducing a compulsory entrepreneurship module across disciplines at the university
 - It should not be compulsory rather be optional so that students are made to be aware of entrepreneurship
3. Discussion on the idea to design a programme with entrepreneurship components
 - It should be optional and must be done as an elective.

4. Discussion on the major obstacles in integrating entrepreneurship education across the disciplines
 - The major challenges would be that not everybody understand what entrepreneurship is and thus won't see its relevance.; in addition, trainers need to be trained first and this has financial implications; it may be burdensome on the side of academics
5. Discussion on tracking your student's employment status after graduation
 - Government expects us to do the tracking; however, we have difficulties in doing that because of lack of staff

Response by ENACTUS group

Respondent 1

1. Discussion on the students' exposure to entrepreneurship as a career option [Theme: Awareness of entrepreneurship]
 - University needs to do more to expose students to entrepreneurship as a career option.
2. Explanation on the thought of an entrepreneurship as a career option after graduating [Theme: attitude towards entrepreneurship]
 - It gives me chance to be my own boss
3. Explanation on the availability of skills and capabilities that are required to succeed as an entrepreneur [Theme: Personality traits]
 - I think I have skills to enable me to start my business. I have once attended a workshop where I was taught about entrepreneurship
4. Discussion on the role a university should play to promote entrepreneurship in the campus [Theme: Environmental factors}
 - University needs to include entrepreneurship as a module
5. Discussion on the difficulties students face in starting a new business [Theme: Obstacles to entrepreneurship]
 - Students are not given a chance to be exposed to entrepreneurship.

6. Discussion on the integration of entrepreneurship in your programme [Theme: Integration of entrepreneurship]

- Integration of entrepreneurship will assist potential entrepreneurs to know how to start a business after graduating

Respondent 2

1. Discussion on the students' exposure to entrepreneurship as a career option
 - I think is important for students to have knowledge about entrepreneurship as gives one an opportunity to employ yourself
2. Explanation on the thought of an entrepreneurship as a career option after graduating
 - I think is a good idea as it gives me chance to have my own company
3. Explanation on the availability of skills and capabilities that are required to succeed as an entrepreneur
 - Being a member of ENACTUS enable me to learn about how to run a business
4. Discussion on the role a university should play to promote entrepreneurship in the campus
 - It should set aside funds for aspiring entrepreneurship in the university
5. Discussion on the difficulties students face in starting a new business
 - Lack of support by the university communities and potential sponsors
6. Discussion on the integration of entrepreneurship in your programme
 - I think there must be a compulsory module on entrepreneurship

Respondent 3

1. Discussion on the students' exposure to entrepreneurship as a career option
 - Not enough exposure is being done at the moment as many students do not participate in ENACTUS activities.
2. Explanation on the thought of an entrepreneurship as a career option after graduating
 - I think is important and need to be encouraged

3. Explanation on the availability of skills and capabilities that are required to succeed as an entrepreneur
 - I think I have skills as I attended CEDA training
4. Discussion on the role a university should play to promote entrepreneurship in the campus
 - I should encourage students to go for entrepreneurship after graduating
5. Discussion on the difficulties students face in starting a new business
 - Lack of information about entrepreneurship and lack of funds
6. Discussion on the integration of entrepreneurship in your programme
 - Is good because it will prepare entrepreneurial mindset for students

Respondent 4

1. Discussion on the students' exposure to entrepreneurship as a career option
 - Most students do not know what entrepreneurship is all about
2. Explanation on the thought of an entrepreneurship as a career option after graduating
 - Good
3. Explanation on the availability of skills and capabilities that are required to succeed as an entrepreneur
 - I think I don't have enough skills and capabilities to start my own company
4. Discussion on the role a university should play to promote entrepreneurship in the campus
 - University must assist in marketing entrepreneurship
5. Discussion on the difficulties students face in starting a new business
 - Lack of funds
6. Discussion on the integration of entrepreneurship in your programme
 - There are more advantages in integrating it in our curriculum

Respondent 5

1. Discussion on the students' exposure to entrepreneurship as a career option

- University is not doing enough as students are only encouraged to pass their studies and then seek employment.
2. Explanation on the thought of an entrepreneurship as a career option after graduating
 - At university, I took entrepreneurship only at a foundation level but now I want to start my own business after graduating
 3. Explanation on the availability of skills and capabilities that are required to succeed as an entrepreneur
 - I don't have skills as I am impatient but I know what to do to start my own business.
 4. Discussion on the role a university should play to promote entrepreneurship in the campus
 - University must support organisation like ENACTUS. Must also invite entrepreneurs after hours to inspire upcoming young entrepreneurs
 5. Discussion on the difficulties students face in starting a new business
 - One major difficulty is competition among business.
 6. Discussion on the integration of entrepreneurship in your programme
 - Inclusion of a module on entrepreneurship across disciplines is a good idea to make all students ware of the benefits of entrepreneurship

Respondent 6

1. Discussion on the students exposure to entrepreneurship as a career option
 - I attended one workshop organised by NYDA about entrepreneurship but only 30 students attended therefore university need to do awareness campaign for the students to take entrepreneurship seriously
2. Explanation on the thought of an entrepreneurship as a career option after graduating
 - Because of ENACTUS I now know how to start my own business
3. Explanation on the availability of skills and capabilities that are required to succeed as an entrepreneur
 - I now have skills to start my own company

4. Discussion on the role a university should play to promote entrepreneurship in the campus
 - University must have partnership with organisations like NYDA to inform students how to get funding for start-ups
5. Discussion on the difficulties students face in starting a new business
 - One major difficult on my side is fear of failure and lack of knowledge about entrepreneurship by staff members could be a stumbling block. Another difficult is that students may think entrepreneurship is a useless course it would be a good idea for the
6. Discussion on the integration of entrepreneurship in your programme
 - It would be a good idea for the students.