

**An assessment of the attitude towards
entrepreneurship among higher education students
in Sedibeng district**

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ABSTRACT

Entrepreneurship has played an important role in economic prosperity and social stability in many developed countries. Today South Africa as developing country is faced with massive challenges of high levels of unemployment among the youth, especially university graduates, due to lack of work experience, low skills base and education. The formal labour market in South Africa is currently saturated, unable to absorb the ever increasing number of labour force; hence, the decision by the government to prioritise the development and support of small medium enterprises. Beside all these interventions, South Africa is still ranked among the lowest of all developing countries participating in the Global Entrepreneurship Monitor (GEM).

Today entrepreneurship is offered in most of the universities as part of the curriculum but it is evident that levels of entrepreneurship are still not improving in the country. There has been an upward trend in the number of young South Africans entering higher education; this can be attributed to the poor market conditions for low-skilled workers and the high monetary benefits to education. The daunting observation is that while the graduate labour force is on the rise, a large number of graduates possessing diplomas and degrees are finding it difficult to find employment. Graduate unemployment in South Africa has been rising very fast since 1995 along with national unemployment.

In this study the entrepreneur was used casually to refer to the owner or creator of a new business, small, growing, and successful business. This includes any person who sets up a small business, or changes from being an employee of an organisation to being self employed, even though neither needs any significant degree of innovation nor capital.

Risk taking and risk tolerance is one component of entrepreneurship that is very critical, hence there is a need for more attention in the entrepreneurial education. In the discovery perspective, cognition has impact on the chance that some people will identify and seize the opportunity. Opportunity identification depends on prior awareness and knowledge, whilst exploitation depends on having the necessary

capabilities. Entrepreneurs should be able to read and recognise patterns for them to recognise opportunities. Profile of an entrepreneur and skills required are technical skills, perseverance, communication skills, managerial skills, leadership skills, innovative skills, pro-activity, information seeking skills, and financial skills.

The primary objective of this study was to assess the attitudes and perceptions towards entrepreneurship among students in a higher education institution in the Sedibeng District of the Gauteng Province. The empirical study was conducted among the population and recommendations on entrepreneurial education were compiled.

The survey was conducted using a self-completion questionnaire method, whereby questionnaires are handed out to respondents for self-completion and returned to the researcher immediately. In an effort to encourage high response, the questionnaire was accompanied by a cover letter which assured the respondents of confidentiality. An attitude scale to test the prevalence of entrepreneurial attitudes and perceptions among the respondents was used. The Likert scale was used whereby the respondents were asked to rate a particular issue on a scale that ranged from strongly disagrees to strongly agree.

The majority of the respondents are predominantly young Africans, from low income families with only few parents that made it to university level, and mostly not involved in entrepreneurship. The gap exists with regard to equipping the respondents with entrepreneurial education and training. The university and other stakeholders should create an environment that is supportive towards entrepreneurial activities. There are still many business opportunities that need to be explored in South Africa but the biggest challenge remains the access to knowledge and information with regard to available support structures.

Tertiary institutions should: Develop start-up capital systems for students whilst studying. The curriculum design should support employability skills such as languages, starting your own businesses, presentation skills, creativity and leadership abilities, specific qualifications focusing on business creation should be developed, case studies should focus more on opportunity orientated ideas and

business and lecturing staff should be empowered to support entrepreneurial activities in their respective fields. Databases of possible business ideas should be developed.

A conceptual research model that will support accelerated youth entrepreneurship should be developed in the country and research institutions should be contracted to populate this research model. Furthermore, government regulations should be tested regarding their impact on youth entrepreneurship development as a standard item. Fresh approaches are thus needed to stimulate youth entrepreneurship in rural areas. Therefore, policies and programmes to encourage youth entrepreneurship in these areas should be researched.

National competitions for youth entrepreneurs should be encouraged and visible events should be organised such as enterprise weeks at tertiary educational institutions. Tertiary institutions can also investigate the possibility of business hives for students or allowing students businesses to operate on campuses for the duration of their studies.

Key words: Entrepreneurial attitudes, tertiary education institutions, youth entrepreneurship, unemployment

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LIST OF ACRONYMS

BRICS	Brazil, Russia, India, China and South Africa
CIPC	Companies and Intellectual Property Commission
CIPRO	Companies and Intellectual Property Registration Office
DTI	Department of Trade and Industry
EAO	Entrepreneurial Attitude Orientation
EAOS	Entrepreneurial Attitude Orientation Scale
EQ	Entrepreneurial Quotient
GDP	Gross Domestic Product
GEM	Global Entrepreneurship Monitor
NEPAD	New Partnership for Africa's Development
NYDA	National Youth Development Agency
OCIPE	Office of Companies and Intellectual Property Enforcement
SADEC	Southern African Development Communities
SARB	South African Reserve Bank Bulletin
TEA	Total Early-Stage Entrepreneurial Activity
VUT	Vaal University of Technology

CHAPTER 1

NATURE AND SCOPE OF THE STUDY

1.1 INTRODUCTION

Entrepreneurship plays an important role in economic prosperity and social stability in many developed countries. South Africa faces massive challenges with its high levels of unemployment among the youth especially university graduates due to lack of work experience, low skills base and education.

The Global Entrepreneurship Monitor (GEM) South African report 2009 (Herrington, Kew & Kew, 2009: 12) indicates that the formal labour market in South Africa is currently saturated, unable to absorb the ever increasing number of labour force hence the decision by the government to prioritise the development and support of small medium enterprises. Besides all these interventions, South Africa is still ranked among the lowest of all developing countries participating in GEM. Today entrepreneurship is offered in most of the universities as part of the curriculum but it is evident that levels of entrepreneurship are still not improving in the country (Herrington *et al.*, 2009: 12).

Attitudes play a vital role in the life of a successful entrepreneur. As they build their new ventures, they are bound to overcome hurdles, solve problems, and complete the job. They are disciplined, tenacious, and persistent, they are able to commit and recommit quickly, and they are not intimidated by challenges (Timmons & Spinelli, 2009: 49).

One of the key findings of the Global Entrepreneurship Monitor Report of 2009 is how attitudes vary from one individual to another on attractiveness of entrepreneurship as a career. The understanding of these attitudes can be instrumental in assisting the policy direction and in encouraging entrepreneurship within the country (Bosma & Levie, 2009: 15).

A better understanding of the attitudes and perceptions towards entrepreneurship within South Africa will enable role players to evaluate, reinforce and to change strategy in order to enhance entrepreneurial behaviour in the country contributing to economic development, wealth creation for all and the alleviation of poverty.

1.2 BACKGROUND TO THE STUDY

According to the South African Reserve Bank Quarterly Bulletin (SARB2010: 15), the unemployment rate in South Africa has increased to 25.2% in the first quarter of 2010 from 24.3% in the fourth quarter of 2009. The economically active population is standing at 17.1 million and the unemployed constitutes 4.3 million of the total. The recent economic recession exacerbated the unemployment situation in the country. Interventions by government such as the failed extended public works programme did not make a significant difference to create jobs. The solution to creation of wealth, economic growth and sustainable jobs lies in entrepreneurship.

According to the Global Entrepreneurship Monitor (GEM) South African report 2009 (Herrington *et al.*, 2009: 33), South Africa is ranked the lowest of all the developing countries involved in GEM. South Africa is ranked 15th out of the 37 in start-up and 29th in new firm activity, with only two percent of the adult population involved. South Africa is also ranked in the lowest quartile of all GEM countries in two key measures, such as opportunity entrepreneurship and new firm activity. The Total Entrepreneurial Activity (TEA) rate in South Africa remains the lowest and relatively unchanged from 2005. The rate of necessity entrepreneurship is at its lowest (2.05%) and the opportunity rate is at the lowest (2.95%) among the developing countries.

The areas that are singled out to be problematic in doing business in South Africa are crime and theft, inadequately trained workforce, restrictive legislations, and inefficient government bureaucracy (Herrington *et al.*, 2009: 33).

1.3 PROBLEM STATEMENT

South Africa is plagued by high levels of unemployment, crime and a low skills base. Government in collaboration with private stakeholders have initiated numerous

interventions to encourage entrepreneurship, however not enough progress has been made up to date. This can be attributed to the lack of understanding of the attitudes and perceptions among the youth towards entrepreneurship. The current interventions are mostly focused on dealing with the most common obstacles such as the cultural and social norms, financial support, regulation, while ignoring to foster the correct attitudes towards entrepreneurship as a career choice.

The Gauteng Province is known to be the economic hub of South Africa being the highest in terms of its contribution to GDP of the country. It is by no coincidence that many universities are located in the Gauteng Province, strategically placed to supply a skilled labour force to various industries.

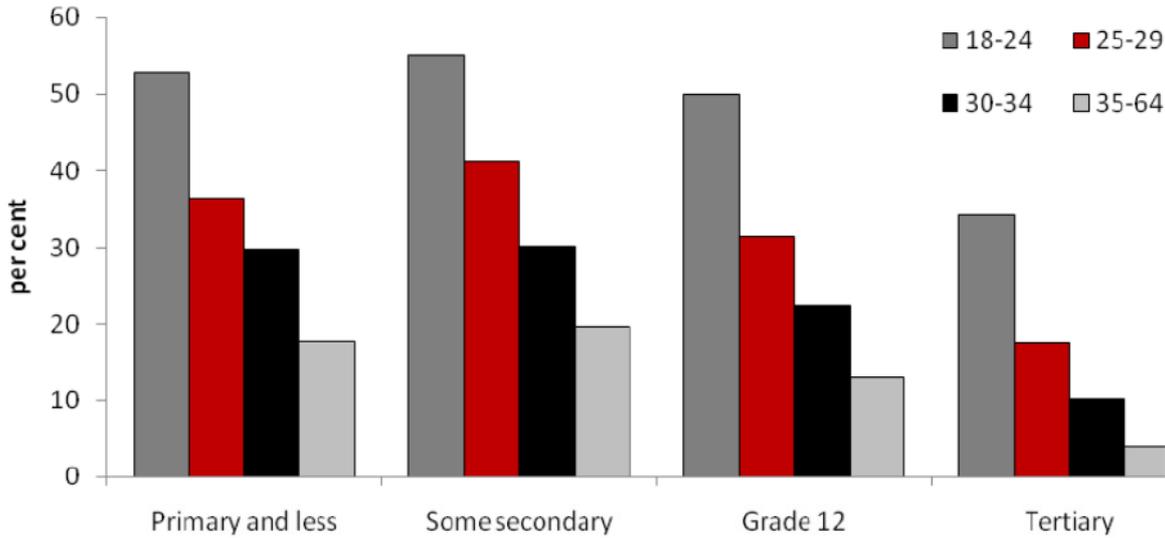
The scarcity of employment opportunities in the formal market is the source of the high unemployment rate among graduates. The University students possess a high potential in terms of starting their own businesses ventures due to their levels of education. The question is: Do they possess a positive attitude towards entrepreneurship?

Problem statement central to this study is the expectation that poor attitudes towards entrepreneurship among graduates will continue to contribute towards high levels of unemployment.

1.3.1 The statistics on graduate unemployment in South Africa

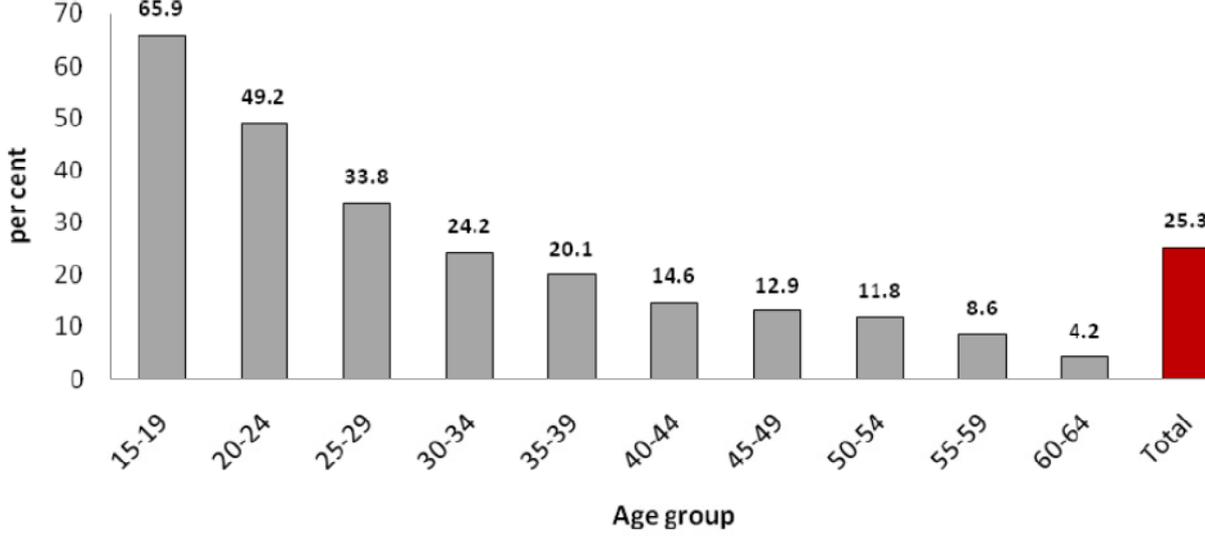
According to the discussion paper by National Treasury (2011: 13), dealing with youth unemployment in South Africa, young people are disadvantaged in the labour market. The youth unemployment has escalated over the past two years as a result of the recession. The following figures and table compare youth unemployment with adult unemployment.

Figure 1.1: Unemployment rates by age and education in 2010



Source: National Treasury (2010)

Figure 1.2: Youth unemployment rate in South Africa



Source: National Treasury (2011)

It is stated that the employment of 18 to 24 year olds fell dramatically by more than 20 per cent (320 000) between December 2008 and December 2010, compared with an overall decline of 6.4 per cent. The unemployment rate among those under the age of 25 years old is about 50 per cent, accounting for 30 per cent of total unemployment (National Treasury, 2011: 13).

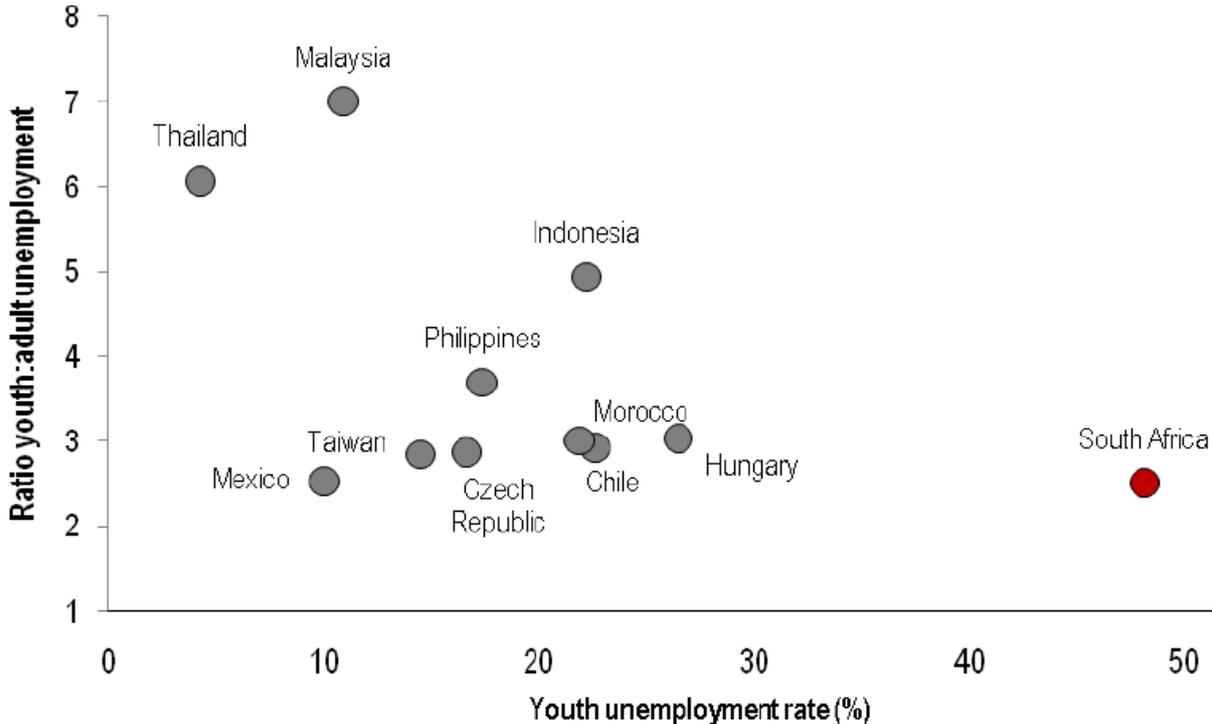
Table 1.1: Intensity of unemployment by age group in South Africa

	Unemployment rate (%)	Share of unemployment (%)	Labour Force Participation Rate (%) (Adjusted for education and training attendance)	Unemployment Intensity (Weighted by employment share)	Unemployment Intensity (Weighted by adjusted LFPR)
18-24	51.0	30.3	59.8	0.155	0.305
25-29	33.8	24.0	71.6	0.081	0.242
30-34	24.2	16.8	76.2	0.041	0.185
35-39	20.1	11.8	75.0	0.024	0.150
40-44	14.6	6.4	75.7	0.009	0.111
45-49	12.9	4.6	70.0	0.006	0.090
50-54	26.0	87.2	61.3	0.227	0.160
55-59	8.6	1.6	51.1	0.001	0.044
60-64	4.2	0.3	26.4	0.000	0.011

Source: National Treasury (2010)

A comparison of youth unemployment in South Africa with other developing countries presents a very bleak picture of the South African situation (refer to figure 1.3).

