

An assessment of the attitudes of Grade 12 learners toward entrepreneurship in a selected area in the North West province

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ABSTRACT

The primary objective of this study was to assess the attitude of grade 12 learners towards entrepreneurship. This primary objective was achieved through the discussion and evaluation of the secondary objectives. The secondary objectives included the literature review relative to entrepreneurship, the empirical study and making practical recommendations. The study was conducted in a selected area in the North-West province, with a specific focus on the region as clustered by the Department of Education of the Kgetlengrivier Local Municipality.

A comprehensive literature review was conducted. In the literature review entrepreneurship was defined based on an entrepreneur's point of view and also as a process. The literature review also discussed the current state of entrepreneurship in South Africa, education and training models including measures to fast track entrepreneurship adoption among learners, and various models of entrepreneurial development. The assessment of attitude, entrepreneurial intentions of learners and opportunity recognition were other subjects covered in the literature review chapter.

After the literature review, the empirical study was conducted by means of a self-completion questionnaire administered to grade 12 learners. The questionnaire was distributed to a total of 299 learners, and the feedback accumulated to 274 respondents, which represent a good response rate of 92%. Chapter 3 focused on the empirical research by discussing the results obtained from the questionnaire. The questionnaire was structured in such a way that it firstly deals with the respondents' demographic information, after which it assesses attitude towards entrepreneurship, followed by ways of seizing entrepreneurial opportunities, and establishing the entrepreneurial environment in secondary schools including in South Africa. Furthermore, relations were determined between demographic variables and the constructs used to measure attitude towards entrepreneurship.

Following the detailed analysis of chapter 3, conclusions and recommendations were summoned to chapter 4. Overall, the results indicated a view that learners are not entirely pruned to entrepreneurship due influential factors such as their parents' or

guardian's lack of involvement in business. Furthermore, it also indicated that if learners are afforded constructive mentorship, they can be more inclined to entrepreneurship. Similarly, if they are financially assisted or motivation is provided by the government and private sectors, they can be able to venture into business.

Keywords: entrepreneurship, attitude, entrepreneurial education, South Africa, opportunity.

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LIST OF ACRONYMS

DGMT	DG Murray Trust
DoE	Department of Education
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
ILO	International Labour Organisation
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
SAIRR	South African institute of Race Relations
SALGA	South African Local Government Association
SARB	South African Reserve Bank Bulletin
SEDA	Small Enterprise Development Agency
TEA	Total Early-Stage Entrepreneurial Activity

CHAPTER 1

NATURE AND SCOPE OF THE STUDY

1.1 INTRODUCTION

South Africa faces enormous challenges including poverty and eminent high levels of unemployment that are evidently rampant in the country (National Treasury, 2011:13). Luiz and Mariotti (2011:49) support the thought as outlined on the GEM report 2011 that the challenges facing South Africa are immense, particularly with regards to the young democratic, highly unequal country and enormous socio-economic problems. Presumptuous factors that seems to be contributing to the lack of employment and poverty are such as the skilled labour shortage, HIV/AIDS pandemic, vulnerable economy, political and economic issues such as inflation targeting versus growth policy, weaker currency, labour unrest and stringent labour laws as outlined on the DG Murray Trust report (Smith, 2011:5) and Van Wyk, Boshoff and Kruger (2004:15).

The global labour market has declined due to several measures including the economic meltdown experienced during 2008 (www.ilo.org). Hence, the introduction of measures to curb the cost of production or manufacturing in companies was imperative. This has resulted in cutting costs associated with business processes and upgrading to more advanced and efficient technological systems, while compromising the labour intensive operations. Hence the reduction experienced within the job creation fraternity during 2008.

Therefore, an engagement platform to address the on-going impetus has been created by several organisations such as First National Bank (FNB) (Endeavour, 2012). The platform presented the opportunity to make deliberations and conclude on key findings about the state of entrepreneurship in South Africa, in which dialogues have been prompted to address the key issues surrounding the entrepreneurial development with the mind set of eradicating poverty and creating jobs. The Global Entrepreneurship Monitor (GEM) South African reports also reveal

the accomplishments and setbacks of the country particularly with regards to the Total Entrepreneurial Activity (TEA) index. All the GEM reports refer to challenges facing South Africa including the lack of quality education, government policies, and many more (Source: www.gemconsortium.org).

Therefore, a need to dissect the development of entrepreneurship is of critical importance. Similarly, perceived ideas about who is supposed to be an entrepreneur are still actively suggested by most individuals. Hougard (2005:27) points out that entrepreneurship can be learned and that to a large extent, coincidence determines who will start a business of their own. Hougard continues to outline entrepreneurship as a way of thinking, a way of acting, a form of organising, not a personal quality reserved for a minority of the population.

The perception one has towards entrepreneurship is highly regarded as a concerning factor among learners, particularly because South Africa has been experiencing high levels of unemployment among young people (Kelley, Singer and Herrington, 2011: 17). The objective of this research is to determine the attitude towards entrepreneurship amongst learners limited to the geographic demarcation and subsequently present the entrepreneurial environment as influenced by the behavioural patterns and the level of interest among society including the parents. Nieman and Nieuwenhuizen (2009:6) identified the value system as a fundamental element in explaining entrepreneurial behaviour. Furthermore, these authors view entrepreneurs as innovators, independent people whose role as business leaders conveyed a source of formal authority.

Hence, the study is aimed at assessing the entrepreneurial attitude of grade 12 learners in the Kgetlengrivier district in the North-West Province. The South African youth constitute a number of talented individuals, which are ideal to capture interest in the labour force environment. Hence, the objective of this study is to determine all the contributing factors towards the lack of self-employment attitude amongst learners. The characteristics of entrepreneurs are as diverse in their own rights, therefore identifying opportunities and monitoring the environment of entrepreneurship in secondary schools and around the province can reveal the attitude portrayed towards entrepreneurship.

1.2 BACKGROUND TO THE STUDY

The conventional interest in this study arise from the current situation of unemployment, insufficient absorption rate of young people into the South African labour market, and the prominent levels of poverty in and around the rural areas. The study also focuses on the issues such as the characteristics of entrepreneurs, means of opportunity identification and mitigating factors on the economic development in South Africa. The study is impeccably decorated to suit grade 12 secondary school learners.

According to the South African Institute of Race Relations (SAIRR, 2011) report, “A grim picture has been painted for the South African school leavers; with statistics showing that one in two young South Africans and two out of three young African women are jobless”. The unemployment rate among 15 to 24 year olds is 51%, more than twice the national unemployment rate of 25%, as stipulated in the latest South African Survey published by the South African Institute of Race Relations.

The honourable President of South Africa Jacob Zuma has reflected back on the statistics that relates to unemployment rate in his State of the Nation Address (Government Info, 2012). The President admits that high levels of unemployment are evident even while jobs grew rapidly between 2003 and 2008, but the unemployment rate did not fall less than the government’s set target of 20%. Therefore, introduction of entrepreneurial activities is imperative to curb or control the current unemployment situation and poverty.

According to Sikiti (2011:10), the perception of entrepreneurship, being about the “idea” was found to be persistent among South African youth. While the idea generation seems to be consistent, there are few blocking factors that potentially turn down the fulfilment of an idea into reality. The National Treasury discussion paper (National Treasury, 2011), elaborate on the interventions made by the National Youth Development Agency (NYDA) in and around the schools. The NYDA support the young potential entrepreneurs by developing programmes such as business

planning, marketing, and branding that are designed to swerve the young individuals to venture into business.

According to Smith (2011:31), the demoralising factor is lack of financial resources which have an effect of reducing the number of learners departing secondary schools towards furthering their studies with higher education institutions. Therefore, learners are mandated to add to the growing number of unemployment in South Africa. In the Global Entrepreneurship Monitor (GEM) global report, according to Bosma and Levie (2009:15), attitudes and perceptions are of critical importance in opportunity evaluation. The report also remarks that opportunity needs to prevail in order for an entrepreneur to profoundly counter the prospective opportunity. If options were warranted such as a better opportunity relative to starting a business and expected returns on employment are broad forward, the obvious appealing choice to youth will be that of employment.

This research seeks to focus on learners who are about to leave school, in order to determine their attitudes with regards to pursuing for entrepreneurship as a career, rather than pursuing for university or college endeavours. School leavers presumably find it difficult to crack into the corporate world without any expertise. Therefore, a bunch of school leavers are encouraged to study further in order to utilise their knowledge in the employment sector rather than venturing into business. The sole option of employment is normally enforced by culture, way of thinking of the community, educational background, and life style conditions.

1.3 PROBLEM STATEMENT

South Africa is a poverty stricken country, whereby high levels of unemployment are adversely evident. A large number of unemployed people in South Africa are made of young people. The latest Adcorp Employment Index report which is extracted and is based on the Quarterly Labour Force Survey (Stats SA, 2011) indicates that the unemployment rate fell sharply at an annualised rate of 3.1% in May 2011. All sectors, all occupations and all employment types recorded declines. The latest Quarterly Labour Force Survey (Stats SA, 2011) indicates that between the second

and third quarters of 2011, the unemployment level declined by 96000, which resulted in a proportional decline of 0.7 % in the unemployment rate while reaching the milestone of 25%. Despite the marginal decline in unemployment in the third quarter of 2011, 4.4 million people still remain unemployed and just over 68.2% of those people have been unemployed for a period of one year or more. Unfortunately 60.2% of the job seekers have not passed grade 12.

Supplement to the South African unemployment situation, the Bojanala-Platinum District labour market has also contributed to the relative high levels of unemployment. As stipulated in the South African Local Government Association report (SALGA, 2011) the Bojanala district labour market is characterised by low level of skills. About 15.1% of the population older than 20 years have not received any form of schooling and 19.7% have only primary education. These figures imply that nearly 35% of the total adult population can be regarded as functionally illiterate. Conversely, only 20.1% of the adult population have completed their high school education and only 5.5% have obtained some form of tertiary education.

Therefore, initiatives to instigate entrepreneurial interest among young people at an earlier age might eliminate the national crises and guide South Africa into a brighter and sustainable prosperity in the entrepreneurial arena. Non-profit organisations in collaboration with government and private sectors have initiated numerous programmes that seeks to encourage and promote entrepreneurship, however much had not been achieved to attract grade 12 school leavers. The lack of interest can be attributed to variables such as negative attitudes or perceptions towards entrepreneurship. Furthermore, lack of awareness featuring entrepreneurship in the rural areas also adds to the distinctive list of attributes that are effectively demoralising young people. Hence, an assessment of the entrepreneurial environment including the entrepreneurship education on how to correct the unemployment situation is of vital importance.

The probability of suitable employment for grade 12 learners is unpredictable in the labour sector in view of the current unemployment situation. Therefore, South African young people need to attract and develop new ways of creating wealth. Venturing into entrepreneurship is one way of bringing about change in the nation's current

situation. Hence, the study is aimed at assessing the attitudes towards entrepreneurship among grade 12 learners with a focus on the Kgetlengrivier Local Municipality. The study can therefore make a contribution to the Bojanala district through assessing the state of entrepreneurship, the intentions of learners towards entrepreneurship, available opportunities, impeding factors towards the progress of entrepreneurship and ineffective entrepreneurship education methods.

1.4 OBJECTIVES OF THE STUDY

The purpose of this study is outlined under a primary objective and secondary objectives.

1.4.1 Primary objective

The primary objective of this study is to assess the attitude and behavioural patterns or trends towards entrepreneurship among grade 12 learners in the Kgetlengrivier Local Municipality in the North-West Province in South Africa. Furthermore, it is compiled to make recommendations of how to accomplish a positive entrepreneurial attitude in which participating schools will use this study to gauge their entrepreneurial milestones.

1.4.2 Secondary objectives

Secondary objectives were constituted to develop an approach for attainment of the primary objective:

- To conduct a literature review in order to gain an understanding of entrepreneurship as a phenomenon and concepts relative to assessing entrepreneurial attitudes.
- To determine the entrepreneurial characteristics that is reflected on learners such as their ultimate understanding of entrepreneurship, cultural influences, family environment and entrepreneurial prejudice.
- To study the present government policies that subsequently address the entrepreneurial awareness programmes and execution plan in secondary

schools, and thus the implementation of those strategic policies in rural areas, while monitoring the state of entrepreneurship in schools and in South Africa.

- To conduct an empirical study that assesses the attitude of learners towards entrepreneurship among grade 12 learners.
- To make recommendations on how to fill gaps between the current and desired state of entrepreneurship in schools.
- To make practical recommendations concerning the entrepreneurship education in the demographic area of the study.