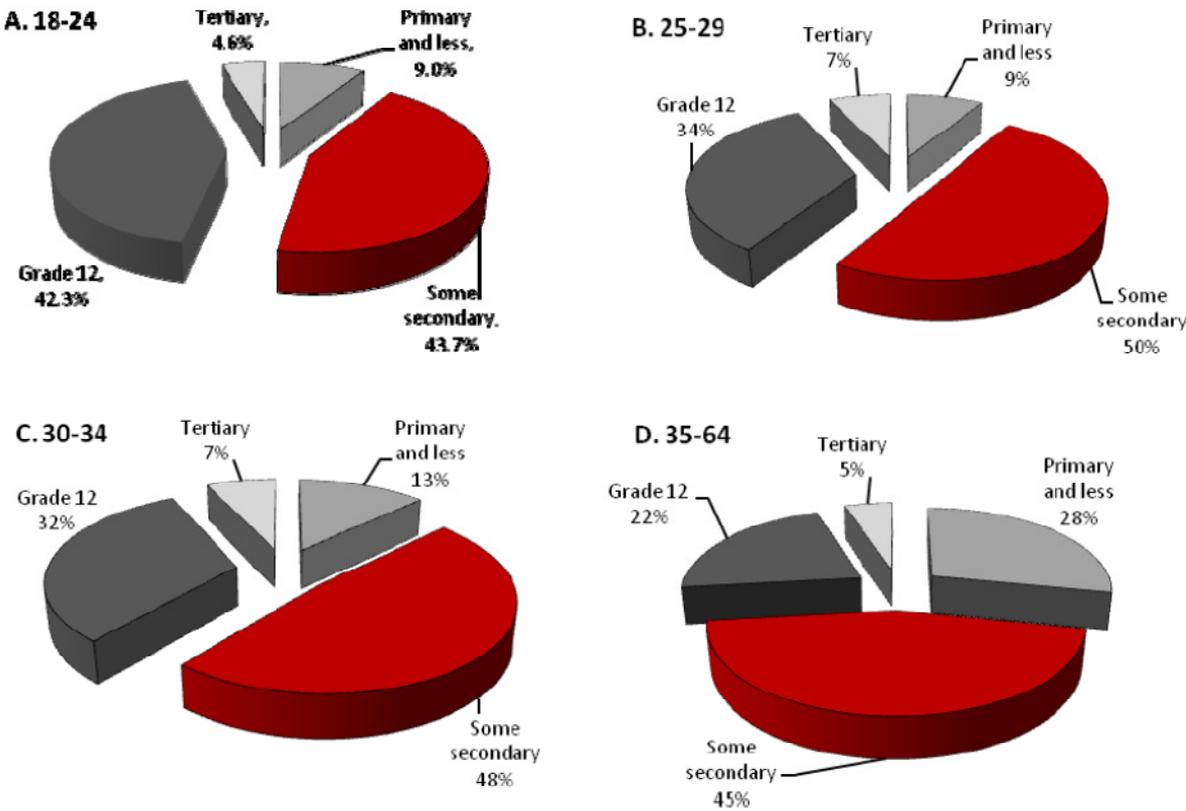
Figure 1.3: Youth (15 – 24) to adult unemployment ratio compared with youth unemployment in emerging markets



Source: National Treasury (2010)

Figure 1.3 clearly indicates that youth unemployment is severe in South Africa when comparing with other developing countries. These figures identify acute areas where the policy on resolving unemployment should focus. Graduate unemployment (2006: 17) defines ‘unemployed graduate’ as recently graduated youths without jobs. It further stated that the unemployed graduates include persons with tertiary education of any age between fifteen and sixty-five. The figure below is a representation of the unemployment by age and education. Unemployment is rife at seven percent among the university graduates aged between 18 and 34 years.

Figure 1.4: Share of unemployment by age and education in South Africa 2010



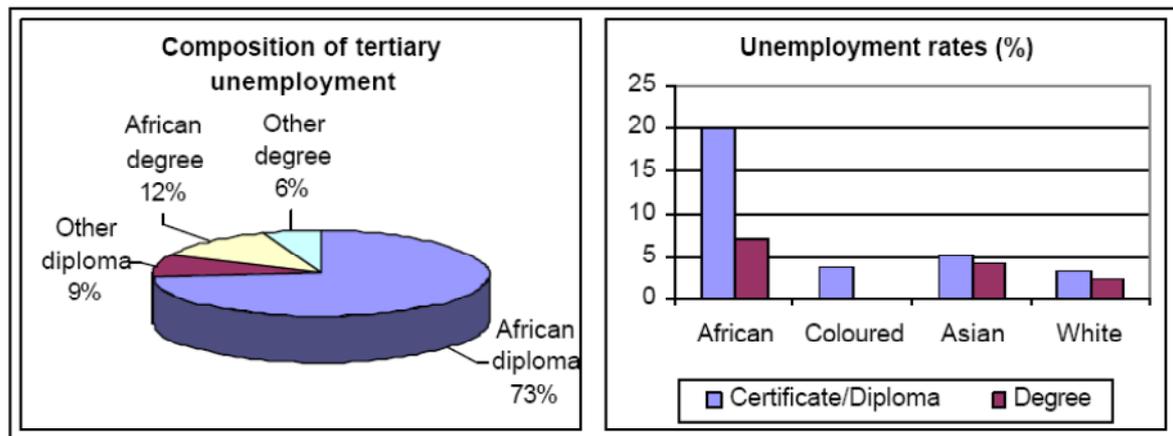
Source: National Treasury (2010)

There has been an upward trend in the number of young South Africans entering higher education; this can be attributed to the poor market conditions for low-skilled workers and the high monetary benefits to education. The daunting observation is that while the graduate labour force is on the rise, a large number of graduates possessing diplomas and degrees are finding it difficult to find employment. Graduate unemployment in South Africa has been rising very fast since 1995 along with the

national unemployment rate as depicted in figure 1.5 below (National Treasury, 2006: 35).

Figure 1.5, furthermore, indicates the very high graduate unemployment rate of Africans in comparison with other race groups.

Figure 1.5: Graduate unemployment of Africans relative to other races in South Africa



Source: Graduate unemployment (2006)

1.3.2 Contributing factors to graduate unemployment in South Africa

According to the Graduate Unemployment, (2006: 35), there are numerous factors contributing to graduate unemployment in South Africa, they include:

- The shift in output away from the primary and secondary sector towards the services or tertiary sectors - a trend seen in most of the developing economies. As a result there has been a change in demand patterns for labour due to differences in sectors skills' composition.
- South African companies are investing in technology to improve their productivity to remain competitive amidst globalisation, trade liberalisation and the strengthening of the currency lately.
- The real wage increases has also exacerbated unemployment and also the increase in non-wage costs of labour after 1994.
- Young people acquiring skills not required to drive the economy or mismatch of skills supplied and skills demanded.

- Issues relating to quality of education offered by institutions of higher learning.
- South African companies preferring experienced workers, whether foreign or local over the inexperienced graduates.

It is against the preceding background that a problem statement central to this study is outlined as: **Problem statement central to this study is the expectation that poor attitudes towards entrepreneurship among graduates will continue to contribute towards high levels of unemployment.**

It is becoming more difficult for graduates to find employment in the formal sector and this call for the graduates to use their skills and education to create employment opportunities through entrepreneurship. This will only be possible when the graduates are well equipped with entrepreneurial skills during their years of learning.

This study can significantly contribute to the body of knowledge by evaluating the state of entrepreneurial education within the university and the prevalence of entrepreneurial attitudes among students. This study will also assist the stakeholders and government in directing resources where they are mostly needed and making recommendations on how to improve the current state of entrepreneurship.

1.4 OBJECTIVES OF THE STUDY

The purpose of this study was outlined under primary objectives and secondary objectives.

1.4.1 Primary objective

The primary objective of this study was to assess the attitudes and perceptions towards entrepreneurship among students in a higher education institution in the Sedibeng District of the Gauteng Province. The empirical study was conducted among the population and recommendations on entrepreneurial education were compiled.

1.4.2 Secondary objectives

In order to achieve the primary objective, the following secondary objectives were formulated:

- To understand entrepreneurship as a phenomenon and also examine the entrepreneurial attitudes.
- To understand the nature of interventions from government, support programmes, and state of entrepreneurship in South Africa.
- To come up with new ways to stimulate and encourage entrepreneurship among university students.
- To identify the role society plays in the development of entrepreneurial attitudes.
- To develop guidelines and recommendations on how to practically encourage entrepreneurial attitudes among the higher education students.

1.5 SCOPE OF THE STUDY

The scope of this study is limited to entrepreneurship as a discipline and the geographical demarcation as outlined.

1.5.1 Field of study

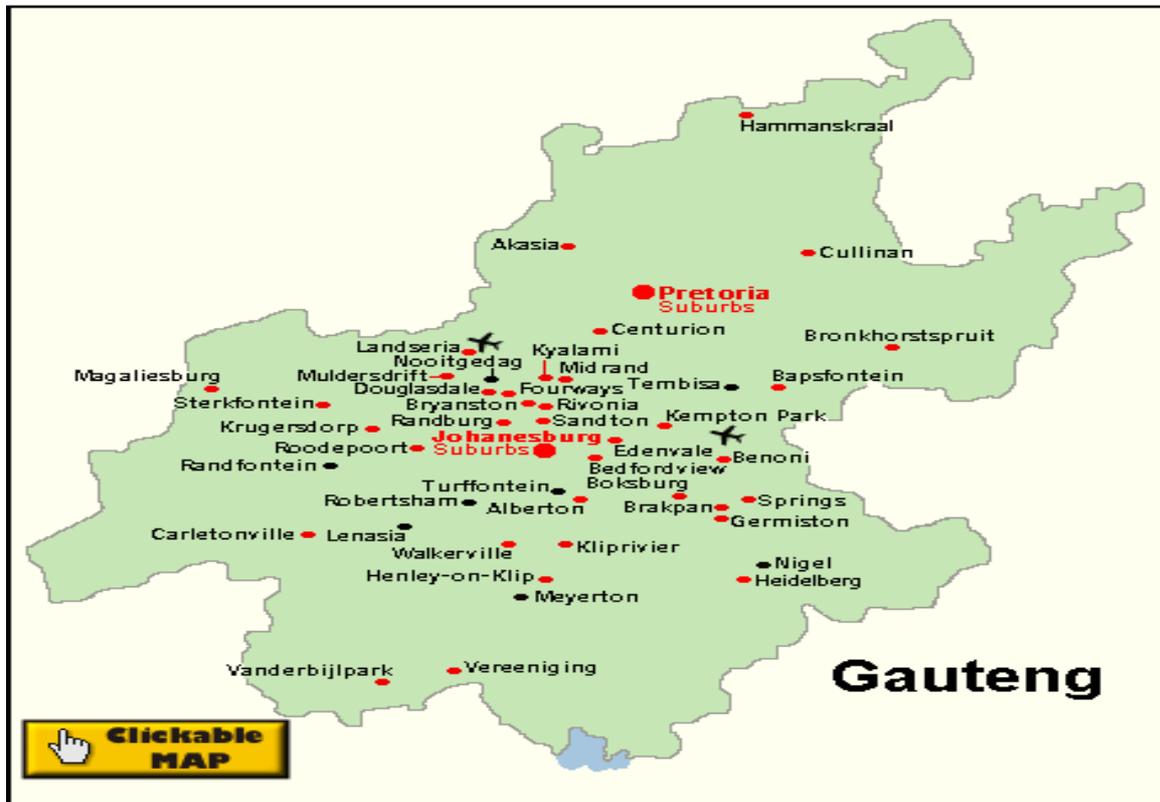
The study was focused on entrepreneurship as a discipline, in particular entrepreneurial attitudes towards entrepreneurship as career choice.

1.5.2 Geographical demarcation

The empirical data was collected among university students in Sedibeng District in the Gauteng Province of South Africa and it focused on entrepreneurship across all fields of study in a higher education institution. The university targeted for the purpose of this study was the Vaal University of Technology (VUT). This university is situated in the Sedibeng District Municipality in the Southern part of Gauteng Province. This university is a product of the merger between the Vaal Triangle

Technikon and VISTA University Vaal Triangle campus. This is one of the densely populated universities in the province with students' intake mainly from previously disadvantaged groups (Source: <http://www.vut.ac.za>: Accessed 18/02/2011).

Figure 1.6: Map of the Gauteng Province



Source: http://www.stayinsa.co.za/southafrica/gauteng_hotels.html (Accessed 09/12/2010)

The Gauteng Province is the smallest province in terms of square kilometre radius in comparison with other provinces of South Africa. The Gauteng Province is surrounded by Free State Province, Mpumalanga, North-West Province and Limpopo. The name Gauteng is a Sotho name for place of gold, because of mining activities that took place in the region. The province has since become the centre for economic activities and industrialisation in South Africa (Source: http://www.stayinsa.co.za/southafrica/gauteng_hotels.html: Accessed 09/12/2010).

The Gauteng Province is divided in five districts. They are:

- City of Tshwane metro
- Mogale City district
- City of Johannesburg metro
- Ekurhuleni metro
- Sedibeng district

The Vaal University of Technology (VUT) is situated in the Sedibeng district of Gauteng Province. The university has about 17000 students with satellite campuses in Secunda, Uppington, Kemptonpark and Klerksdorp. The Vaal University of Technology has an extension of the main campus in Sebokeng, the old Vista University (Source: <http://www.vut.ac.za>: Accessed 18/02/2011). The study was conducted only among the students based in the main campus in Vanderbijlpark and the Sebokeng campus.

Figure 1.2 below depicts the map of the Sedibeng district and municipal demarcation of Emfuleni, Midvaal and Lesedi.

Figure 1.7: Municipal demarcation of Sedibeng District



Source: http://www.sedibeng.gov.za/tourism_maps.html (Accessed 17/02/2011)

The Sedibeng district is subdivided into three local municipalities as shown in the map above. The local municipalities are Emfuleni, Midvaal and Lesedi. The majority of residents of Sedibeng District Municipality live in the townships such as Boipatong, Sharpville, Sebokeng, Evaton and Ratanda, whilst the minority of the residents are spread across towns such as Vereeniging, Vanderbijlpark, Meyerton, Devon and Heidelberg. The Sedibeng District covers a total geographic area of 4185 square kilometres and the total population is 908 107 based on the projections from census 2001 (www.sedibeng.org.za).

1.6 RESEARCH METHODOLOGY

The research methodology followed in this study comprised of a literature review on entrepreneurship as discipline, followed by the empirical study in the geographic area of interest.

1.6.1 Literature study

In order to get ideas on how to proceed with the investigation, the study followed a literature review on issues relating to entrepreneurial attitudes and perceptions among the university students. The literature review evaluated the origin of entrepreneurship as a discipline and discussed types of entrepreneurs and the entrepreneurial process. The study also focused particularly on entrepreneurial education, entrepreneurship as a career choice in the demographic area.

Sources that were consulted for the content of the literature review included but not limited to, the following:

- Academic journals.
- Internet searches about the demographic area. Research also included academically approved articles which were sourced through the library of North-West University in Potchefstroom.
- Internet searches to learn about the information related to the subject under study, websites visited include the Statistics South Africa, Sedibeng District

Municipality, Vaal University of Technology, Treasury Department of South Africa, and South African Reserve Bank.

- Text books including published works on entrepreneurship.

1.6.2 Empirical study

The empirical study followed a valid research design, which is a plan according to which research participants will be obtained and information collected from them. The research design assists the researcher to define the study population, selection of a suitable measuring instrument and suitable statistical techniques for data analysis (Welman, Kruger & Mitchell, 2010: 52). The study undertook an exploratory quantitative research approach as influenced by the nature of the research problem. This approach was relevant as the researcher intended to gain insight into the phenomenon.