1.5 SCOPE OF THE STUDY

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

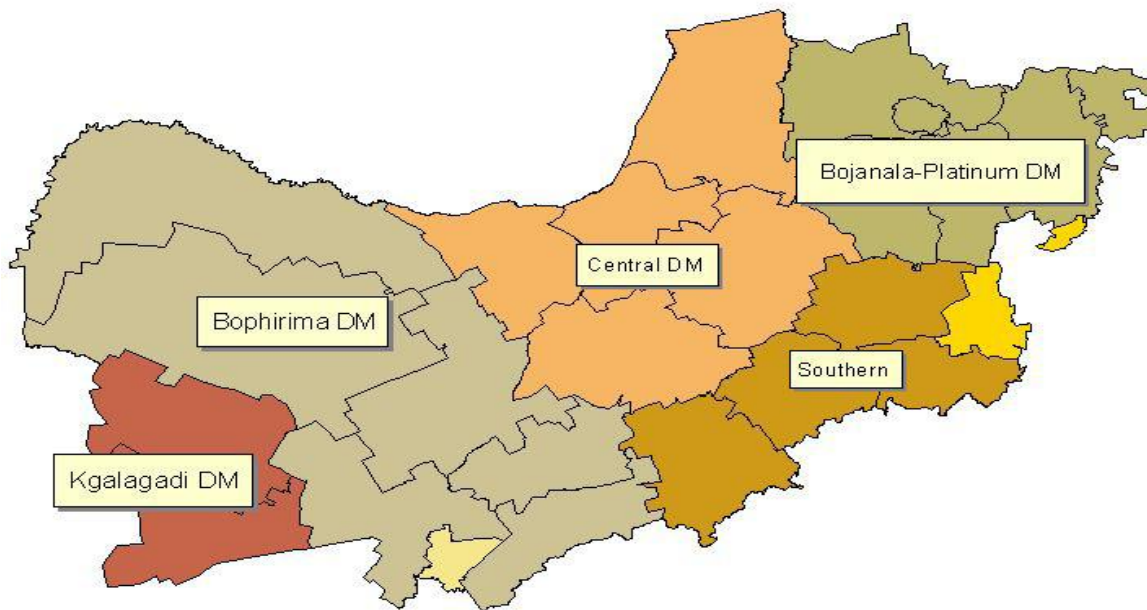
1.5.1 Field of study

The field of the study falls within the subject discipline of entrepreneurship with special focus on the attitude towards entrepreneurship among the selected group of learners.

1.5.2 Geographical demarcation

In terms of the geographical demarcation, the study remains focused on the Kgetlengrivier Local Municipality which is in the Bojanala-Platinum District in the North-West Province. According to the SALGA report (SALGA, 2011), the Bojanala-Platinum District is situated in the north-eastern corner of the North-West Province. The district comprises of five local municipalities such as Kgetlengrivier, Madibeng, Moretele, Moses Kotane and Rustenburg. Figure 1.1 depicts the North-West Province map and the more formal urban areas are located in the southern part of the province.

Figure 1.1: Map of the North-West Province, district demarcation

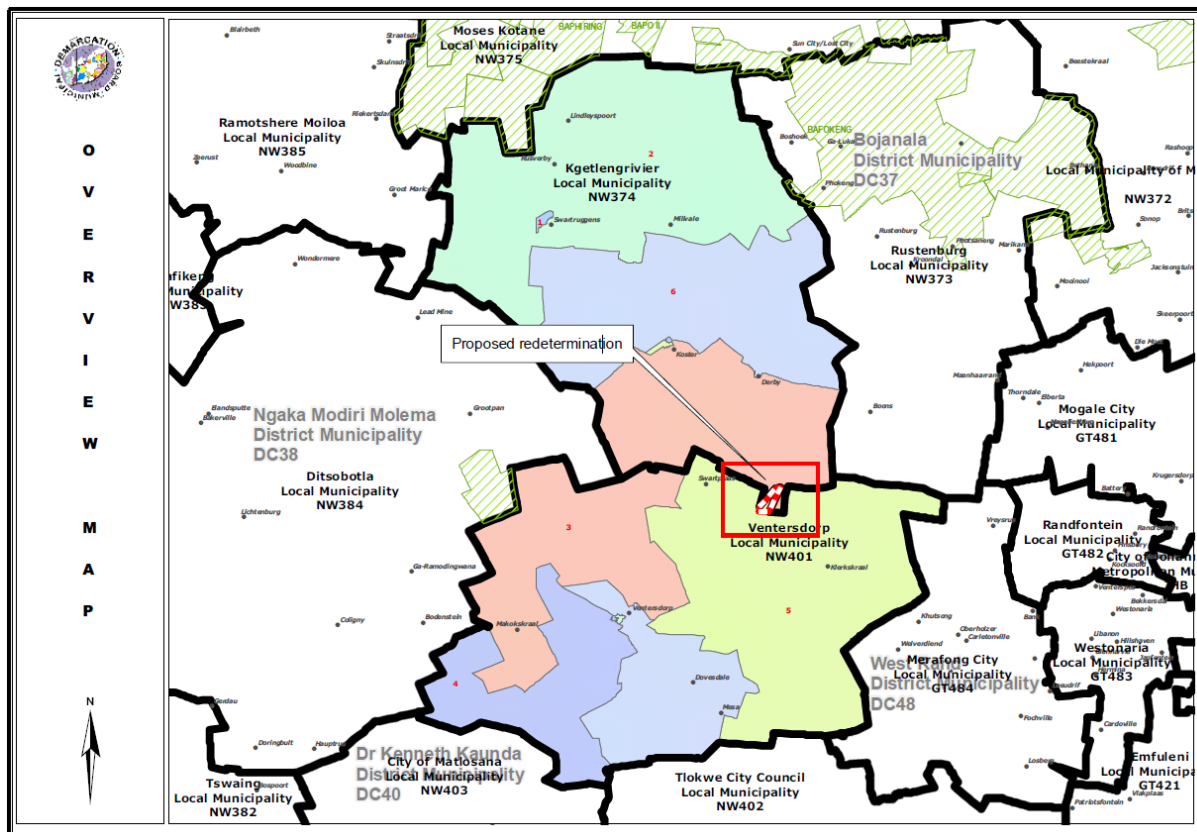


Source: <http://mfma.treasury.gov.za>

The population of the Bojanala-Platinum District amounts to 1,281,498 people and nearly 39% of the population are below 19 years of age. This implies that a significant number of young people will be entering the labour market over the next few years and will be seeking employment opportunities.

The area of focus within the Bojanala-Platinum District is the Kgetlengrivier Local Municipality. The Kgetlengrivier Local Municipality comprises of a few urban villages such as Koster, Swartruggens, Millvale, Lindleyspoort and Derby as depicted in figure 1.2.

Figure 1.2: Map of the Kgetlengrivier Local Municipality



Source: www.demarcation.org.za (Accessed date 20/06/2012)

Table 1.1 presents the Bojanala-Platinum District population, which indicates the number of wards accounted for by various local municipalities. The Kgetlengrivier Local Municipality is the second largest with respect to the size, contributing 4076.32 square kilometres, but accounts for the lowest number of people as compared to other municipalities in the same district.

Table1.1: Population statistics and wards in the Kgetlengrivier Municipality

Municipality	Size (Km2)	Population	Households	Wards
Kgetlengrivier	4076.31	36477	10497	5
Madibeng	3911.48	338261	97279	31
Moretele	1405.3	177905	43184	24
Moses Kotane	5351.43	236845	62795	30
Rustenburg	3587.99	395539	119863	36
TOTAL	18332.51	1185027	333618	126

Source: 2001 Stats SA Census and 2007 Community Survey Report

1.5.3 Kgetlengrivier Local Municipality economics

Major developments regarding entrepreneurship requires monetary injection by the Bojanala-Platinum District, as it was outlined during the strategic development plan summit hosted in 2004. Furthermore, the devised strategic objectives must be upheld for ten years. The proposed economic growth strategy intends to aggressively extend interventions by the government by investing on learning facilities especially in the rural areas, initiate mentorship programmes to assist potential entrepreneurs and the facilitation of learnership programmes within the public sector (Bojanala-Platinum growth and development strategy, 2005).

The Mayor of the Kgetlengrivier Local Municipality D.W. Moleko highlighted in her 2010/11 budget speech that assurance has been carved on issues such as infrastructure development. The report also reveals that an amount of R200 000 is set aside to provide the learners with bursaries to register with higher education institutions. Hence, the plan to eradicate poverty must be quickly devised, if such a small amount of financial aids is provided to school leavers. The introduction of entrepreneurship particularly among young people can redeem the situation and also reduce the backlog of low skilled personnel and compensate for unevenly distributed funds.

1.6 RESEARCH METHODOLOGY

The study prompts to be conducted in two phases, in which the literature review relating to attitude and behavioural patterns towards entrepreneurship will be presented, followed by an empirical study that assesses the attitudes of learners in the selected demographic area.

1.6.1 Literature review

In order to gain the relevant insight relative to attitudes or perceptions among the prospect of potential entrepreneurs, an appropriate comprehensive literature review is essential, and it should present the characteristics that make an entrepreneur. The exposition of entrepreneurship as a phenomenon and relative definitions as proposed by writers and scholars will be examined. Furthermore, the focus will also be directed to entrepreneurial education, awareness programmes, entrepreneurship as an alternative career choice and measures by the government in combating poverty. The current state of entrepreneurship in South Africa will be examined in order to identify gaps in the system that constitute entrepreneurship in the country. Similarly, the literature review will also unpack the environmental factors impeding on entrepreneurship success.

Numerous sources were consulted for the literature study with a view on the subject matter including, but not limited to the following:

- Academic journals provided by the Ferdinand Postma Library of the North-West University. Articles subjective to being peer reviewed and having the track record of being academically acceptable.
- Internet searches to examine the current issues such as unemployment rates, levels of poverty, government policies and state of entrepreneurship in South Africa and also in the urban schools. These searches included websites such as Statistics South Africa, Local Municipalities Demarcation Board, Bojanala-Platinum District, the Kgetlengrivier Local Municipality and the Department of Education. The Global Entrepreneurship Monitor (GEM)

South African report 2011 is of critical importance in shaping the study towards the problem statement.

- Published works such as textbooks.
- Previous studies including dissertations and articles such as “Perceptions regarding entrepreneurship in an emerging and culturally diverse economy: A South African survey.”

1.6.2 Empirical study

The empirical study requires a valid research design, as it motivates the implementation of thorough definitions of the study population, selection of a suitable measuring instrument and statistical techniques for data analysis (Welman, Kruger & Mitchell, 2010: 52). The study will undertake an exploratory quantitative research approach as propelled by the circumstances arising from the problem statement. The research method should be descriptive due to the state of entrepreneurship in the Kgetlengrivier Local Municipality is unknown and similarly the assessment of perception towards entrepreneurship among learners had not been previously established.

1.6.2.1 Selection of the measuring instrument

The questionnaire is structured in such a way to consider the level of maturity of learners (i.e. the language is not difficult to understand, limited academic “jargons”), influential factors in the geographic area towards entrepreneurship and the level of education among the learners. Survey questions possess an ability of using self-completion method, whereby there will be no need for learners to request any form of assistance in order to complete the questions.

The measuring instrument used in this study is a standard questionnaire adapted from a study called “Entrepreneurship in an emerging and culturally diverse economy: A South African survey of perceptions”, developed by Luiz and Mariotti (2011). Their study was designed for university students. Similarly, all their assigned variables contain crucial elements that can also assess the attitude towards

entrepreneurship among secondary school learners. Also in an attempt to reduce the apathy associated with surveys, an accompanying cover letter has been provided, which assures the participants of their response being kept confidential. The presentations of the questionnaires as administered in the survey are as follows:

- **Section A: Personal information**

Section A gathered data from respondents regarding their demographic profiles and characteristics. Nine questions were posed about topics such as **gender, age group, race, parents own a business, parents' level of education, is given pocket money while at school, have a job while a school, currently studying business subjects such as accounting and business economics, my parents' monthly income.**

- **Section B: Attitudes towards entrepreneurship**

Section B measures the attitudes towards entrepreneurship as a career choice among grade 12 learners. 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 a career option, schools 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, 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 measures the capability of the respondents to identify entrepreneurial opportunities. This section includes nine questions such as: **I have many ideas for business ventures, it is too expensive to start own business, there are many entrepreneurial opportunities in student's areas of study, entrepreneurial ventures are mainly limited to business ideas, I have a 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 school**

Section D probes into the schools' entrepreneurship environment. Nine questions were asked with regards to entrepreneurship activities in schools and the support systems available. The questions included the following: **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 are: **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 will have to indicate the applicable answer by marking the desired designated block with a cross. In these sections B, C, D and E a five point Likert scale is used to measure responses that range from “strongly disagree” with a value of one, to “strongly agree” with a value of five. The summated scale is predominantly used in most researches due to its uniqueness of being simple to compile and analyse than any other attitude scale such as semantic differential, the Guttman scale and the Thurstone scale (Welman *et al.*, 2010: 156). The Summated scale gives a reliable measure of the actual position on the field, instead of indicating only whether the respondent was favourably inclined on an issue or not.