1.6.2.1 Selection of questionnaire

The survey was conducted using a self completion questionnaire method, whereby questionnaires were handed out to respondents for self-completion and returned to the researcher immediately. This method has proved to be very successful in attaining high response rates specifically when a survey is conducted in a captive audience (Welman & Kruger, 2001: 150)

The instrument used in the study was a standard questionnaire adapted from “Entrepreneurship in an emerging and culturally diverse economy: A South African survey of perceptions”, developed by Luiz and Mariotti (2011). In an effort to encourage a high responses rate, the questionnaire was accompanied by a cover letter which assured the respondents of confidentiality. An attitude scale to test the prevalence of entrepreneurial attitudes and perceptions among the respondents was used. The Likert scale was used whereby the respondents were asked to rate a particular issue on a scale that ranged from strongly disagree to strongly agree. The rating scale had an even number of choices ranging from a scale of one to five (Welman & Kruger, 2001: 150).

- **Section A: Personal information**

Section A gathered data from respondents regarding their profiles and characteristics. Ten questions on gender, age group, race, field of study, parents own a business, parents level of education, was given pocket money while at school, have a job while a university, currently studying business subjects, my parents monthly income.

- **Section B: Attitudes towards entrepreneurship**

Section B measured the attitudes towards entrepreneurship as a career choice among higher education students. This section included 17 questions, i.e. **Wants to start own business, Entrepreneurs are almost always inventors, Buying a business is not entrepreneurship, Owning a franchise is not entrepreneurship, Entrepreneurs will do anything for profit, Entrepreneurs are largely responsible for new innovations, technologies and products, I can earn more money working for someone else, I seriously consider entrepreneurship as career option, Academic institutions should encourage students to consider entrepreneurship, I am too busy with classes to consider starting my own business, My parents are entrepreneurs, It is too risky to start own business, I am a risk taker, Entrepreneurship is a good way to make lots of money, Entrepreneurship is an honourable profession, A tertiary education is not necessary to be an entrepreneur, I prefer to work for a large company, for better career prospects.**

- **Section C: Entrepreneurial opportunities**

Section C measured the ability of the respondents to recognise and spot entrepreneurial opportunities. This section includes nine questions, i.e. **I have many ideas for business ventures, It is too expensive to start own business, There are many entrepreneurial opportunities in student's area of study, Entrepreneurial ventures are mainly limited to business ideas, I have good understanding of intellectual property, I understand what is equity finance, I am**

constantly alert to business opportunities, All the good ideas have been taken, Need connections to start a business.

- **Section D: Entrepreneurship environment within the university**

Section D assessed the entrepreneurship environment within the university. Nine questions were asked with regard to entrepreneurship activities on campus and the support systems available. The questions were: **Students are encouraged to pursue entrepreneurship ventures, High school counsellor mentioned entrepreneurship as career option, Examples of how science and technology are key to business are included in class examples, Entrepreneurial or business related examples are included in classes, Having a mentor will help, A small seed grant would encourage entrepreneurship.**

- **Section E: The South African entrepreneurial environment**

Section E assessed the entrepreneurial environment in South Africa. Five questions were asked with regard to entrepreneurship activities in South Africa and the available support programmes. The questions were: **South Africa is an excellent country to start a business, My local community supports entrepreneurs, It would be very difficult to raise the money needed to start a new business in South Africa, I know how to have access to the assistance I would need to start a new business, I am aware of programmes the state provides to help people start businesses.**

In section A the respondents had to indicate the applicable answer by marking the designated block with a cross. In sections B, C, D and E a five point Likert scale was used to measure responses that range from “strongly disagree” with a value of one, to “strongly agree” with a value of five. The Likert scale was particularly chosen because it is easier to compile than any other attitude scale (Welman *et al.*, 2010: 156). The Likert scale gives a reliable measure of the actual position on the continuum, instead of indicating only whether the respondent was favourably inclined on an issue or not.

1.6.2.2 Study population and sampling method

For the purpose of this study the population of interest was the students of a higher education institution in Sedibeng district. The study a questionnaire was administered to all students at all levels of studies within the university.

The author applied the non probability sampling method as it is less complicated and economical on time and financial costs. The specific approach was the accidental sampling as the most convenient collection of members of the population that are near and readily available for research purposes (Welman & Kruger, 2001: 62). The sample size was 200 responses from the university and the minimum target was set at 100 responses for making conclusions.

1.6.2.3 Data collection

The questionnaire was hand delivered to the respondents due to the proximity and accessibility of the study population. The researcher used the members of academic staff to distribute the questionnaire. A cover letter assuring the respondents about the anonymity and confidentiality of the information was attached to the questionnaire.

1.6.2.4 Data analysis

Data collected was sent to the Statistical Consultation Services at the North-West University in Potchefstroom for coding and analysis. The data was transformed into useful outputs such as frequency tables and descriptive statistics. The results were used to draw conclusions, recommendations from existing literature were used and sources acknowledged.

1.7 LIMITATIONS OF THE STUDY

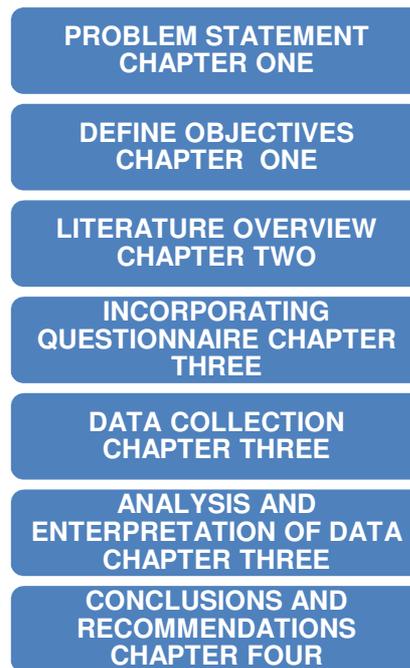
The study was primarily focused only on the expressions and views from current university students who are studying within the Sedibeng district at a specific institution. The university students were specifically selected because they possess high potential with regard to entrepreneurship due to levels of awareness and education. Timmons and Spinelli (2009: 45) argued that there is strong case that entrepreneurs are born and made better and that certain attitudes and behaviours can be acquired, developed, practiced, and refined through both experience and study. The limitations of the study included, but not limited to the following:

- The outcomes of this study will be limited to a select geographic area, therefore not a true representation of all universities in South Africa.
- The high levels of apathy towards surveys among people in general may adversely affect the response rate and the quality of the results.
- The Vaal University of Technology has an intake of students who are predominantly black, and from previously disadvantaged backgrounds. This may negatively affect the results through bias towards views held by a particular demographic group on issues relating to entrepreneurship.
- The promotion and policy drive by the university may affect entrepreneurial attitudes of students towards this career.
- The unavailability of successful student entrepreneurs and graduate role models may impact adversely on the phenomenon.

1.8 LAYOUT OF THE STUDY

The layout of the study is presented in figure 1.8.

Figure 1.8 **Layout of the study**



Chapter two: Literature review

The literature review includes the definition of an entrepreneur and entrepreneurship in order to understand the origin of the phenomenon. The types of entrepreneurs and the entrepreneurial process are discussed in this chapter. The study follows a literature review on issues relating to entrepreneurial attitudes and perceptions among the university students.

The literature review examines the South African entrepreneurial environment including the state of entrepreneurial education and training. The study also focuses particularly on entrepreneurship as a career choice. The literature review outlines the challenges faced by South Africa, such as high unemployment, poverty and the policy measures implemented by government to deal with these challenges.

The literature review examines the characteristics, attributes and attitudes that are common among entrepreneurs. The literature review aims to provide in-depth knowledge about entrepreneurship in terms of its evolution and current state and the most successful models in entrepreneurship.

Chapter three: Empirical study

Chapter three focused on the empirical study, which is about the data collection from the demographic area. The chapter outlines the sampling procedure, the research instrument used in the study and the design. The chapter focuses on the statistical analysis of the data, presentation of the research results and interpretation of the results. The main aim of this chapter is to examine the current state of entrepreneurship in the demographic area demarcated for the study.

Chapter four: Conclusions and Recommendations

Chapter four focuses on drawing conclusions about the state of entrepreneurship within the selected demographic area. The chapter examines the gap between the current levels of entrepreneurship and the desired state. The chapter also recommend measures from existing literature on how to encourage entrepreneurial attitudes and perceptions within the selected demographic area. The chapter also reviews the study objectives to assess if they are achieved, and identifies any available future research opportunities on entrepreneurial attitudes among university students.

CHAPTER 2

LITERATURE REVIEW ON ENTREPRENEURSHIP

2.1 INTRODUCTION

South Africa, like all other developing countries is following the growing global interest in entrepreneurship as a source of economic growth. This can be attributed mainly to growing unemployment levels, and stagnant high poverty levels as evident in rising number of citizens depending on social grants. The government has shifted its focus into supporting small and medium enterprises to create employment opportunities. This policy shift towards supporting small and medium enterprises in South Africa is evident through the latest restructuring of Companies and Intellectual Property Commission (CIPRO) and Office of Companies and Intellectual Property Enforcement (OCIPE) to form Companies and Intellectual Property Commission (CIPC) under the Department of Trade and Industry (DTI). The purpose is to ensure a regulatory framework for all enterprises of all types and sizes, promote growth, employment, innovation, stability, good governance, confidence and international competitiveness (www.cipc.co.za).

Promoting the culture of entrepreneurship among the young people through nurturing and unearthing talent will stimulate the economic growth and development within a country. The latest statistics released according to the (SARB) unemployment rate is currently at 24.3% (SARB, 2009: 15). Referring to this latest labour market dynamics, it is a sad reality that many young people especially graduates will find it difficult to find employment.

This calls for a shift towards self employment as a means of creating jobs rather than seeking formal employment. This route may be attractive once there is a clear understanding of the entrepreneurial process and to attaining adequate business skills among students within institutions of higher learning. Having entrepreneurial attitudes among our graduates will advance job creation initiatives. It is also highly critical towards strengthening the battle against crime, hopelessness and poverty.

The South African government has in the past been accused of being a culprit when coming to delayed payment to its service providers and mostly small emerging businesses with cash flow problems. To reverse this situation the government is running national campaigns through the Department of Trade and Industry with the aim of accelerating payments to their service providers.

The South African government has prioritised job creation, provided policy support, and signed agreements with multilateral bodies such as Southern African Development Communities (SADEC); New Partnership for African Development (NEPAD); and Brazil, Russia, India, China and South Africa (BRICS) to stimulate trade and economic growth.

All these have achieved little success in reducing the rate of unemployment since the number of small and medium sized enterprises were unable to benefit from most of these agreements, but only big business which is also struggling to create jobs. It becomes imperative for institutions of higher learning to support government initiatives in fighting unemployment and poverty through equipping their students with entrepreneurial knowledge, skills and qualities to turn them into creators of employment instead of job seekers.

2.2 DEFINITION OF THE ENTREPRENEUR AND ENTREPRENEURSHIP

To fully understand the concept “entrepreneurship”, it is necessary to unpack the word entrepreneur. We need to understand what an entrepreneur is and who qualifies to be one.

According to Scott and Marshall (2009: 219), there are at least four different meanings or definitions of the term entrepreneur or entrepreneurship which are:

- The basic meaning is a person who owns and runs a business but not necessarily a new business, small, growing, or a successful business.
- Economists perspective; an entrepreneur as a person who risks capital and other resources in the hope of substantial financial gain, or as someone who

specialises in taking judgemental decisions about the use and co-ordination of scarce resources. More emphasis is put on calculated risk taking.

- Sociologists view an entrepreneur as a creative innovator in the business sphere, in contrast with the conventional business owner, capitalist, or professional manager, who conforms more often to established procedures and objectives. It further stated that this conception originated with Joseph Schumpeter, who defined “entrepreneurs as individuals who develop and implement new combinations of the means of production, a function he described as fundamental to economic development” in his book *The Theory of Economic Development* (1934).
- Finally, the entrepreneur is used casually to refer to the owner or creator of a new business, small, growing, and successful business. This includes any person who sets up a small business, or changes from being an employee of an organisation to being self employed, even though neither needs any significant degree of innovation nor capital.

As part of the evolution of the entrepreneur and entrepreneurship phenomenon, the 1980s saw the development of the concept called intrapreneurs. This concept is about people who work alone or in teams who are employees within an organisation or worked for the organisation, but took responsibility for some innovation, costly exercise or risky development, or even involved in routine subset of activities, in the expectation of additional personal financial reward for successful ventures and profitable operations. In some cases the definition of intrapreneurs may include employees whom their remuneration structure depends heavily on bonus and commission payments, or other incentive payments such as sales people (Scott & Marshall, 2009: 219).

The term entrepreneur or entrepreneurship seem to be elusive, there is no clear, consistent definition. Some researchers have simply equated venture creation with entrepreneurship, whilst others strongly believe that there exists a fundamental difference between entrepreneurs and small business owners. According to Martz, Biscaccianti, Neil and Williams (2005: 360), at least two scales, the Entrepreneurial Quotient (EQ) and the Entrepreneurial Attitude Orientation (EAO) can be used as tools to identify potential entrepreneurs.

2.3 OVERVIEW OF ENTREPRENEURSHIP

According to Fayolle (2002: 262), in support of the multifaceted nature of this phenomenon of entrepreneurship, researchers can subdivide their focus areas into the following categories: the personal qualities and values of the entrepreneur, secondly the anticipation of the future, and the recognition and the discovery of business opportunities, the success of the entrepreneurs in relation to technical and non-technical managerial tools or leadership, a need to change strategic orientation to make it more adaptable. In support of the above statement, it is further stated that the field of entrepreneurship has many school of thoughts which are tabled below.

Table 2.1: The different schools of thought in entrepreneurship

Entrepreneurial model	Focus
Great person school	Inborn characteristics of entrepreneurs and their success stories
Psychological characteristics school	Specific and unique psychological traits of entrepreneurs
Classical school	Innovation and creativity. Identification of opportunities
Management school	Pursuit of business opportunities and use of appropriate management tools to concretise their accomplishment
Leadership school	Leadership qualities of entrepreneurs
Intrapreneurship	Entrepreneurship behaviour in existing organisations

Source: Fayolle (2002)

In explaining these different schools of thoughts, Fayolle (2002: 263) states that:

- *The first school of thought* regards an entrepreneur as being the great person. The focus is mostly on the career path and the success stories of famous entrepreneurs. The presented image is that of an individual charged with energy, power, and success.
- *The second school of thought* focuses on the distinctive traits, special psychological characteristics of an entrepreneur, which can be values such as

ethics, responsibility, attitudes such as risk taking, initiatives, autonomy or needs such as independence, and accomplishment.

- *The third school of thought* is the classical school of entrepreneurship: It is interested in innovation and in the identification of opportunities. The entrepreneur is viewed as mainly the source of innovation and the introduction, in a given new environment, of new alternative means of production.
- *The fourth school of thought* is focused on the pursuit and the materialisation of business opportunities. An entrepreneur is regarded as a person who perceives an opportunity and creates an organisation to pursue it.
- *The fifth school of thought* is interested in leadership: It states that entrepreneurs are leaders who assign objectives to and guide their employees towards attaining results. Entrepreneurs are meant to provide support to partners in their personal development, and such actions classify them as more than a “manager”, but a leader.
- *The last school of thought* focuses on intrapreneurship, which states that corporates are deprived of innovation and they have less capacity to respond to the ever changing global environment. Intrapreneurship is seen as a solution to these challenges through focusing on opportunities, which can allow corporates to innovate, develop, and to diversify their operations into new arenas.

Martz *et al.* (2005: 361) argue that there is a general agreement among researchers that entrepreneurs and managers differ in areas of basic personality traits, business competence and risk taking. Managers' decision making style can be classified as conceptual, behavioural, directive and analytical. The entrepreneurial style is found to be a combination of conceptual and directive. Entrepreneurs are found to be more flexible towards accepting change as compared to managers, are known for excelling in identifying and seizing opportunities, as compared to managers who excel in coordinating and delegating duties better compared to entrepreneurs. Entrepreneurs are known for their risk appetite associated with aggressive business decisions whilst managers seek to mitigate and minimise risk in their business decisions.

Timmons and Spinelli (2009: 101) see entrepreneurs as leaders who can inject a sense of imagination, commitment, passion, tenacity, integrity, teamwork and vision into their companies. In the midst of dilemmas, they are able to make decisions without any ambiguity and contradictions. They are never satisfied with the status quo, and as a result their continuous drive for value creation, the economic pie grows bigger and members of society benefits.

Entrepreneurs are viewed as drivers of economic development because they change the current economic setup and create a new order. Entrepreneurs are regarded as individuals who carry out new combinations, which come in different forms such as new goods or new quality products, new methods of production, new markets, new sources of supply or a new way of organisation. It is a process by which individuals pursue opportunities without consideration of the resources they currently possess (Nybakk & Hansen, 2008: 474).

According to Kor, Mahoney and Michael (2007: 1193), an entrepreneur is viewed as someone who believes that he or she is right while everyone is wrong. The essence of this view is that entrepreneurship is about being different because one holds a different view of the situation. Entrepreneurial decision making is done under uncertainty; there is no clear market for business judgement, and it is more further complicated by the potential opportunism and moral hazard issues.