1.6.2.2 Study population and sampling method

The target population will be narrowed to the 2012 intake of grade 12 learners within the Kgetlengrivier Local Municipality which is situated in the Bojanala-Platinum District. Hence, the sample will be representative of the public secondary schools in the selected local municipality. All participating schools in this research are administered by the government inclusive are the secondary and combined schools. An approximate number of only 299 potential candidates from six schools will participate in the survey.

The names of participating secondary and combined schools as clustered by the Department of Education (DoE) are outlined below:

- Koster Combined School.
- Moedwil Secondary School.
- Mphe-bana High School.
- Moefi Secondary School.
- Reebone Secondary School.
- Swartruggens Combined School.

The sampling method suitable for this research is the non-probability sampling with an approach of convenience sampling technique. In which the sample is accurate, easily accessible and does not contain any periodic patterns. According to Welman

et al. (2010:64), the sample has no impediments, it is relatively easy to explain and the development costs are extensively low as compared to other sampling methods.

1.6.2.3 Data collection

Questionnaires will be distributed to school managers and subject coordinators, in order to facilitate the distribution and collection of survey questionnaires among scholars. The researcher will assert the availability of questionnaires in schools is realised and clear all the uncertainties with regards to questionnaires. A single day will be afforded to two schools depending on the proximity of schools, in which distribution and collection will be handled. Completed questionnaires will be handed over to the researcher the same day. An accompanying letter that assures the participants of the anonymity and confidentiality will be read by school managers and subject coordinators in the presence of the researcher.

1.6.2.4 Data analysis

Data collected will be sent to the Statistical Consultation Services at the North-West University in Potchefstroom for capturing, coding and analysing. The results are not expected to be validated because a standard questionnaire has been used.

Analysed data will be used to recommend on the current entrepreneurial state in the selected area, expand on educational matters and entrepreneurial behavioural trends as set out by the society. Comprehensive details that determine the attitude and perceptions of learners towards entrepreneurship as a career choice will be provided.

1.7 LIMITATIONS TO THE STUDY

This study seeks to evaluate the attitude towards entrepreneurship among grade 12 learners in the Kgetlengrivier Local Municipality. Educational background, socio-economic factors, opportunity assessment and promotion of entrepreneurial activities are some of the key factors that decide the depth of involvement in entrepreneurship

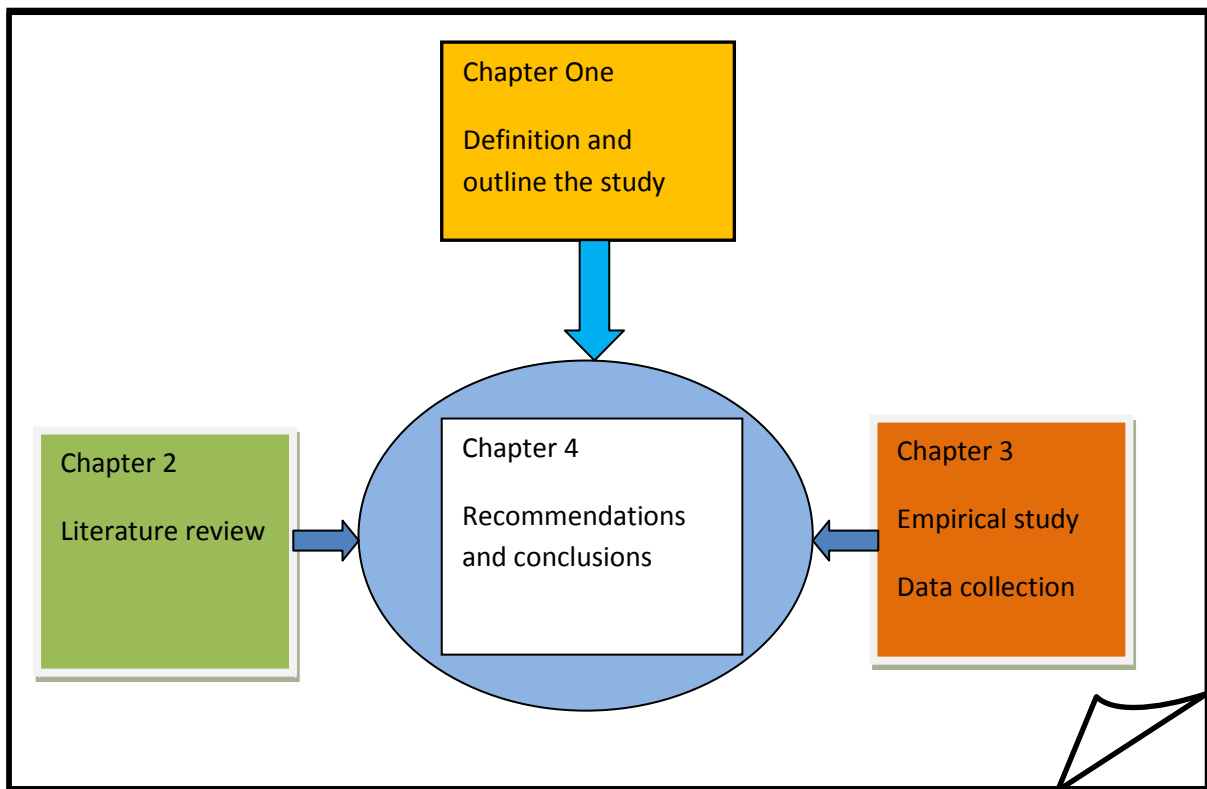
among learners. Some of the limitations and assumptions of the study are listed below:

- The outcome of this study is limited to the selected geographic area rather than the entire Bojanala-Platinum District.
- The Department of Education is segregated into clusters, with the responsibility of integrated local municipalities. The Department of Education has classed the circuits into Elands, Madikwe and Pella/Silwerkrans circuits, and the sample size will not be representative of the population in relation to clusters according to the DoE.
- Display of apathy notion among the pupils towards surveys, may adversely affect the response rate, quantity and quality of the results.
- Private schools have not contributed to this study, therefore, the results cannot be generalised.
- The study will not consider the number of active learners in school but on the grade 12 learners. Therefore, it will not be representative of the school, hence it cannot be generalised.
- The research outcome might be limited by the number of participating candidates due to unpredicted reasons such as drop-out rate.
- Limited accessibility to previous similar studies conducted in the region. Therefore, lack of resources will compromise the researcher to use similar studies from other countries and South African provinces.
- Adverse nature of the existing schools is predominantly populated by black scholars. Therefore, the outcomes cannot be representative of other racial groups. Approximately, 20% is represented by other racial groups.

1.8 LAYOUT OF THE STUDY

The layout of the study is depicted in figure 1.3, which is followed by a brief explanation of contents covered in the chapters.

Figure 1.3: Layout of the study



Chapter 2: Literature review

Chapter two covers the literature review of entrepreneurship in order to obtain insight of different concepts from other researchers on this topic. Various definitions that describe the phenomenon known as “entrepreneurship” are provided in the study. The literature will cover elementary characteristics and behavioural trends that are depicted among entrepreneurial experts. Present drivers that motivate and or demotivate scholars to start their own businesses or to consider entrepreneurship as a career option. The literature review will examine the factors that reduce the number of learners in the secondary schools and models associated to entrepreneurial behaviour.

In depth assessment of models and theories that examines attitude and perceptions. Review the current state of entrepreneurship in South Africa and the impact of entrepreneurial environment on the study including entrepreneurship education and training. The literature review entails the challenges faced by South Africa including

poverty, high levels of unemployment and the quality of education. The interventions as constituted by the South African government, private sectors and non-profit organisations in order to cap the outrageous challenges.

Chapter 3: Results and discussion of empirical study

Chapter three outlines the empirical study which includes the distribution and collection methods of the survey questionnaires. The identification of the study population will be examined. The measuring tool utilised in this study will be presented. Method of data collection and analysis of data will be thoroughly scrutinised. The presentation of results from the analysis of data will be covered in this chapter.

Chapter 4: Recommendations and conclusions

Chapter four will present and draw up conclusions that relates to the findings from the analysed data. Recommendations will be drawn according to analysis and will be presented according to the constructs measuring attitude and also disclose the state of entrepreneurship within the selected demographic area. The researcher will make remarks on the issues that contribute to lack of entrepreneurial awareness and propose interventions to fast track entrepreneurial activities within the Kgetlengrivier Local Municipality. This chapter will draw decisive and conclusive recommendations on the subject matter.

CHAPTER 2

LITERATURE REVIEW ON ENTREPRENEURSHIP

2.1 INTRODUCTION

The concept of entrepreneurship since it emerged in the 17th century, in which it represented “the person bearing risks of profit or loss in a fixed price contract with the government” (Hisrich & Peters, 2002:7). Prior to the 17th century, in the Middle Ages the phenomena was subjected to “a middleman who directed resources provided by others” (Stokes & Wilson, 2010:31). Therefore, this chapter will primarily focus on the literature associated with entrepreneurship pertaining to the South African environment including the entrepreneurial agendas on the global scale. It should outline and provide the scope of entrepreneurship from deriving the fundamental concept of entrepreneurship through to various elements that indicate the perception towards entrepreneurship among individuals. The review is probed to investigate on the essential models that governs and constitutes the entrepreneurial environment in South Africa and abroad. Similarly, the assessment of entrepreneurial opportunities sticking out of South Africa should also be identified by the literature study.

In order to dissect the South African prospect pertaining to entrepreneurship much emphasis relative to the state of education must be ordered. Entrepreneurship education and training had been previously identified as an imposing tool to fast track the adoption of entrepreneurship among individuals and organisations (Morrison, 1998:84). This propels the researcher to also focus on the models associated with entrepreneurship education, the current state of education in South Africa and implications informed by entrepreneurial education.

This chapter seeks to cover the attitudes attached to entrepreneurship by the use of analytical ability of exemplifying the body of thought relevant to aspects that presumably determines the participation in entrepreneurship. Various measuring tools are utilised to establish the kind of attitude portrait by individuals such as entrepreneurial orientation attitude scale and entrepreneurial orientation models.

Several factors may account for the lack of a positive attitude towards entrepreneurship among individuals such as the conduciveness of the South African entrepreneurial environment. Hence, the results are evident from the total early-stage entrepreneurial activities (TEA) rating as compared with other distinguishable countries in the same efficiency driven category (GEM Reports).

2.2 DEFINITIONS OF ENTREPRENEURSHIP

According to Cassis and Minoglou (2005:4), the concept of “entrepreneurship” has remained elusive despite the academic attention it has attracted. The fundamental meaning of the phenomenon “entrepreneurship” has not yet been contextually agreed on by different schools of thought (Kirby, 2003:10). Subsequently, entrepreneurship stems from the French word *entreprendre* meaning “to undertake” or “to take” in one’s own hands (Schaper & Volery, 2004:40). Probable definitions of entrepreneurship are practically subdued to follow suit the researcher’s views, in which pre-emptive arguments and views holds no means or so forth, or otherwise dictate directive paths in the world of entrepreneurship.

The following section defines the phenomenon “entrepreneurship” on the basis of an entrepreneur and the process undertaken through entrepreneurship.

2.2.1 Entrepreneurship as a person

Kumar, Poorninaa, Abraham and Jayashree (2003:7) perceive that the term “entrepreneurship” is often used synonymously with the term “entrepreneur”, it represents two sides of the same coin, but conceptually they are different. Mariotti and Glackinn (2012:3) support Kumar *et al.* (2003) in which these authors remain adamant that entrepreneurship is based on deeds of an entrepreneur such as founding the organisation and bringing products into the world. Hence, Van Aardt, Van Aardt, Bezuidenhout and Mumba (2010:4) opted to condition entrepreneurship in such a way that maintains the original definition from the *Oxford English Dictionary* in which an “entrepreneur” is defined as a person who organises, manages and assumes the risk of a business enterprise.