Timmons and Spinelli (2009: 41) define effective entrepreneurs as internally motivated, high energy leaders with a unique tolerance for ambiguity, a keen eye toward mitigating risk, and a passion for discovery and innovation. These leaders create or identify and pursue opportunities by marshalling the diverse resources required to develop new markets and engage the inevitable competition.

The word entrepreneurship is a subject for intense academic debate and research, it is about establishing means to unlock economic activities, and militate against social problems such as crime, delinquency, and poverty. Entrepreneurship as a notion has evolved beyond just start-ups into a phenomenon that can or fails to occur in all types and sizes of organisation (Timmons & Spinelli, 2009: 101). It is further stated that

entrepreneurship is “a way of thinking, reasoning and acting that is opportunity obsessed, holistic in approach, and leadership balanced” for the purpose of value creation. It is further argued that entrepreneurship results in the creation, enhancement, realisation, and renewal of value, not just for owners, but for all participants and stakeholders. At the heart of the process is the creation and recognition of opportunities, followed by the will and initiative to seize these opportunities. It requires a willingness to take risks both personal and financial but in a very calculated fashion in order to constantly shift the odds of success and balancing the risk with the potential reward (Timmons & Spinelli, 2009: 101).

Entrepreneurship is not only limited to venture creation as previously discussed but it also takes place in organisations. Entrepreneurs influence organisational learning as they discover, learn, create, and enact new entrepreneurial opportunities during the interactions with the dynamic and unpredictable business environment (Timmons & Spinelli, 2009: 101).

This phenomenon of organisational learning gives opportunities; it also allows exchange of ideas and knowledge among, individuals thereby broadening the organisation’s collective imagination with regard to viable productive opportunities (Kor *et al.*, 2007: 1191). This is in line with the view that higher education students may pursue entrepreneurship through new venture creation or as creative managers through organisational learning.

It is agreed that entrepreneurship cannot be viewed from start-ups only because it plays an important role in the performance of existing organisations. There is enough evidence in the body of knowledge that those enterprises which adopt entrepreneurial orientation are likely to exhibit superior performance (Kor *et al.*, 2007: 1191).

Corporates can benefit from being entrepreneurially oriented by taking risks, being innovative and changing products, processes, markets and organisations. Organisations gain sustainable competitive advantage and wealth creation through exploring entrepreneurial opportunities. It is also stated that entrepreneurship assists in preserving the existing business, instead of only improving its profitability. This

implies that organisations which do not invest innovation and creativity may become irrelevant. Entrepreneurship also militates against societal problems by increasing employment and task involvement (Nybakk & Hansen, 2008: 475). It was concluded that enterprises with high risk appetites are likely to change how products or services are supplied, change how they market their products or services, change how they organise the enterprise and find new collaborators.

Martz *et al.* (2005: 361) categorise entrepreneurs into ten different subsets such as: independent innovators; economies of scale exploiters; value manipulators; successor in family business; independent; started from scratch; acquirer; creators; inheritors; and operators.

In explaining what an entrepreneur is, Fayolle (2002: 260) states that there are eight principal themes of entrepreneurship, which are presented in Table 2.2.

Table 2.2: Eight principal themes in entrepreneurship

The entrepreneur	Entrepreneurs implies individuals who possesses unique capabilities and personal characteristics
Innovation	Entrepreneurship is usually related to innovation (something new in an existing or a new organisation)
Creation of organisation	Entrepreneurship describes the behaviours involved in the creation of an organisation
Creation of value	Entrepreneurship contributes to creation of value
Private, public, or not for profit sectors	Entrepreneurship can be applied to these different sectors
Growth	The importance of the growth is a characteristic of entrepreneurship
Unique character	Entrepreneurship is something unique
Owner or manager	Entrepreneurship concerns individuals that are owners and managers of their enterprises or activities

Source: Fayolle (2002)

According to Fayolle (2002: 260), it is advisable to group the population into four categories: potential, intending, actual entrepreneurs and those without intention to start a venture. Fayolle (2002: 260) further argued that perceptions of barriers and opportunities will definitely differ for each individual by situation and over time. An

individual with a clear business opportunity in mind will take a keen interest in investigating more carefully than an individual without an opportunity in mind. The latter will not be aware of the existence of some barriers or imagine non-existence. On the other hand, an entrepreneur may have strong convictions that he or she is not taking any risk whilst a non-entrepreneur may have strong perceptions that all ventures are risky, therefore the entrepreneurship as a process includes both potentiality and intent (Kouriloff, 2000: 60).

Potential entrepreneurs are regarded as individuals who, at a particular time, have pre-existing preparedness, but no salient intention to start a business. Entrepreneurs are individuals who at a particular time have a salient intention to start a new business (Kouriloff, 2000: 61).

This research paper focused on establishing the role of attitudes towards entrepreneurship. It will also uncover the impact of education on higher education students, in discovering available opportunities, and taking entrepreneurship as a career choice. This research paper also focused on establishing the role of attitudes towards entrepreneurship. This study simplified the definition of an entrepreneur to “a person who starts and runs a business and also those who are involved in intrapreneurship.”

2.4 THE TIMMONS MODEL

The entrepreneurial process consists of various components, and these components can be assessed, influenced, and altered. The successful founders or investors of new ventures need to carefully focus on these components in order to evaluate risks and determine what changes need to be implemented to improve chances of a new business' success (Timmons & Spinelli, 2009: 110). It is further stated that though money is important, the successful entrepreneurial process starts with opportunity, strategy, networks, team, or a business plan and initial resources. The Timmons model of the entrepreneurial process is a tool that guides to understand the central themes or forces which are critical to the entrepreneurial process.

Figure 2.1 Timmons Model of the entrepreneurial process



Source: Timmons and Spinelli (2009)

2.4.1 Opportunity recognition

Kor *et al.* (2007: 1191) state that entrepreneurs do not act in response to changes and economic environment, but they stimulate demand through innovation by creating new products and services, advertising, and personal charisma. It is further argued that entrepreneurial judgement goes beyond pure imagination, good insight, and self confidence but involves information gathering and consulting facilities within an organisation. Entrepreneurship is about devising and creating new markets and evaluating product or service opportunities and techniques. These views clearly resonate well with the role of opportunity in venture creation as presented in the Timmons model.

Timmons and Spinelli (2009: 112) state that for the entrepreneurs to spot opportunities with ease, they should apply the following criteria: The higher growth, size, durability, and high gross margins and free cash flow, the greater the opportunity. It is further argued that entrepreneurs should look out for the extent of the market imperfectness, the higher rate of change, discontinuities and chaos,

greater inconsistencies in existing service and quality, in lead times and lag times, greater vacuums in information and knowledge. All of the above represent the areas where entrepreneurs should focus when searching for high potential opportunities.

2.4.2 Resources (people, finances, equipment)

According to Timmons & Spinelli (2009: 112), resources play a fundamental role in any successful venture, because in creating economic opportunities, entrepreneurs need resources to develop these opportunities. Entrepreneurs take calculated risks with fewer resources in order to grab and utilise the opportunity. In support of this view Timmons & Spinelli (2009: 112), argue that entrepreneurs should creatively devise stingy ways to marshal and gain control of resources. It is further stated that to gain a competitive edge entrepreneurs should adopt bootstrapping as a way of life.

Kor *et al.* (2007: 1192) state that entrepreneurship is not only about willingness to take risks, but also about intelligently searching for new ways of cushioning against risks, while gaining substantial growth rate in the business. Knowledge and experience plays a critical role in successful ventures. Entrepreneurs always find creative ways to fund their ideas even in mature products and service markets. This knowledge is also related to the capability of an organisation in attracting the necessary financial support for the entrepreneurial venture.

2.4.3 Team

The biggest challenge facing entrepreneurs today is not necessarily resources as argued by many researchers, but it is the personal characteristics and leadership skills. Successful entrepreneurs should be able to assemble and lead a team that is characterised by accomplishment of the objectives. In fostering the winning spirit, an entrepreneur should be able to reward success and support honest failure, share wealth with those who contributed to creating it, and strive for achieving high standards in performance and conduct (Timmons & Spinelli, 2009: 113).

2.5 THE SOUTH AFRICAN ENTREPRENEURIAL ENVIRONMENT

The Global Entrepreneurship Monitor (GEM) is a body established in 1997 and has three main objectives, namely: To measure differences in the level of entrepreneurial activity among countries; to uncover factors determining the national levels of entrepreneurial activity; and to identify policies that may enhance the national level of entrepreneurial activity (Bosma & Levie, 2009: 8).

GEM takes a comprehensive approach and considers the degree of involvement in entrepreneurial activity within a country; it identifies different types; and phases of entrepreneurship (Bosma & Levie, 2009: 8). The objective of GEM is to provide a summary report on differences in a global entrepreneurship activity at a national, aggregate level (Martz *et al.*, 2005: 363). The GEM researchers have created a composite index called Total Entrepreneurship Activity (TEA) to measure and compare entrepreneurship activity in a country.

The Global Entrepreneurship Monitor (GEM) global report (Bosma & Levie, 2009: 19) defines early stage entrepreneurial activity (TEA) rate as the proportion of people aged 18 to 64 years who are involved in entrepreneurial activity as a nascent entrepreneur or as an owner manager of a new business up to 35 years old.

According to Herrington *et al.* (2009: 75), South Africa is ranked very low with a TEA rate of 5.9%, much lower than the average of 11.2% for efficiency-driven economies and it is ranked 35th out of 54 countries with a TEA rate below the average of 11.7% of all participating countries. South Africa scores below average in terms of perceived capabilities; hence, the discrepancy in entrepreneurial attitudes between South Africa and other efficiency driven economies might be caused by the difference between TEA rates.

South Africa's nascent entrepreneurship rate is 3.6%, well below the GEM average of 5.9% and also below the average of 6.1% for efficiency driven economies. South Africa is ranked 40th out of 54 countries on new firm activities, with a new business prevalence rate of 2.5%, and this is significantly below the average 5.2% for all GEM countries and 5.3% for all efficiency driven countries. There has been no significant

change in the profile of South Africa entrepreneurs in recent years. The TEA rate dropped from 7.8% in 2008 to 5.9% in 2009; this resembled the average of 5% as recorded in year 2004 to 2006. The decline is primarily due to a 40% fall in the number of start-ups compared to 2008. South Africa ranked among the ten GEM countries with the highest prevalence of pessimistic entrepreneurs in terms of perception of growth potential (Herrington *et al.*, 2009: 75).

According to Herrington *et al.* (2009: 45), there are several obstacles towards entrepreneurial activity in South Africa namely:

- *Education and training* is regarded as one of the primary inhibitors of entrepreneurship. Many South Africans were denied access to learning and work experience during apartheid. These areas are important in developing skills and confidence necessary to start a business. Education is regarded as powerful tool to increase entrepreneurial involvement activities among young adults but, South Africa is the country in which education and training is frequently mentioned as a weakness.
- *Cultural and social norms*: The South African media is not keen of reporting about entrepreneurs and celebrating the successful entrepreneurs, instead sporting heroes receive coverage and honour. This implies that there are limited role models for young aspiring entrepreneurs. The low levels of entrepreneurial experience and informal learning experience contribute to the lack of “can-do” attitude. There is apathy towards entrepreneurship as a career choice; most people opt for professional careers. The society is known for being hard on those who experienced legitimate business failures; hence the high fear of failure.
- *Financial and business support*: There are no effective communication channels between entrepreneurs and financial institutions. There is poor marketing and coordination of government interventions. There is a need for mentorship, guidance and small business training support because it is necessary for entrepreneurial development.

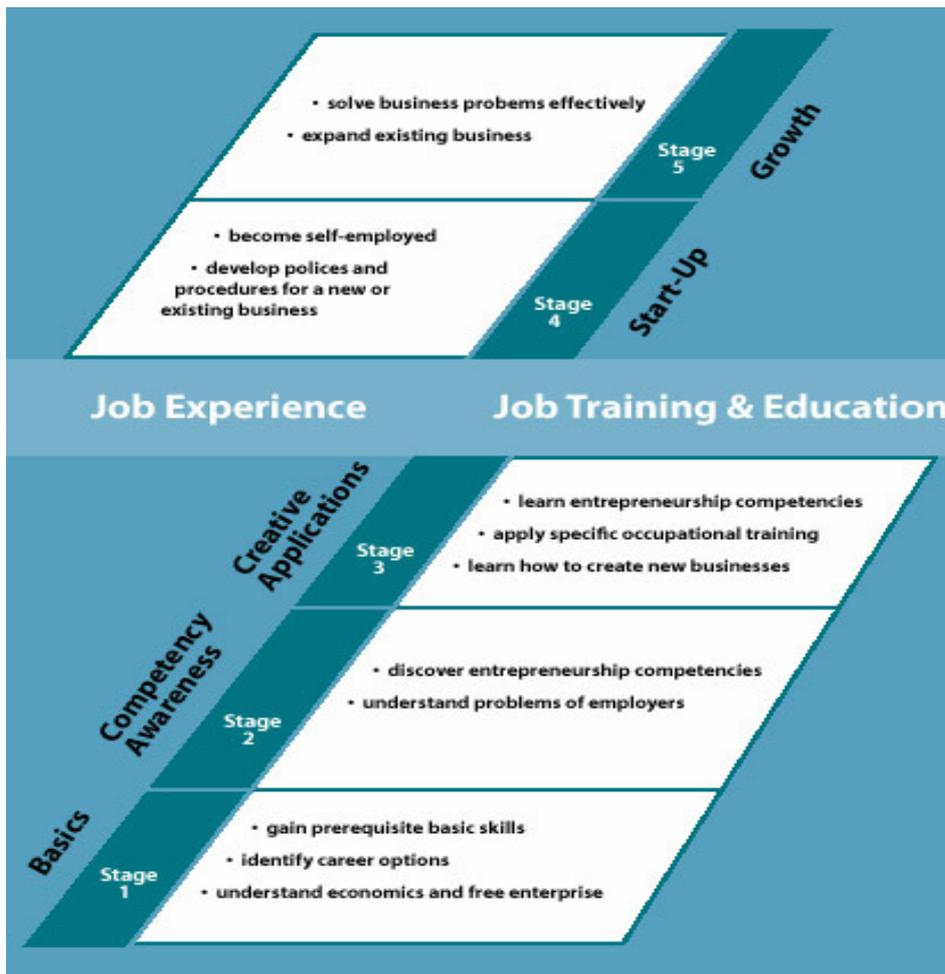
- *The regulatory environment and government policies:* There is a shortage of skills to comply with the legal and tax requirements by small businesses. Excessive bureaucracy and cumbersome application processes hinder small businesses from accessing the incentives from government.
- *Government support for small enterprise:* Interventions from government to assist small and medium sized enterprises are insignificant, such that many companies are not aware of these initiatives.

2.6 ENTREPRENEURIAL EDUCATION AND TRAINING

Entrepreneurship education is defined as the “purposeful intervention by the educator in the life of the learner to impart entrepreneurial qualities and skills to ensure that the learner is able to survive in the business world”. It is further advocated that entrepreneurship education can also be defined as the structured formal conveyance of entrepreneurial competencies, which in turn refers to concepts, skills and mental awareness applied by individuals during the process of starting and developing their ventures (Isaacs, Visser, Friedrich & Brijlal, 2007: 614).

The latest developments in higher education worldwide has been characterised by the proactive introduction of innovations in management, teaching and curriculum development. Entrepreneurship education is one of the responses to such realities; South Africa has recently undergone a dramatic change through merging of universities of technologies and traditional universities. This change has been enacted to facilitate and create an enabling educational environment in order to satisfy the skill requirements of the economy and society. It is further stated that there has been no provision for those pursuing degrees in anything other than business management to get entrepreneurship education. The implications are that students in engineering and science related subjects have not been exposed to skills allowing them for commercial exploitation of specialised knowledge (Urban & Barreira, 2007: 568).

Figure 2.2: The five stages of entrepreneurship training



Source: Isaacs, Visser, Friedrich and Brijlal (2007)

The figure describes entrepreneurship education as a lifelong learning process which consists of five stages, which are: basics, competency awareness, creative applications, start-up, and growth.

Entrepreneurship education is at the developmental stage in South Africa; it is also regarded as a very important element in elevating the status of institutions of higher learning in the country. There is an increasing commitment to entrepreneurship offerings within the institutions of higher learning; the common focus areas are academic, research and outreach activities. It is further argued that teaching and assessment is delivered through the normal classroom methods and that research on entrepreneurship is more or less than other management disciplines (Kabongo & Okpara, 2009: 59).

According to Nieuwenhuizen and Groenewald (2008: 130), strong evidence exists that individuals who attended entrepreneurship courses have a high propensity to start their own businesses compared to those studying other courses. Training is highly critical in the development of ventures.

Peterman and Kennedy (2003: 131) argue that there is evidence that people who start businesses have a higher level of education than people who do not. There is enough evidence that business owners are educated than the general population. Despite the strong correlation between education and business ownership, it is argued that formal education does not promote entrepreneurship, but it prepares students for corporate world as workers; therefore it suppresses creativity and entrepreneurship. Most universities have introduced programs and courses that promote enterprise education and entrepreneurship education.

Mentoor and Friedrich (2007: 223) state that students have positive entrepreneurial attitudes, but the curricula at the institutions of higher learning drive the employee culture rather than the self employment culture. It is argued that there is a need for a change in methods of instruction. Transfer of knowledge is important but very necessary is competencies, development of skills and a change in attitudes.

Herrington *et al.* (2009:45) (GEM 2009) highlighted that entrepreneurship education can have an influence on learners in four areas, namely: Self confidence about their ability to start a business; understanding of financial and business issues; desire to start their own business; and finally, desire to further studies at institutions of higher learning.

Entrepreneurship education is defined as “the structured formal conveyance of entrepreneurial competencies, which includes concepts, skills and mental awareness utilised by individuals in the start-up process and growth stages in their ventures”. It entails entrepreneurial individuals interacting with their environment, thus discovering, evaluating and exploiting opportunities (Alberti, Sciascia & Poli, 2004: 5).

There is overwhelming evidence in the body of knowledge with regard to the impact of education on economic development of countries and entrepreneurship as a career choice among citizens in developed countries. According to Mentoor and Friedrich (2007: 222), enterprise education serves three objectives. Firstly, to increase the understanding among students about what entrepreneurship entails. Entrepreneurial education is very important and necessary for all segments of society. Secondly, it is about preparing individuals for the world of work. It implies teaching students on how to become entrepreneurial, take responsibility about their careers and personal lives.

Finally, enterprise education serves to prepare individuals to be entrepreneurs and managers. The students should be taught how to become entrepreneurs, to assess whether they have the potential to be entrepreneurs, and also assist them in developing business management skills. Students should be encouraged to be creative in their thinking, and this can be done from the lower levels within the institutions of higher learning. The enterprise education needs to move from product orientation to customer focus, which has proved to have a major impact on the development of entrepreneurial skills (Mentoor and Friedrich, 2007: 222).

Herrington (2008: 46) advocate that there is still an opportunity to radically increase youth entrepreneurship development in South Africa. It is further argued that socio-economic conditions in South Africa can be renewed through creative means and willingness to accelerate youth entrepreneurship. The table below outlines the specific actions that should be implemented for successful youth entrepreneurship development in South African context.

Table 2.3: Specific recommendations for youth entrepreneurship development

Financing for young entrepreneurs	<p>The youth must be encouraged to start their own businesses and be taught that making mistakes is one way of learning. Therefore, a financial support system which allows for trial and error should be developed for entrepreneurs starting their first business.</p> <p>One way to start such a process and where the emphasis is on relatively higher order ideas, is to develop a system for tertiary level students similar to the Student Placement for Entrepreneurs in</p>
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	<p>Education programme within tertiary education institutions in the UK. Students receive on average 4 500 pounds, which must be spent in developing their business.</p> <p>The emphasis is more on the journey of how to establish a business than on the success of the business itself. One important fact to determine is the average start-up capital needed for people starting their first small business. The private sector, higher education institutions and local authorities should integrate their activities in order to find solutions for youth development. Therefore, tertiary institutions should:</p> <ul style="list-style-type: none"> • develop start-up capital systems for students whilst studying.
Curriculum design	<p>It is accepted that the world is experiencing an entrepreneurial age which is characterised by factors such as accelerated innovation and the commercialisation threat at a faster rate, companies scaling down in order to be more competitive and more emphasis on project driven approaches. One can therefore assume that more must be done to ensure that the youth is employable and can start their own businesses. Therefore:</p> <ul style="list-style-type: none"> • Curriculum design should support employability skills such as languages, starting your own businesses, presentation skills, creativity and leadership abilities. • Specific qualifications focusing on business creation should be developed. • Case studies should focus more on opportunity orientated ideas and business. • Lecturing staff should be empowered to support entrepreneurial activities in their respective fields.
Research	<p>Not all youth come from families involved in their own businesses. From discussion, it is also clear that a mindset for starting one's own business is not the dominant paradigm. Because of this, it can be expected that the youth might struggle to both identify the right business idea and implement it successfully. Therefore:</p> <ul style="list-style-type: none"> • Databases of possible business ideas should be developed, • A conceptual research model that will support accelerated youth entrepreneurship development should be developed in the country,

	<ul style="list-style-type: none"> • Research institutions should be contracted to populate this research model, • All government regulations should be tested regarding their impact on youth entrepreneurship development as a standard item, • Fresh approaches are needed to stimulate youth entrepreneurship in rural areas. <p>Therefore, policies and programmes to encourage youth entrepreneurship in these areas should be researched.</p>
<p>Visibility of youth entrepreneurs</p>	<p>Visibility of activities is the strongest possible motivational tool to encourage others to try it out. Positive images of entrepreneurs can help to address the fear factor which prevents youth from becoming entrepreneurs. Therefore:</p> <ul style="list-style-type: none"> • National competitions from youth entrepreneurs should be encouraged, • Visible events should be organised such as Enterprise Weeks at tertiary educational institutions, • Tertiary institutions can investigate the possibility of business hives for students or allowing students businesses to operate on campuses for the duration of their studies.

Source: Herrington (2008)

2.7 ENTREPRENEURIAL ATTITUDES AND PERCEPTIONS

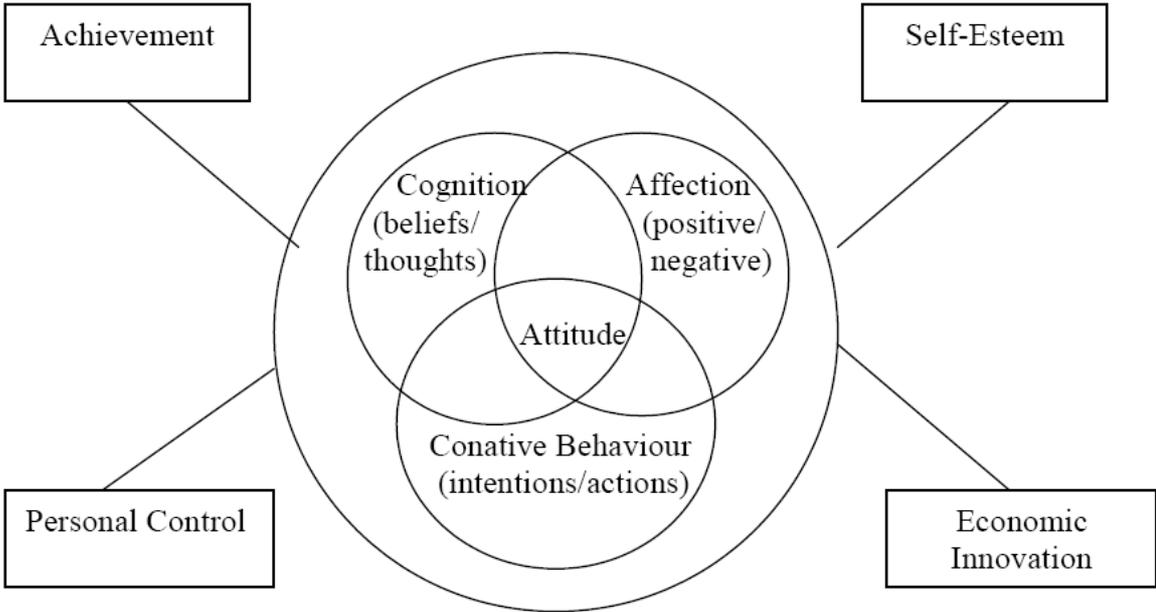
Research advocates that the success of entrepreneurship as a process can be highly attributed to attitudes towards this process. Attitudes play a critical role in shaping innovation and behaviour of individuals.

The Global Entrepreneurship Monitor (GEM) global report (Bosma and Levie, 2009: 10) define entrepreneurial attitudes as attitudes towards entrepreneurship. It is about the extent to which people think there are good opportunities for starting a business. Attitudes play an important role in establishing entrepreneurial activity within a population. The attitudes relevant to entrepreneurship includes willingness to bear the level of risk that individuals might be willing to bear and individuals perceptions of their own skills, knowledge, and experience in business creation. Entrepreneurial

attitudes can influence entrepreneurial activity, but can also be influenced by entrepreneurial activity. Entrepreneurial attitudes are important because they express the general feelings of the population toward entrepreneurs and entrepreneurship. More important is that if the national attitudes toward entrepreneurship are positive, this will generate cultural support, help, financial resources, and networking benefits to those who are already entrepreneurs or want to start a business (Bosma & Levie, 2009: 10).

According to Van Wyk and Boshoff (2004: 33), entrepreneurial behaviour results from subjective association behaviour of an individual towards certain attributes.

Figure 2.3: Attitudes consist of achievement, self esteem, personal control and innovation in combination with underlying cognition, affection and conations



Source: Van Wyk and Boshoff (2004)

The figure above depicts that there are four important entrepreneurial attitudes that were identified, and which can be used as potential method to evaluate entrepreneurial orientation of individuals, namely achievement, self esteem, personal control, and innovation. Out of these attitudes an instrument called the, Entrepreneurial Attitude Orientation Scale (EAOS) was developed to measure these qualities. The four attitude sub-scales are described as:

- Achievement, in creating new venture.
- Innovation, by acting upon business incentives.
- Perception of personal control and influence over business incentives.
- Perceived self esteem, perceived competence in operating business (Van Wyk & Boshoff, 2004: 33).

The subscales are reportedly developed from the three theoretical attitudinal behavioural components of cognition which are beliefs and thoughts. Affection can be positive or negative conviction and conative behaviour is intentions and actions (Van Wyk & Boshoff, 2004: 33).

According to Nybakk and Hansen (2008: 474), there are two important elements of entrepreneurial attitudes, namely the ability to recognise opportunities and the ability to take calculated risk. It is further argued that people with entrepreneurial attitudes are more likely to start-up new business activities. This implies that risk-takers are more likely to initiate a new activity and risk attitude affects the selection of individuals into entrepreneurial positions.

2.7.1 Risk tolerance and risk taking

According to Antonites and Wordsworth (2009: 70), risk taking and risk tolerance is one component of entrepreneurship that is very important, hence there is a need for more attention in entrepreneurial education. There is high failure rate of entrepreneurs in South Africa of about 70 to 80%, which calls for interventions in education and training. It has been found that there is a strong relationship between risk tolerance and the success of entrepreneurs in new venture creation (Antonites & Wordsworth, 2009: 70).

It is explained, that in its simplest form, risk is a function of the variation of possible outcomes, the associated outcome likelihoods and their subjective values. In simple form, risk is explained as the result of insecurity that exists because of uncertainty related to successful market penetration (Antonites & Wordsworth, 2009: 70).

According to Antonites and Wordsworth (2009: 72), an entrepreneur is likely to encounter the following types of risks:

- *Time risk*: This type of risk is about the implication of time in putting a new idea through the product development phase until it could be considered right for the market.
- *Investment*: This risk includes the cost involved in establishing the new venture, which implies, does the entrepreneur has access to enough capital to enable the venture to survive to a point of being an entrepreneurial institute? Other costs are those related to the total product development process, as well as including those related to the physical manufacturing facility of the total product that will, for instance, satisfy the qualitative description.
- *Technical risk*: This risk is about when all technical aspects related to product development are considered, and the final product has to meet certain quality specifications or standards.
- *Competitive risk*: The chances that competitors could be offering similar or comparable products in the market, while the success rate of competitors in comparable markets is also an indication of risk. The focus must also be on the financial strength and depth of a competitor, as it could further pose risk. Research must be done on the current market advantage of the competitor including its existing distribution system, selling power and established relationships with the market.

Antonites and Wordsworth (2009: 70) further state that risk can be classified as career risk, family, social risk, and also psychological risks. It is argued that high risk taking is particularly visible in the new venture creation process. A suggestion for alternative measures concern is more over explored, and it is agreed with regard to three dimensions of risk construct, which are: Risk as a variance; Risk as a downside loss and bankruptcy; and Risk as an opportunity. A body of knowledge is described with regard to the operationalisation of the concept risk gained from the economics, finance, strategy, and entrepreneurship literature with aim to support constructs in entrepreneurship. The findings are presented in the table below (as summarised by Antonites & Wordsworth, 2009).

Table 2.4: A summary of the risk construct, and how it can be applied in entrepreneurship

Dimensions of the risk construct and areas of study for each	Representative studies drawn from the economics, finance, strategy, and entrepreneurship literature
Risk as a variance	Variability of results (Bowman, 1984)
Returns to new product/firm launches	Variance of ROE around the mean ROE (Miller & Bromley, 1990)
Returns to corporate venturing	R&D [research and development] intensity (Miller & Bromley, 1991)
Private equity placements	Stock analysts' earnings forecasts (Wiseman & Bromily, 1990)
Funds raised at IPO [initial public offering]	Funds raised at IPO (Deeds, DeCarolis & Coombs, 1997)
Risk as downside loss and bankruptcy	Entry and exit rates from industry (Gimeno, Folta, Cooper & Woo, 1997)
Loss of employment	TMT [top management team] heterogeneity (McNamara & Bromily, 1999)
Survival analysis of new firms	Age of the firm (Gimeno, Folta, Cooper & Woo, 1997)
Liability of newness	ROA [return on assets] relative to a target level (Reuer & Leiblein, 2000)
Entrepreneurial perceptions of risks from launching a new firm or product	Use of the term 'new' in the president's section of annual reports (Bowman, 1984)
Decision to launch multiple products at once	Burn rate/ survival index (Janney & Folta, 2003) Managerial perceptions of risk/ survey (Busenitz & Barney, 1997; Simon, Houghton & Aquino, 2000)
Risk as opportunity	Entrepreneurial wealth, education, experience and income levels (Gimeno, Folta, Cooper & Woo, 1997)
Opportunity costs	Dilution of control/ investor concentration (Wruck, 1989)
Evaluation of decision to launch new ventures	Geographic location (Deeds, DeCarolis & Coombs, 1997)
Rate of new product launches	Network affiliation (Powell, Koput & Smith-Doerr, 1996)
Number of new product launches	Number of products under development (Janney & Folta, 2003)

Source: Antonites and Wordsworth (2009)

2.7.2 Entrepreneurial perceptions

Edelman and Yli-Renko (2010:837) argued that perceptions and other cognitive factors play a fundamental role in both the creation views and discovery of entrepreneurship. In the discovery perspective, cognition has an impact on the chance that some people will identify and seize the opportunity, and opportunity identification depends on prior awareness and knowledge, whilst exploitation depends on having the necessary capabilities. It is further argued that entrepreneurs should be able to read and recognise patterns for them to recognise opportunities.

It is further highlighted that driven by desire, the entrepreneur initiates a set of actions to transform an idea to an opportunity and perception into a company, therefore, actions of an entrepreneur are mainly driven by subjective “productive opportunity”. Opportunity in this context is viewed as a set of subjective expectations of what the entrepreneur thinks can be accomplished and these expectations are mainly driven by entrepreneurial ideas and images of the environment and they determine an entrepreneur’s behaviour. The perceptions of the market opportunity therefore drive the entrepreneur’s efforts to start a new venture, the greater the perceived opportunity the more likely an entrepreneur will aggressively pursue that opportunity (Edelman & Yli-Renko, 2010: 837).

2.8 LEADERSHIP AND BUSINESS SKILLS FOR ENTREPRENEURS

2.8.1 Characteristics of entrepreneurs

Timmons and Spinelli (2009: 47) argue that there are many attitudes and behaviours that characterise what an entrepreneurial mind is. To further support the elusive nature of the word entrepreneur, it is further argued that there is no single set of attitudes and behaviours which every entrepreneur must have in order to seize every opportunity that arises. There is also general consensus that there is no such a thing as a perfect entrepreneur as yet, however researchers agree on seven dominant themes of desirable and acquirable attitudes or behaviours (Timmons & Spinelli, 2009: 47).