Van Aardt, Hewitt, Bendeman, Bezuidenhout, Van Rensburg, Naidoo, Van Aardt, Van der Bank and Visser (2011:4) and Henry, Hill and Leitch (2003:28) adopted the notion of defining entrepreneurship on an entrepreneur base, in which these authors define entrepreneurs as people who have an ability to see and evaluate business opportunities, to gather the necessary resources to take advantage of them, and to initiate appropriate actions to ensure success.

Birley and Muzyka (2000:8) add that the term entrepreneurship is a process whereby activities are undertaken by entrepreneurs, in which entrepreneurs are painted as highly motivated individuals meant to pursue business ventures. Hence, opportunity is prominently regarded as opposed to resources as a leverage that suggestively promotes the entrepreneurial process. Drucker (2006:25) defines the entrepreneur as a person who is able to create a vision from the minimum resources through using his own creativity.

2.2.2 Entrepreneurship as a process

In contrary to entrepreneurship being defined on the basis of an entrepreneur, Kuratko and Hodgetts (2007:47) regard entrepreneurship as a process of innovation and new venture creation through which four major dimensions being individual, organisational, environmental and process are aided by collaborative networks in government, education and institutions. Nieuwenhuizen, Le Roux, Jacobs and Strydom (2001:3) purport on the preceded statement that entrepreneurship is a process whereby value creation is intended to manifest through the use of resources. Bridge, O'Neil and Cromie (2003:36) add that entrepreneurship must be defined as an attempt to create a new business venture or expand on the current business.

Bessant and Tidd (2011:40) encapsulate entrepreneurship as a phenomenon that is motivated by innovative thoughts in which the powerful mixture of energy, vision, passion, commitment, judgement and risk taking provides the motive power behind the innovation process. But Kumar *et al.* (2003:7) promote entrepreneurship as a process of identifying opportunities in the market place, arranging the resources to exploit the opportunities for long term gains. It involves creating wealth by bringing

together resources in new ways to start and sustain an enterprise. Van Aardt *et al.* (2010:4) add that the definition explains the act of initiating, controlling, monitoring and sustaining an enterprise through the use of a team in order to exploit the opportunities. Van Aardt *et al.* (2010:5) expand on that the long term proposition of entrepreneurship should be based on gaining financial stability and to achieve the business growth.

Hence, Morrison (1998:28) considered a different approach in unpacking the definition of entrepreneurship which appears to revolve around two central tenets, as listed below:

- Entrepreneurship is perceived as an activity central to small business activities.
- Entrepreneurship is perceived as a cluster of behavioural and psychological propensities including risk-taking, innovation and the ability to make decisions.

In the midst of apparent indefinable definitions of entrepreneurship, Herrington, Kew and Kew (2010:11) considerately tabulated the timeline of evolving definitions of entrepreneurship as cited by several branded authors are presented in table 2.1.

Table 2.1: Tracking entrepreneurship in South Africa

Author	Definition
Schumpeter (1934)	Entrepreneurship is seen as new combinations, including the doing of new things that are already being done in a new way. New combinations include: Introduction of new goods, new method of production, opening of new markets, new source of supply and new organisations.
Kirzner (1973)	Entrepreneurship is the ability to perceive new opportunities. This recognition and seizing of the opportunity will tend to “correct” the market and bring it back to equilibrium.
Drucker (1985)	Entrepreneurship is the act of innovation that involves endowing existing resources with new wealth capacity.
Stevenson and Roberts (1985)	Entrepreneurship is the pursuit of an opportunity without concern for current resources or capabilities.
Rumelt (1987)	Entrepreneurship is the creation of new business: new business meaning that they do not exactly duplicate existing business but have some element of novelty.
Macmillan (1988)	Entrepreneurship is the creation of new enterprise.
Gartner (1988)	Entrepreneurship is the creation of organisations: the process by which new organisations come into existence.
Timmons (1997)	Entrepreneurship is a way of thinking, reasoning and acting that is opportunity obsessed, holistic in approach, and leadership balanced.
Venkataraman (1997)	Entrepreneurship research seeks to understand how opportunities to bring into existence future goods and services are discovered, created, and exploited, by whom and with what consequences.
Sharma and Chrisman (1999)	Entrepreneurship encompasses acts of organisational creation, renewal, or innovation that occur within or outside an existing organisation.

Source: Herrington *et al.* (2010:11)

The most prevalent subjects reflective on table 2.1 are innovation, self-fulfilment or autonomy, opportunity recognition, pursuit of new ventures and promotion of existing businesses. Therefore, it is evident that a clear-cut definition of entrepreneurship is not composed of a single perception.

Hence, Coulter (2003:4) acknowledges the importance of diverse definitions as commended by various authors, but concludes that within the pronouncement of defining the phenomenon, there are two critical notions that complement entrepreneurship which are innovation and the role played by an entrepreneur within the entrepreneurial process. Pretorius and Van Vuuren (2003:514) argue that entrepreneurship cannot only be opined to the process of entrepreneurship but also to the activities of an entrepreneur as primary factors that contributes to the definition. Therefore, to further define entrepreneurship it is imperative to relinquish the concept from the basis relative to dimensions of entrepreneurship.

2.2.3 Dimensions of entrepreneurship

Pretorius and Van Vuuren (2003:515) promote the view of entrepreneurial categories in order to substantiate on the proposed definitions of entrepreneurship. The dimensions of entrepreneurship are categorised in a fashion that depicts the qualities predominantly attributed by an entrepreneur such as leadership, low level of risk aversion, cultural propensity, and intentions as motivated by life experience.

Birley and Muzyka (2000:9) proposed six critical dimensions of business practices in order to relate to the description of entrepreneurship, which are as listed:

- *Commitment to opportunity* – it is necessary to move beyond the identification of opportunity to its pursuit.
- *Commitment of resources* – lack of resources may deter the ultimate goal of an entrepreneur, and therefore exchange canvass between resources and opportunities should be established.
- *Controls of resources* – entrepreneurs are encouraged to learn on how well to effectively manipulate and control resources.
- *Reward philosophy* – entrepreneurs must be explicitly focused on creation and harvesting of value.