Table 2.5: Seven themes of desirable and acquirable attitudes and behaviours

Theme	Attitude or Behaviour
Commitment and determination	<ul style="list-style-type: none"> • Tenacious and decisive, able to recommit/ commit quickly • Intensely competitive in a achieving goals • Persistent in solving problems, disciplined • Willing to undertake personal sacrifice • Immersed in the mission
Courage	<ul style="list-style-type: none"> • Moral strength • Fearless experimentation • Not afraid of conflicts, failure • Intense curiosity in the face of risk
Leadership	<ul style="list-style-type: none"> • Self starter ; high standards but not a perfectionists • Team builder and hero maker; inspires others • Treats others as you want to be treated • Shares the wealth with all the people who helped create it • Honest and reliable; builds trust; practices fairness • Not a lone wolf • Superior learner and teacher; courage • Patient and urgent
Opportunity obsession	<ul style="list-style-type: none"> • Leadership in shaping the opportunity • Has intimate knowledge of customers' needs and wants • Market driven
Tolerance of risk, ambiguity, and uncertainty	<ul style="list-style-type: none"> • Obsessed with value creation and enhancement • Calculated risk taker • Risk minimiser • Risk sharer • Manages paradoxes and contradictions • Tolerates uncertainty and lack of structure • Tolerates stress and conflict
Creativity, self-reliance, and adaptability	<ul style="list-style-type: none"> • Able to resolve problems and integrate solutions • Nonconventional, open-minded , lateral thinker (helicopter mind) • Restless with status quo • Able to adapt and change; creative problem solver • Quick learner • No fear of failure
Motivation to excel	<ul style="list-style-type: none"> • Able to conceptualize and “sweat details” • Goal and results oriented; high but realistic goals • Drive to achieve and grow • Low need for status and power • Interpersonally supporting (versus competitive) • Aware of weaknesses and strengths • Has perspective and sense of humour

Source: Timmons and Spinelli (2009)

There are multiple skills that one should possess in order to become an entrepreneur; hence, education is necessary to enhance competitiveness of the entrepreneurial sector. Education plays a fundamental role in building the required skills, however it is evident that the quality of education is more important than the quantity (Roodt, 2005: 19). To further support this statement, an overview of entrepreneurial skills is outlined below.

2.8.2 Profile of an entrepreneur and skills required

- **Technical skills:** Entails the ability of an individual to apply specific knowledge, techniques and resources successfully in the execution of an assignment.
- **Perseverance:** The most successful business people possess certain characteristics and share common attitudes, including commitment, perseverance, a tolerance to risk, and a high level of integrity and reliability.
- **Communication skills:** It is about the ability to satisfy needs of and wants of customers better than anyone else. This can be achieved through effective communication whereby information is captured properly and feedback is provided.
- **Managerial skills:** It is about handling scarce resources and executing tasks such as planning, organising, leading, coordinating, and controlling, in order to reach certain objectives.
- **Leadership skills:** It is a task of leading; it is also about the ability an individual has to influence others' behaviour so that they can voluntarily contribute to the attainment of preselected objectives. It is expected that leaders should reiterate, reinforce and redefine the vision and goals to gain support and commitment from their followers.
- **Innovative skills:** It is about bringing change, and also about bringing something that has never existed before, or a change in the status quo.
- **Pro-activity:** It is about being the first mover when it comes to the introduction of products or services rather than being a follower of the actions of competitors. Changes are eminent in growing organisations, and organisations should seek creative and innovative means of change, because success of entrepreneurial

activity depends on the changes in technology and competitors thrust, among other factors.

- **Information seeking skills:** It is about seeking information on ideas, theory, conjecture, experience, or philosophy that can be discerned with senses and intellect, and can be found in books, magazines, TV, computers, movies, and people. Information becomes valuable when it has been collected, processed, and used to provide solutions to problems or needs. It is very important for a business person to gather, process and use information in order to stay ahead.
- **Financial skills:** Entails the ability to determine the capital requirements of the venture, and ensuring that capital is available and effectively utilised. It supports the strategic planning and it is necessary for securing loans, growth planning, asset management, profit planning, and cash flow planning. Financial skills assist in drafting accurate financial statements, which enhances the image of the organisation (Roodt, 2005: 19).

2.9 SUMMARY

In chapter two the literature review on aspects related to entrepreneurial attitudes was discussed. An entrepreneur and entrepreneurship was defined and types and characteristics of entrepreneurs were discussed. Entrepreneurship was also defined from a GEM perspective and also from various researchers perspective; there was a general consensus of key features of entrepreneurs, however it was difficult to capture the clear definition of entrepreneurship. There is an agreement that an entrepreneur does not necessarily have to possess specific inherent traits, but certain skills which can be learned and acquired. There is also agreement that entrepreneurs share certain common attitudes and behaviours.

It was learnt that successful entrepreneurs are not only creative and innovative in nature, but they need strong management skills, business knowledge and established networks. The successful entrepreneurs possess necessary experience, knowledge, attitudes, behaviours, and skills for them to be able to seize opportunities as they emerge.

There is a strong relationship between education and business ownership. It is argued that formal education does not necessarily promote entrepreneurship, but it prepares students for the corporate world as workers. On the other hand education is regarded as a powerful tool to increase entrepreneurial involvement activities among young adults, but South Africa is the only country in which education and training is frequently mentioned as a weakness.

Risk-taking and risk-tolerance is one component of entrepreneurship that is very crucial; hence, there is a need for more attention in entrepreneurial education. In the discovery perspective, cognition has an impact on the chance that some people will identify and seize the opportunity. Opportunity identification depends on prior awareness and knowledge, whilst exploitation depends on having the necessary capabilities. Entrepreneurs should be able to read and recognise patterns for them to recognise opportunities.

There is no single set of attitudes and behaviours which every entrepreneur must have in order to seize every opportunity that arises; there is also general consensus that there is no such a thing as a perfect entrepreneur as yet but there is agreement on seven dominant themes of desirable and acquirable attitudes and behaviours.

CHAPTER 3

RESULTS AND DISCUSSION OF THE EMPIRICAL STUDY

3.1 INTRODUCTION

The purpose of this chapter is to present the results of the empirical study, in context with the research objectives and design, and in relation to the broader problem statement. The discussion will therefore contain the findings correlated to the research questions. The discussion also contains the various methodological issues and considerations regarding the gathering of the data.

3.2 DATA COLLECTION

This section presents explanation of the methodological issues and considerations regarding obtaining and handling the data used in the study. The section consists of two parts, each representing a different component of the data collection process. The first part contains information regarding the incorporation and construction of the questionnaire and the second part contains information regarding the data collection.

3.2.1 Incorporation and construction of questionnaire

As indicated in chapter one, the survey instrument used in the study was a standard questionnaire adapted from “Entrepreneurship in an emerging and culturally diverse economy: A South African survey of perceptions” developed by Luiz and Mariotti (2011: 65).

The structured questionnaire comprised of 40 questions testing respondents’ attitudes or perceptions towards entrepreneurship using a five point Likert scale and 10 questions focusing more on social or demographic issues. The study was conducted among 166 university students in Sedibeng district of Gauteng.

Refer to the appendix for the layout of the analytical categories relevant to the research problem and literature review.

In section A the respondents had to indicate the applicable answer by marking the designated block with a cross.

In sections B, C, D and E a five point Likert scale was used to measure responses that range from “strongly disagree” with a value of one, to “strongly agree” with a value of five. The Likert scale was particularly chosen because it is easier to compile than any other attitude-scales (Welman *et al.*, 2010: 156). The Likert scale gives a reliable measure of the actual position on the continuum, instead of indicating only whether the respondent was favourably inclined on an issue or not.

3.2.2 Data collection

The physical questionnaires were administered to the students in their lecture rooms at the conclusion of their lectures. Their participation was voluntary and completely anonymous. It took approximately 20 to 30 minutes to complete the questionnaires. The physical questionnaires were handed to the North-West University Statistical Consulting Services for data capturing and analysis.

The author applied the non-probability sampling method as it is less complicated and economical on time and financial costs. The specific approach was accidental sampling as the most convenient collection of members of the population that were near and readily available for research purpose (Welman & Kruger, 2001: 62). The sample size is 200 responses from the university and the minimum target is set at 100 responses for making valid conclusions.

A total of 166 fully completed questionnaires were returned from the sample, which constitutes a response rate of 83%. The high response rate is mainly attributed to the data collection technique applied, accessibility and availability of the study population. A total of 15 questionnaires were excluded in the data analysis due to either incorrectly completed instrument or due to visible patterns, and 19 questionnaires were not returned.

3.3 PERSONAL INFORMATION

3.3.1. Gender classification of respondents

- **Purpose of question**

The purpose of question A1, in Section A of the questionnaire (refer to Appendix A), was to determine the gender category of respondents.

- **Results obtained**

The gender classification of all university students that responded to the survey are presented in Table 3.1 below.

Table 3.1: Gender classification of respondents

Gender	Frequency	Percentage
Male	68	41.00%
Female	98	59.00%
Total	166	100%

- **Analysis of the results**

The female respondents in this study represented the highest figure as compared to male respondents (refer to table 3.1) where 59% of the respondents were female and 41% of the respondents were males.

3.3.2 Age group of respondents

- **Purpose of question**

The purpose of question A2, in Section A of the questionnaire was to determine the age group category of respondents.

- **Results obtained**

The age group of all the university students that responded to the survey are presented in Table 3.2 below.

Table 3.2: The age group classification of respondents

Age group classification of respondents	Frequency	Percentage
Below 19 years old	28	16.9%
20 to 29 years old	127	76.5%
30 to 39 years old	7	4.2%
40 to 49 years old	2	1.2%
50 above years old	1	0.6%
Total	166	100%

- **Analysis of the results**

Table 3.2 indicates that the biggest categories in this study were represented by the 20 to 29 age group and the below 19 years age group (refer to table 3.2) where 76.5% and 16.9% are recorded respectively. A total of 4.2% represented the 30 to 39 age group and 1.2% represented 40 to 49 year age group. Only one prevalent, constituting 0.6% of the respondents, was older than 50 years.

3.3.3 Race of respondents

- **Purpose of question**

The purpose of question A3, in Section A of the questionnaire (refer to Appendix A), was to determine the race group of the participants. The results can be utilised in determining the level of entrepreneurial attitudes among different racial groups within the study population.

- **Results obtained**

The racial classification of all the university students participating is presented in Table 3.3 below.

Table 3.3: Race classification of respondents

Race classification	Frequency	Percentage
African	163	98.2%
White	2	1.2%
Asian/ Indian	1	0.6%
Coloured	0	0
Total	166	100%

- **Analysis of the results**

Table 3.3 indicates that Africans constituted the largest group of all responses, representing 98.2% of the respondents. Two respondents (1.2%) were white, and only one (0.6%) was of Asian/ Indian origin.

3.3.4 Field of study

- **Purpose of question**

The purpose of question A4, Section A of the questionnaire (refer to Appendix A) was to determine the field of study of the participants within the university.

- **Results obtained**

The field of study of the participating university students is presented in Table 3.4 below.

Table 3.4: Field of study of respondents

Field of study	Frequency	Percentage
Human sciences	21	12.7%
Applied and computer sciences	2	1.20%
Management sciences	141	84.9%
Engineering and technology	1	0.6%
Total	166	100%

- **Analysis of the results**

The majority of the respondents (84.9%) were studying towards a qualification in management sciences. A total of 21 (12.7%) respondents were studying towards a qualification in human sciences, two (1.27%) respondents were studying towards a qualification in applied and computer sciences, and only one (0.6%) was studying for a qualification in engineering and technology.

3.3.5 Parents own a business

- **Purpose of question**

The purpose of question A5, Section A of the questionnaire (refer to Appendix A) was to determine if the parents of the respondents own a business. The results can be utilised in determining the influence parents have towards business ownership and entrepreneurial state of the family.

- **Results obtained**

Parents' ownership of a business of university students that responded to the survey is presented in Table 3.5 below.

Table 3.5: Parents own a business classification

Parents own a business	Frequency	Percentage
Yes	29	17.5%
No	137	82.5%
Total	166	100%

- **Analysis of the results**

Table 3.5 indicates that the majority of the respondents' (82.5%) parents 137 have no businesses. A total of 29 (17.5%) of the respondents' parents own a business.

3.3.6 Parents education

- **Purpose of question**

The purpose of question A5, Section A of the questionnaire (refer to Appendix A), was to determine parents' level of education. The results can be utilised in determining the influence of parents' level of education towards business ownership and the entrepreneurial state of the family.

- **Results obtained**

Parents' level of education of university students that responded to the survey is presented in Table 3.6 below.

Table 3.6: Parents' education classification

Parents education level	Frequency	Percentage
Tertiary education	65	39.2%
Completed grade 12	44	26.5%
High school	33	19.9%
Primary school	10	6.0%
No schooling	13	7.8%
Total	166	100%

- **Analysis of the results**

Table 3.6 indicates that the highest concentration of the respondents' parents (39.2%) have a tertiary education. A total of 44 (26.5%) of the respondents' parents have completed grade 12 (matric). A total of 33 (19.9%) have some high school education, 13 (7.8%) have no formal schooling, and 10 (6.0%) have only primary education.

3.3.7 I was given pocket money while at school

- **Purpose of question**

The purpose of question A7, in Section A of the questionnaire (refer to Appendix A), was to determine the early exposure to financial responsibility. It is to check if respondents with early exposure to financial responsibility are more likely to think that they will start their own business.

- **Results obtained**

Table 3.7: 'I was given pocket money while at school'

I was given pocket money while at school	Frequency	Percentage
Yes	132	79.5%
No	34	20.5%
Total	166	100%

- **Analysis of the results**

Table 3.7 indicates that 132 respondents (79.5%) were given pocket money while at school, and only 34 (20.5%) of the respondents were not given pocket money while at school.

3.3.8 I have a job while at the university

- **Purpose of question**

The purpose of question A8 in Section A of the questionnaire (refer to Appendix A) was to obtain information about respondents who have to work to pay their university fees as compared to those without jobs.

- **Results obtained**

The results of respondents with part-time jobs at university in this study are presented in table 3.8 below.

Table 3.8: 'Have a job while at the university'

I have a job while at university	Frequency	Percentage
Yes	21	12.7%
No	143	86.1%
Total	166	100%

- **Analysis of the results**

A total of 164 respondents (86.1%) had no part-time jobs while studying at the university, whereas 21 respondents (12.7%) had part-time jobs while studying at the university.

3.3.9 I am currently studying business subjects

- **Purpose of question**

The purpose of question A9 in Section A of the questionnaire (refer to Appendix A), was to obtain information about the effect of business classes with regard to training towards entrepreneurial content or training students for the existing labour.

- **Results obtained**

The results of students studying business subjects at the university in this study are presented in Table 3.9 below.

Table 3.9: Studying business subjects

<i>I am currently studying business subjects</i>	<i>Frequency</i>	<i>Percentage</i>
Yes	142	85.5%
No	24	14.5%
Total	166	100%

- **Analysis of the results**

A total of 142 respondents (85.5%) were studying business subjects at the university, and only 24 respondents (14.5%) were not studying business subjects at the university.

3.3.10 Parents' monthly income

- **Purpose of question**

The purpose of question A10 in Section A of the questionnaire (refer to Appendix A), was to obtain information about the effect of family income on attitude towards starting their own business.

- **Results obtained**

The parents' monthly income of the university students in this study is presented in Table 3.10 below.

Table 3.10: Parents monthly income

<i>Parents monthly income</i>	<i>Frequency</i>	<i>Percentage</i>
Below R2000	41	24.7%
R2000 to R5000	38	22.9%
R5001 to R10 000	36	21.7%
R10 001 to R20 000	28	16.9%
Above R20 000	21	12.7%
Total	166	100%

- **Analysis of the results**

The total of 41 (24.7%) of the respondents have a family income below R2000, 38 (22.9%) have a family income between R2000 and R5000, 36 (21.7%) have family income between R5001 and R10 000, 28 (16.9%) of the respondents have family

income between R10 001 to R20 000, and only 21 (12.7%) indicated that their family income was above R20 000 monthly.

3.4 ATTITUDES AND PERCEPTIONS TOWARDS ENTREPRENEURSHIP

3.4.1 Attitudes towards entrepreneurship

- **Purpose of question**

The purpose of questions B1 to B17 in Section B of the questionnaire (refer to Appendix A), was to determine the attitudes towards entrepreneurship among the respondents. The results can be utilised to determine if the respondents view entrepreneurship as a destined career choice.

- **Results obtained**

The average or mean (\bar{x}) and the standard deviation (s) (variation around the mean) of each of the 17 items assessing attitudes towards entrepreneurship as a career choice are presented in Table 3.11 below. The attitudes towards entrepreneurship are ranked from the highest to the lowest mean score.

Where Likert scale type questions (where 1 = “Strongly disagree” and 5 = “Strongly agree”) are asked, relatively low numbers represent disagreement with the statement, while relatively high numbers represent agreement with the statement. A higher number thus suggests that the respondents perceived the statement as true. In the same way, a low number represents disagreement and suggests that the statement is perceived to be false.

Table 3.11: Attitudes towards entrepreneurship

Attitudes towards entrepreneurship	N	\bar{x}	s
Academic institutions should encourage students to consider entrepreneurship	161	4.180	0.921
Wants to start own business	166	4.042	0.949
I am a risk taker	161	4.031	0.890
I prefer to work for a large company, for better career prospects	166	4.000	0.941
Entrepreneurs will do anything for profit	159	3.994	1.150
Entrepreneurship is a good way to make lots of money	162	3.932	0.998
Entrepreneurs are largely responsible for new innovations, technologies and products	163	3.896	0.998
Entrepreneurs are almost always inventors	164	3.756	0.928
Entrepreneurship is an honourable profession	163	3.693	0.932
I seriously consider entrepreneurship as career option	162	3.611	1.191
It is too risky to start own business	161	3.342	1.251
A tertiary education is not necessary to be an entrepreneur	163	2.994	1.372
I am too busy with classes to consider starting my own business	163	2.945	1.182
Buying a business is not entrepreneurship	166	2.789	1.297
I can earn more money working for someone else	163	2.650	1.075
Owning a franchise is not entrepreneurship	159	2.459	1.246
My parents are entrepreneurs	166	2.199	1.313
Total	166	3.440	0.370

- **Analysis of the results**

A high mean of $\bar{x} = 4.180$ was calculated for the statement: **Academic institutions should encourage students to consider entrepreneurship**. There was also agreement with the following statements: **I want to start my own business** ($\bar{x} = 4.042$), **I am a risk taker** ($\bar{x} = 4.031$), **I prefer to work for a large company for better career prospects** ($\bar{x} = 4.000$), **Entrepreneurs will do anything for profit** ($\bar{x} = 3.994$), **Entrepreneurship is a good way to make lots of money** ($\bar{x} = 3.932$), **Entrepreneurs are largely responsible for new innovations, technologies and products** ($\bar{x} = 3.896$), **Entrepreneurs are almost always inventors** ($\bar{x} = 3.756$),

Entrepreneurship is an honourable profession ($\bar{x} = 3.693$), I seriously consider entrepreneurship as career option ($\bar{x} = 3.611$),

The respondents expressed or neutral feelings towards the following statements: **It is too risky to start own business ($\bar{x} = 3.342$), A tertiary education is not necessary to be an entrepreneur ($\bar{x} = 2.994$), I am too busy with classes to consider starting my own business ($\bar{x} = 2.945$), Buying a business is not entrepreneurship ($\bar{x} = 2.789$), I can earn more money working for someone else ($\bar{x} = 2.650$).**

The following statements scored the lowest ratings, which indicated that the respondents were in disagreement, i.e. **Owning a franchise is not entrepreneurship ($\bar{x} = 2.459$) and My parents are entrepreneurs ($\bar{x} = 2.199$).**

3.4.2 Entrepreneurial opportunities

- **Purpose of question**

The purpose of questions C1 to C9, in Section C of the questionnaire (refer to Appendix A), was to determine if the respondents are able to identify entrepreneurial opportunities. The participating university students indicated their responses on nine statements. The responses were set out on a Likert scale type questionnaire (where 1 = “Strongly disagree” and 5 = “Strongly agree”). Lower numbers again represent disagreement with the statement and higher numbers represent agreement with the statements.

- **Results obtained**

The ability of the respondents to identify entrepreneurial opportunities is presented in Table 3.12 below. The results are ranked from the highest to the lowest mean score.

Table 3.12: Entrepreneurial opportunities

Entrepreneurial opportunities	<i>n</i>	\bar{x}	<i>s</i>
There are many entrepreneurial opportunities in student's area of study	164	3.701	1.028
I have many ideas for business ventures	166	3.663	1.042
It is too expensive to start own business	161	3.559	1.048
I am constantly alert to business opportunities	165	3.448	0.907
Need connections to start a business	164	3.445	1.283
I have good understanding of intellectual property	162	3.414	0.917
I understand what equity finance is.	165	3.382	1.039
Entrepreneurial ventures are mainly limited to business ideas	165	3.133	1.003
All the good ideas have been taken	159	2.409	1.274
Total	166	3.357	0.502

- **Analysis of the results**

A high mean of $\bar{x} = 3.701$ was calculated for the statement: **There are many entrepreneurial opportunities in the student's area of study**. This result indicates that the participants are in agreement with the statement. The same accounts for the statements: **I have many ideas for business ventures** ($\bar{x} = 3.663$), and **It is too expensive to start own business** ($\bar{x} = 3.559$).

Moderate or neutral views were indicated to the following statements: **I am constantly alert to business opportunities** ($\bar{x} = 3.448$), **Need connections to start a business** ($\bar{x} = 3.445$), **I have good understanding of intellectual property** ($\bar{x} = 3.414$), **I understand what equity finance is** ($\bar{x} = 3.382$), **Entrepreneurial ventures are mainly limited to business ideas** ($\bar{x} = 3.133$).

The following statement was rated the lowest, which indicated that the respondents were in disagreement: **All the good ideas have been taken** ($\bar{x} = 2.409$).

3.4.3 Entrepreneurial environment within the university

- **Purpose of question**

The purpose of questions D1 to D9, in Section C of the questionnaire (refer to Appendix A), was to evaluate the entrepreneurial environment within the university. The participating university students indicated their responses on nine statements. The responses were set out on a Likert scale type questionnaire (where 1 = “Strongly disagree” and 5 = “Strongly agree”). Lower numbers represent dis-agreement with the statement and higher numbers agreement with the statements.

- **Results obtained**

Perceived obstacles to the respondents to start their own businesses are presented in Table 3.13 below. The results are ranked from the highest to the lowest mean score.

Table 3.13: Entrepreneurial environment within the university

Entrepreneurship environment within the university	<i>n</i>	\bar{x}	<i>s</i>
Having a mentor will help	164	4.311	0.818
A small seed grant or (start-up fund) would encourage entrepreneurship	166	4.223	0.876
More business sector interaction would encourage entrepreneurship	166	3.904	0.889
A programme exempting student loan payments, for student entrepreneurs would encourage more students to pursue a business venture after graduation	166	3.819	0.962
Entrepreneurial or business related examples are included in classes	165	3.818	0.892
Private sector support for students entrepreneurs would result in more university based business start-ups	166	3.801	0.889
High school counsellor mentioned entrepreneurship as career option	164	3.561	1.109
Examples of how science and technology are key to business are included in class examples	165	3.539	0.997
Students are encouraged to pursue entrepreneurship ventures	166	3.476	1.077
Total	166	3.827	0.509

- **Analysis of the results**

All nine statements as presented in Table 3.13 indicated relative high levels of agreement, i.e. **Having a mentor will help** ($\bar{x} = 4.311$), **A small seed grant or (start-up fund) would encourage entrepreneurship** ($\bar{x} = 4.223$), **More business sector interaction would encourage entrepreneurship** ($\bar{x} = 3.904$), **A programme exempting student loan payments, for student entrepreneurs would encourage more students to pursue a business venture after graduation** ($\bar{x} = 3.819$), **Entrepreneurial or business related examples are included in classes** ($\bar{x} = 3.818$), **Private sector support for students entrepreneurs would result in more university based business start-ups** ($\bar{x} = 3.801$), **High school counsellor mentioned entrepreneurship as career option** ($\bar{x} = 3.561$), **Examples of how science and technology are key to business are included in class examples** ($\bar{x} = 3.539$).

The statement that was rated the lowest was: **Students are encouraged to pursue entrepreneurship ventures** ($\bar{x} = 3.476$) indicating neutral on the Lickert scale.

3.4.4 The South African entrepreneurial environment

- **Purpose of question**

The purpose of questions E1 to E5, in Section E of the questionnaire (refer to Appendix A), was to determine respondents' perceptions of the South African entrepreneurial environment. The participating university students indicated their responses on five statements. The responses were set out on a Likert scale type questionnaire (where 1 = "Strongly disagree" and 5 = "Strongly agree"). Lower numbers again represent disagreement with the statement and higher numbers represent agreement with the statements.

- **Results obtained**

The perceptions about the South African entrepreneurial environment are reflected in Table 3.14 below. The results are ranked from the highest to the lowest mean score.

Table 3.14: The South African entrepreneurial environment

The South African entrepreneurial environment	<i>n</i>	\bar{x}	<i>s</i>
South Africa is an excellent country to start a business	164	3.951	1.002
I am aware of programmes the state provides to help people start businesses	165	3.673	1.100
My local community supports entrepreneurs	159	3.516	1.072
I know how to have access to the assistance I would need to start a new business	165	3.406	0.981
It would be very difficult to raise the money needed to start a new business in South Africa	164	3.085	1.190
Total	166	3.532	0.674

- **Analysis of the results**

The statements as presented in Table 3.14 indicate relative high levels of agreement: **South Africa is an excellent country to start a business** ($\bar{x} = 3.951$), **I am aware of programmes the state provides to help people start businesses** ($\bar{x} = 3.673$) and **My local community supports entrepreneurs** ($\bar{x} = 3.516$).

The statements that were rated neutral or moderate by the respondents were: **I know how to have access to the assistance I would need to start a new business** ($\bar{x} = 3.406$) and **It would be very difficult to raise the money needed to start a new business in South Africa** ($\bar{x} = 3.085$).

3.5 SUMMARY

At the beginning of this chapter, issues with regard to methodology and data collection were discussed in detail. The results of the survey were then presented in frequency and percentage tables. The data was also presented using descriptive statistics where (*n*) denoted number of respondents, (\bar{x}) denoted the arithmetic mean and (*s*) denoted the standard deviation from the mean. The survey results were analysed in the context of the research objectives and the broader problem area.

The survey data included biographical information of all the university students that participated in the study. The biographical information included gender, age group, race, field of study, and studying business subjects. The survey data also included information with regard to family background. The data was collected on parents owning a business, parents' level of education, and parents' monthly income.

The survey also collected information with regard to respondents' money experience. Questions asked included: **I was given pocket money while at school** and **I have a job while at the university**.

The study also collected information on attitudes towards entrepreneurship as a career by respondents. The questions asked were: **I want to start my own business, Entrepreneurs are almost always inventors, Buying a business is not entrepreneurship, Owning a franchise is not entrepreneurship, Entrepreneurs will do anything for profit, Entrepreneurs are largely responsible for new innovations, technologies and products, I can earn more money working for someone else, I seriously consider entrepreneurship as career option, Academic institutions should encourage students to consider entrepreneurship, I am too busy with classes to consider starting my own business, My parents are entrepreneurs, It is too risky to start my own business, I am a risk taker, Entrepreneurship is a good way to make lots of money, and Entrepreneurship is an honourable profession.**

The questions also collected information on the ability of the respondents to recognise entrepreneurial opportunities. The questions asked were: **I have many ideas for business ventures, It is too expensive to start own business, There are many entrepreneurial opportunities in student's area of study, Entrepreneurial ventures are mainly limited to business ideas, Entrepreneurial ventures are mainly limited to business ideas, I have good understanding of intellectual property, I understand what is equity finance, I am constantly alert to business opportunities, All the good ideas have been taken and I need connections to start a business.**

The study also collected information on entrepreneurship environment within the university. The questions asked were: **Students are encouraged to pursue entrepreneurship ventures, High school counsellor mentioned entrepreneurship as career option, Examples of how science and technology are key to business are included in class examples, Entrepreneurial or business related examples are included in classes, Having a mentor will help, A small seed grant would encourage entrepreneurship, More business sector interaction would encourage entrepreneurship, Private sector support for students entrepreneurs would result in more university based business start-ups, and A programme exempting student loan payments for student entrepreneurs would encourage more students to pursue a business venture after graduation.**

Finally the study collected information on the perceptions about entrepreneurship environment in South Africa. The questions asked were: **South Africa is an excellent country to start a business, My local community supports entrepreneurs, It would be very difficult to raise the money needed to start a new business in South Africa, I know how to have access to the assistance I would need to start a new business and I am aware of programmes the state provides to help people start.**

The information gathered by the survey is used in chapter four to determine the attitude of the university students on entrepreneurship as career choice in Sedibeng district. The findings are then utilised to recommend interventions and action plans to encourage entrepreneurship as a career choice among the university students.

CHAPTER 4

CONCLUSIONS AND RECOMMENDATIONS

4.1 INTRODUCTION

According to Luiz and Marriotti (2011: 50), South Africa has a relative small informal and entrepreneurial sector. It is further explored in their study why the spirit of entrepreneurship is poor. This study seeks to explore and provide a structured understanding of the micro foundations of entrepreneurship by assessing attitudes towards entrepreneurship in relation with socio-economic, demographic and institutional factors in Sedibeng district.

The purpose of this chapter is to conclude the empirical study by presenting the current state of entrepreneurial attitudes among the university students in Sedibeng district. This chapter will further suggest action plans and recommendations to facilitate entrepreneurship development among higher education students in this region, followed by a critical evaluation of the study.

4.2 CONCLUSIONS ON THE EMPIRICAL STUDY

The following depicts a higher education student in Sedibeng district as concluded in the empirical study conducted.

4.2.1 Section A: Personal information

The majority of the higher education students in the Sedibeng district who participated in this study are females, aged 19 to 29 years old, mainly older than 20 years. Black Africans constitute the majority of the higher education students, who were mostly enrolled for management sciences and human sciences courses. The majority of the respondents are coming from a family background where parents have either a high school education or completed grade 12. The results indicates that a more than a third of the parents have a tertiary education.

The majority of the respondents had early exposure to financial responsibility because they were given pocket money while at school. Most of them, however, did not consider any part time jobs while at university. The majority of the respondents are enrolled for business subjects, whilst their family income ranges between R2000 and R10 000 per month.

It can be concluded that the majority of the respondents are predominately young Black Africans from lower income families with more than a third of the parents having university education. Most of the parents are not involved in businesses.

4.2.2 Attitudes towards entrepreneurship

The majority of the respondents strongly agreed that academic institutions should encourage students to consider entrepreneurship, they also want to start their own businesses, and they strongly believe that they are risk takers, whilst agree that they would prefer to work for a large company for better career prospects. Entrepreneurship seemed an attractive career to many respondents; nonetheless many respondents are attracted by employment and financial security offered by big companies.

The respondents agreed with the statements that entrepreneurs will do anything for profit, and that entrepreneurship is a good way to make lots of money. They agreed that entrepreneurs are largely responsible for new innovations, technologies and products, that entrepreneurs are almost always inventors, that entrepreneurship is an honourable profession, and that they are approaching neutral in considering entrepreneurship as career option.

According to the results of the study, it is evident that the majority of the higher education students have positive attitudes towards entrepreneurship as a career option. The results indicate that to some extent the respondents lack education with regards to the profile of an entrepreneur. It raises questions around knowledge on ethics because entrepreneurs will not necessarily do anything to make lots of money.

The respondents had neutral expressions to the statements: it is too risky to start my own business, that tertiary education is not necessary to be an entrepreneur, that they are too busy with classes to consider starting a business, that buying a business is not entrepreneurship, and that they can earn more money working for someone else.

The majority of the respondents disagreed with the statements: that owning a franchise is not entrepreneurship and that their parents are entrepreneurs. It can be concluded that the respondents know and understand entrepreneurship, though they are predominantly not from entrepreneurial families. The respondents do not understand the role education plays in successful entrepreneurship, and they are also not familiar with the risk factor in venture creation.

4.2.3 Entrepreneurial opportunities

As indicated by a high mean values the majority of the respondents agreed with the statement that there are many entrepreneurial opportunities in their area of study, that they have many ideas for business ventures, and that it is too expensive to start their own business.

The respondents expressed neutral feelings to the following statements: that they are constantly alert to business opportunities, that they need connections to start a business, which they have good understanding of intellectual property, they understand equity finance, and that entrepreneurial ventures are mainly limited to business ideas.

The majority of the respondents disagreed with the statement: all the good ideas have been taken. It can be concluded that the respondents believe that there are opportunities that still need to be explored but they will need a lot of financial resources to start their own businesses. It is worth noting that the respondents expressed neutral feelings on being alert to business opportunities, networking, intellectual property, and equity finance. It can be concluded that the gap exists with regard to equipping the respondents with entrepreneurial education and training.

4.2.4 Entrepreneurship environment within the university

As indicated by high mean values the majority of the respondents strongly agreed that having a mentor will help and that a small seed grant or start-up fund would encourage entrepreneurship.

The majority of the respondents agreed with the statement: that more business sector interaction would encourage entrepreneurship, that a programme exempting students loan payment, for student entrepreneurs would encourage more students to pursue a business venture after graduation, that entrepreneurial or business related examples are included in classes, that private sector support for students entrepreneurs would result in more university based business start-ups, that high school counsellor mentioned entrepreneurship as career option, that examples of how science and technology are key to business are included in class examples, and as indicated by neutral mean value, it is not clear that students are encouraged to pursue entrepreneurship ventures.

There is a strong feeling among the respondents that the university and other stakeholders should create an environment that is supportive towards entrepreneurial activities.

4.2.5 The South African entrepreneurial environment

As indicated by high mean values the respondents agreed that South Africa is an excellent country to start a business, that they are aware of programmes the state provides to help people to start a business, and that marginal in local communities support entrepreneurs.

The respondents expressed neutral feelings about the following statements: I have the know-how to have access to the assistance I would need to start a new business, and that it would be very difficult to raise the money needed to start a new business in South Africa.

We can conclude that the respondents hold a strong view that there are still many business opportunities that need to be explored in South Africa. The biggest challenge remains the access to knowledge and information with regard to available support structures.

4.3 RECOMMENDATIONS

The conclusions made on the assessment of the attitudes towards entrepreneurship including the ability to recognise entrepreneurial opportunities, the entrepreneurship environment within the university and the overall South African entrepreneurial environment clearly indicates that the higher education institution in Sedibeng is not optimally conducive for entrepreneurial behaviour.

4.3.1 Education and training

It is evident from the literature study that entrepreneurs should be equipped with certain skills for them to discover, identify and seize business opportunities. Opportunity identification depends on prior awareness and knowledge, whilst exploitation depends on having the necessary capabilities. Entrepreneurs should be able to read and recognise patterns for them to recognise opportunities. Education and training becomes vital, particularly on technical skills, perseverance, communication skills, managerial skills, leadership skills, innovative skills, pro-activity, information seeking skills, and financial skills. Risk taking and risk tolerance is one component of entrepreneurship that is very crucial, hence there is a need for more attention in the entrepreneurial education.

4.3.2 Support for entrepreneurship within the university

Literature indicates the fundamental role resources play in any successful venture, because in creating economic opportunities, entrepreneurs need resources to develop these opportunities. The management of the university can enhance the entrepreneurial activities of the students through various interventions such as:

- To promote awareness, the university should introduce entrepreneurship as part of the curriculum across all faculties.
- The university should establish a bureau for small business development, similar to the one operated by university of North West in Potchefstroom to provide support to the aspiring entrepreneurs.
- The university should make use of the VUT campus radio station host talk shows on entrepreneurship and also use this platform to celebrate the success stories.
- The university should encourage students to be involved in business activities while studying through part time employment, and campus entrepreneurship.

According to Herrington (2008: 46), the university management can overcome the challenge of creating an environment that is suitable for entrepreneurship by adopting the proposed recommendations:

- **Financing for young entrepreneurs**

The youth must be encouraged to start their own businesses and be taught that making mistakes is one way of learning. Therefore, a financial support system which allows for trial and error should be developed for entrepreneurs starting their first business. One way to start such a process and where the emphasis is on relatively higher order ideas, is to develop a system for tertiary level students similar to the Student Placement for Entrepreneurs in Education programme within tertiary education institutions in the UK. Students receive on average 4 500 pounds which must be spent in developing their business. The emphasis is more on the journey of how to establish a business than on the success of the business itself. One important fact to determine is the average start-up capital needed for people starting their first small business. The private sector, higher education institutions and local authorities should integrate their activities in order to find solutions for youth development. **Therefore, tertiary institutions should: Develop start-up capital systems for students whilst studying.**

- **Curriculum design**

It is accepted that the world is experiencing an entrepreneurial age which is characterised by factors such as accelerated innovation and the commercialisation threat at a faster rate, companies scaling down in order to be more competitive and more emphasis on project driven approaches. One can therefore assume that more must be done to ensure that the youth is employable and can start their own businesses. **Therefore: Curriculum design should support employability skills such as languages, starting your own businesses, presentation skills, creativity and leadership abilities. Specific qualifications focusing on business creation should be developed. Case studies should focus more on opportunity orientated ideas and business and lecturing staff should be empowered to support entrepreneurial activities in their respective fields.**

- **Research**

Not all youth come from families involved in their own businesses. From the discussion, it is also clear that a mindset for starting one's own business is not the dominant paradigm. Because of this, it can be expected that the youth might struggle to both identify the right business idea and implement it successfully. **Databases of possible business ideas should be developed. A conceptual research model that will support accelerated youth entrepreneurship development should be developed in the country. Research institutions should be contracted to populate this research model. All government regulations should be tested regarding their impact on youth entrepreneurship development as a standard item, and new approaches are needed to stimulate youth entrepreneurship in rural areas. Therefore, policies and programmes to encourage youth entrepreneurship in these areas should be researched.**

- **Visibility of youth entrepreneurs**

Visibility of activities is the strongest possible motivational tool to encourage others to try it out. Positive images of entrepreneurs can help to address the fear factor which prevents youth from becoming entrepreneurs. **Therefore: National competitions from youth entrepreneurs should be encouraged and visible events should be organised such as Enterprise Weeks at tertiary educational institutions. Tertiary institutions can investigate the possibility of business hives for students or allowing students businesses to operate on campuses for the duration of their studies.**

4.3.3 The South African entrepreneurial environment

Herrington *et al.* (2008: 45) further argued that in promoting the entrepreneurship will need the government to pay special attention on these challenges that prohibit entrepreneurial activities:

- **Cultural and social norms**

The South African media is not keen of reporting and celebrating the successful entrepreneurs. Instead, sporting heroes receive coverage and honour. This implies that there are limited role models for young aspiring entrepreneurs. The low levels of entrepreneurial experience and informal learning experience contributes to the lack of “can-do” attitude. There is apathy towards entrepreneurship as a career choice; most people opt for professional careers. The society is known for being hard on those who experienced legitimate business failures hence high fear of failure.

- **Financial and business support**

There are no effective communication channels between entrepreneurs and financial institutions. There is poor marketing and coordination of government interventions. There is a need for mentorship, guidance and small business training support because it is necessary for entrepreneurial development.

- **The regulatory environment and government policies**

There is a shortage of skills to comply with the legal and tax requirements by small businesses. Excessive bureaucracy and cumbersome application processes hinder small businesses from accessing the incentives from the government.

- **Government support for small enterprise**

Interventions from the government to assist small and medium sized enterprises are insignificant, such that many companies are not aware of these initiatives.

4.4 CRITICAL EVALUATION OF THE STUDY

The success of this study is based upon realising the primary and secondary objectives, as indicated in section 1.4 of this study.

4.4.1 Primary Objectives re-visited

The primary objective of this study was to assess the attitudes towards entrepreneurship among the higher education students in the Sedibeng district of the Gauteng Province. The empirical study was conducted among the population and recommendations on entrepreneurial education were compiled.

4.4.2 Secondary Objectives re-visited

The set of secondary objectives that supported the attainment of the primary objective included:

- To analyse and understand theories of entrepreneurship as a discipline
- To understand the nature of interventions from government, support programmes, and state of entrepreneurship in South Africa.
- To come up with new ways to stimulate and encourage entrepreneurship among university students.
- To understand entrepreneurship as a phenomenon and also examine the entrepreneurial attitudes.
- To identify the role society plays in the development of entrepreneurial attitudes.
- To develop guidelines and recommendations on how to practically encourage entrepreneurial attitudes among the higher education students.

The first objective, **To analyse and understand theories of entrepreneurship as a discipline**, was achieved by defining entrepreneur and entrepreneurship in section 2.2 of chapter 2 of this study.

The second secondary objective, **To understand the nature of interventions from government, support programmes, and state of entrepreneurship in South Africa** was achieved through presentation of the literature review as presented in section 2.5 of chapter 2.

The third objective, **To come up with new ways to stimulate and encourage entrepreneurship among university students** was achieved in section 4.3 of chapter 4 of this study.

The fourth objective, **To understand entrepreneurship as a phenomenon and also examine the entrepreneurial attitudes** was achieved in section 2.3 and 2.7 of chapter 2 and also in chapter 3 through the empirical study.

The fifth objective, **To identify the role society plays in the development of entrepreneurial attitudes** was achieved in section 2.4 and 2.5 of chapter 2 through literature review.

The last secondary objective, **To develop guidelines and recommendations on how to practically encourage entrepreneurial attitudes among the higher education students** was achieved in section 4.3 of chapter 4 by presenting recommendations.

Primary objective to assess attitudes and perceptions about entrepreneurship achieved based on data collected and sample statistical analysis based purely on mean scores, considering the limited scope of a mini-dissertation.

4.5 SUGGESTIONS FOR FUTURE RESEARCH

There was not enough evidence found of prior studies that the university investigated (VUT) in the Sedibeng district have special programmes that seek to promote and enhance youth entrepreneurship on campus and after graduation, therefore, it is recommended that further research in this district be conducted to aid a structured understanding of the underlying issues. The following topics concerning assessment of entrepreneurial attitudes provides basis for further research:

- Culture of entrepreneurship within the university.
- Financing and support structures for campus entrepreneurship.
- Strategies for motivating and growing student owned enterprises.
- How government policies affect youth entrepreneurial activities on campus and after graduation.
- The impact of education on the performance of youth entrepreneurs.
- The study of successful campus entrepreneurship.
- A longitudinal study which follows these respondents after completion of their studies and change in perceptions at work place.
- The perceptions of the respondents' as it changes with time and their future career choices.

4.6 SUMMARY

The purpose of this chapter was to conclude on the empirical study that investigated the entrepreneurial attitudes among higher education students in Sedibeng district. A detailed background information and the description of the university student in Sedibeng was outlined and included the following aspects: The biographical information of the higher education students included gender, age group, race classification, current field of study, parents owning a business, parents' education, given pocket money while at school, have a job while at the university, currently studying business subjects, parents monthly income.

The assessment of the attitudes towards entrepreneurship was performed through asking different related questions. Questions about the ability of the respondents to recognise and capture entrepreneurial opportunities were asked, the current state of entrepreneurship environment within the university was assessed, and finally the South African entrepreneurial environment was also explored.

Finally, the empirical study assisted in the formulation of conclusions and recommendations to the development of strategies for campus entrepreneurship and overall youth entrepreneurship development in Sedibeng district. That was followed by a critical evaluation of the study with regards to the achievement of the research objectives. Suggestions for future studies were also presented.

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APPENDIX A

ATTITUDES TOWARDS ENTREPRENEURSHIP AMONG HIGHER EDUCATION STUDENTS QUESTIONNAIRE

ATTITUDES TOWARDS ENTREPRENEURSHIP AMONG HIGHER EDUCATION STUDENTS

PLEASE NOTE:
THIS QUESTIONNAIRE MUST ONLY BE COMPLETED BY HIGHER EDUCATION STUDENTS

All information will be treated as **STRICTLY CONFIDENTIAL** and will only be used for academic purposes.

INSTRUCTIONS FOR COMPLETION:

1. Please answer the questions as objectively and honestly as possible.
2. Place a **cross (X)** in the space provided at each question which reflects your answer the most accurately. Use the following key: **1= Strongly disagree; 2= Disagree; 3= Neutral; 4= Agree; 5= Strongly agree**

EXAMPLE

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
B1	I always generate fresh business ideas	1	2	3	4X	5

It is essential to indicate your choice clearly with a **pen**

3. Please answer all the questions, as this will provide more information to the researcher so that an accurate analysis and interpretation of data can be made.
4. The results of the study will be made available to the respondents should a need arise. Your cooperation is highly appreciated and we believe filling this questionnaire will be such a wonderful experience.

RESEARCHER:

Mr. Murutluluga Reuben Kgagara

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SECTION A: PERSONAL INFORMATION

This section of the questionnaire refers to your background or biographical information; it lists the characteristics of the respondents in the survey with regards to gender, race, level of study, parent characteristics, and personal money experience. Once again, we assure you that your response will be anonymous. Your cooperation is appreciated.

A1	What is your gender	Male	Female
		1	2

A2	In which age group do you fall?	Below 19	20 – 29	30 – 39	40- 49	50 Above
		1	2	3	4	5

A3	What is your race	African	White	Asian	Coloured
		1	2	3	4

A4	What is your field of study	Human Sciences	Applied & Computer Sciences	Management Sciences	Engineering & Technology	Other specify
		1	2	3	4	

A5	Parents own a business	Yes	No
		1	2

A6	My parents education	Tertiary Education	Completed grade 12	High school	Primary school	No schooling
		1	2	3	4	5

A7	I was given pocket money while at school	Yes	No
		1	2
A8	I have a job while at the university	1	2
A9	I am currently studying business subjects	1	2

A10	Parents monthly Income	Below R2000	R2000 to R5000	R5001 to R10 000	R10 001 to R20 000	Above R20 000
		1	2	3	4	5

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
SECTION B: ATTITUDES TOWARDS ENTREPRENEURSHIP						
B1	I want to start my own business	1	2	3	4	5
B2	Entrepreneurs are almost always inventors	1	2	3	4	5
B3	Buying a business is not entrepreneurship	1	2	3	4	5
B4	Owning a franchise is not entrepreneurship	1	2	3	4	5
B5	Entrepreneurs will do anything for profit	1	2	3	4	5
B6	Entrepreneurs are largely responsible for new innovations, technologies and products	1	2	3	4	5
B7	I can earn more money working for someone else	1	2	3	4	5
B8	I seriously consider entrepreneurship as career option	1	2	3	4	5
B9	Academic institutions should encourage students to consider entrepreneurship	1	2	3	4	5
B10	I am too busy with classes to consider starting my own business	1	2	3	4	5
B11	My parents are entrepreneurs	1	2	3	4	5
B12	It is too risky to start own business	1	2	3	4	5
B13	I am a risk taker	1	2	3	4	5
B14	Entrepreneurship is a good way to make lots of money	1	2	3	4	5
B15	Entrepreneurship is an honourable profession	1	2	3	4	5
B16	A tertiary education is not necessary to be an entrepreneur	1	2	3	4	5
B17	I prefer to work for a large company, for better career prospects	1	2	3	4	5
SECTION C: ENTREPRENEURIAL OPPORTUNITIES						
C1	I have many ideas for business ventures	1	2	3	4	5
C2	It is too expensive to start own business	1	2	3	4	5
C3	There are many entrepreneurial opportunities in my specific area of study	1	2	3	4	5
C4	Entrepreneurial ventures are mainly limited to business ideas	1	2	3	4	5
C5	I have a good understanding of intellectual property	1	2	3	4	5
C6	I understand what is equity finance	1	2	3	4	5
C7	I am constantly alert to business opportunities	1	2	3	4	5
C8	All the good ideas have been taken	1	2	3	4	5
C9	I need connections to start a business	1	2	3	4	5
SECTION D: ENTREPRENEURSHIP ENVIRONMENT WITHIN THE UNIVERSITY						
D1	Students are encouraged to pursue entrepreneurship ventures	1	2	3	4	5
D2	My high school councillor mentioned entrepreneurship as career option	1	2	3	4	5
D3	Examples of how science and technology are key to business are included in class examples	1	2	3	4	5
D4	Entrepreneurial or business related examples are included in classes	1	2	3	4	5
D5	Having a mentor will help	1	2	3	4	5

D6	A small seed grant or (start-up fund) would encourage entrepreneurship	1	2	3	4	5
D7	More business sector interaction would encourage entrepreneurship	1	2	3	4	5
D8	Private sector support for student entrepreneurs would result in more university based business start-ups	1	2	3	4	5
D9	A programme exempting student loan repayments, for student entrepreneurs would encourage more students to pursue a business venture after graduation	1	2	3	4	5
SECTION E: THE SOUTH AFRICAN ENTREPRENEURIAL ENVIRONMENT						
E1	South Africa is an excellent country to start a business	1	2	3	4	5
E2	My local community supports entrepreneurs	1	2	3	4	5
E3	It would be very difficult to raise the money needed to start a new business in South Africa	1	2	3	4	5
E4	I know how to have access to the assistance I would need to start a new business	1	2	3	4	5
E5	I am aware of programmes the state provides to help people start businesses	1	2	3	4	5

WE THANK YOU FOR YOUR PARTICIPATION AND TIME.

APPENDIX B

**APPLICATION FOR PERMISSION TO UTILISE THE QUESTIONNAIRE FOR RESEARCH
ON ENTREPRENEURSHIP**

16 Stockenstroom Street
SE 6
Vanderbijlapark
1911
04 August 2011

Tel: 016 980 2541
Cell: 0836287218

Attention: John Luiz

Subject: Application for permission to utilise the questionnaire for research on entrepreneurship

I am a final year **MBA** student at **Northwest University Potchefstroom Business School**. At the moment doing research on a topic related to perceptions towards entrepreneurship as part of the fulfilment of preliminary requirements for the degree.

I am interested in using the questionnaire from the study: "ENTREPRENEURSHIP IN AN EMERGING AND CULTURALLY DIVERSE ECONOMY: A SOUTH AFRICAN SURVEY OF PERCEPTIONS" John Luiz and Martine Mariotti SAJEMS NS 14 (2011) No 1. I therefore request to be granted a permission to utilise this questionnaire in my study.

Should a need arise for further information, you are welcomed to contact my study leader at NWU Potchefstroom Business School, lecturer Prof Stephan Van Der Merwe at 018 2991414 or email: stephan.vandermerwe@nwu.ac.za .

I hope and waiting with great anticipation for your positive response.

Yours sincerely
Murutluluga Reuben Kgagara
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Student Number: 21917140
ID number: 7211095522088,