In contrast to the preceded dimensions of entrepreneurship, Schaper and Volery (2004:5) present dimensions of entrepreneurship as follows:

- *An individual* – critical key success factor of an entrepreneurial process is dependent on the individual's propensity to succeed.
- *An Act* – entrepreneurs need to execute plans of action rather than only being subjected to opportunity identification.
- *An organisation* – the author regards creation of organisations as a condition for entrepreneurship.
- *Innovation* – innovation is a considerable instrument that entirely defines and constitutes entrepreneurship as a phenomenon.

According to Mariotti and Glackin (2012:3); Stokes and Wilson (2006:31); Read, Sarasvathy, Dew, Wiltbank and Ohlsson (2011:200), the entrepreneur constitute and propels the entrepreneurship process. Therefore, an equally important task to be undertaken by an entrepreneur is to recognise or identify an opportunity and thereby carefully managing the accompanying risk.

Hisrich and Peters (2002:17) perceive entrepreneurship as an effective method for bridging the gap between science and the marketplace, creating new enterprises, and bringing new products and services to the market. Hence, the state of entrepreneurship in South Africa needs to be assessed, in order to clarify and uproot hurdles affecting the progress or effectiveness of entrepreneurship programmes.

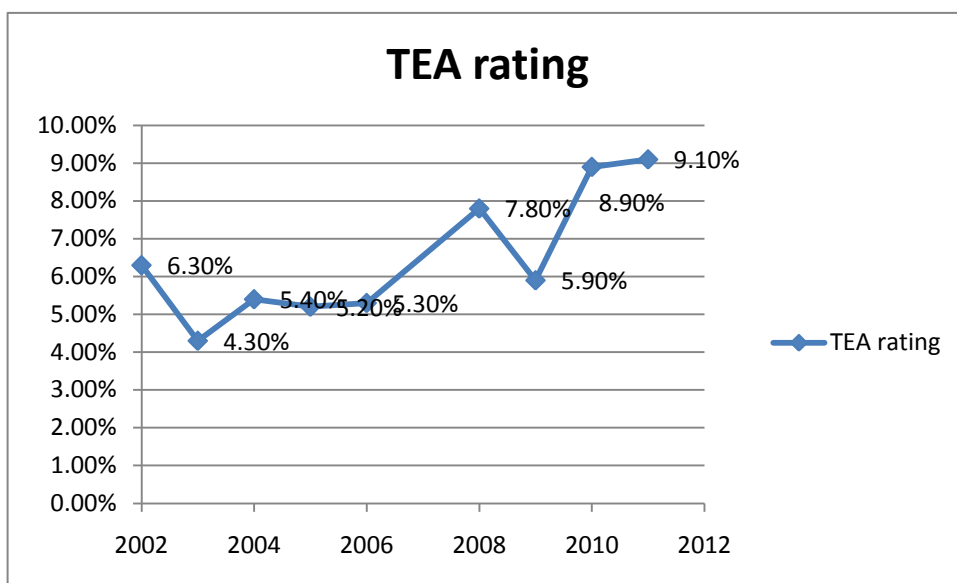
2.3 STATE OF ENTREPRENEURSHIP IN SOUTH AFRICA

2.3.1 Global entrepreneurship monitor rating

The Global Entrepreneurship Monitor (GEM) research initiative is administered to monitor the entrepreneurial activities relative to business start-ups including participation of various role players such as the adult population between the ages of 18 and 64. The principal objective of the total early entrepreneurial activity (TEA) index is to compare the entrepreneurial activities with other commendable competing countries (GEM report SA, 2011:16). According to Simrie, Herrington, Kew and Turton (2011:14), South Africa remains one of the poorly performing countries with regards to entrepreneurial activities, despite the fact that considerable effort to bring

about attractive entrepreneurial participation with the implementation of intensive and stringent government policies and programmes. Figure 2.1 illustrates the TEA rating trend of South Africa over the period between 2002 and 2011, the trend indicates a convincing volatile rate with slightest increase in 2011, but the pressure is still mounting on South Africa with its rating still below the average, as compared to other countries (GEM report SA, 2011:4).

Figure 2.1: South Africa’s TEA rate over the period between 2002 and 2011



Source: GEM report 2011

2.3.2 Key challenges faced by South Africa

The National Treasury proposed few interventions in order to spur growth and economic development in South Africa through encouraging entrepreneurship and innovation (National Treasury, 2011). Thus, an encouraging effort but the current South African crisis relative to unemployment levels is of a concern with 25% of the population being jobless (JP Morgan, 2012). Luiz and Mariotti (2011:49) postulate that challenges facing South Africa are immense because it is a relatively young democratic, highly in-egalitarian country, with enormous socio-economic problems. Jobs are also not created at an expected faster rate and also with school leavers having expectations of being employed.

Conveniently, measures are continually devised to counter the unemployment and poverty situation among South Africans. An effort such as the formation of entrepreneurial dialogues to highlight and track the state of entrepreneurship in South Africa, in which this has had benefits as deliberations and key findings were presented on burning issues (Endeavour, 2012). Furthermore, insightful findings derived from the conference as listed below facet critical aspects that need urgent intervention by the government in collaboration with financial institutions, private sectors, and small and medium business (Davis, 2010:3).

Key challenges facing South Africa:

- A successfully spotting and taking market opportunity is a function of an entrepreneur's industry knowledge.
- The challenge of getting funding: familiarity and distinctiveness.
- An entrepreneur's social network plays a huge role in the likely success of the enterprise.
- Sales & Profits is vanity; Cash Flow is reality – the short term nature of South Africa's investment culture.
- Real entrepreneurs do not start a business to delight investors.
- Banks do not have a mandate, or leeway, to make risky investments.
- Initial business funders must be real partners who share the vision and have a long-term appetite to see the business grow.
- It is harder to find customers than capital; capital flows to commercial success.

Recommendations that came forth from the above mentioned conference included the involvement of individuals with high net-worth capital to invest in business ventures and equally share the risk associated with equity-ownership. Thus entrepreneurs should avoid seeking funding through other means but concentrate on financial service institutions such as banks, in order to reduce the venture capital risk.

South Africa remains serious about combating unemployment levels through entrepreneurship, it is evident from few government initiatives such as the

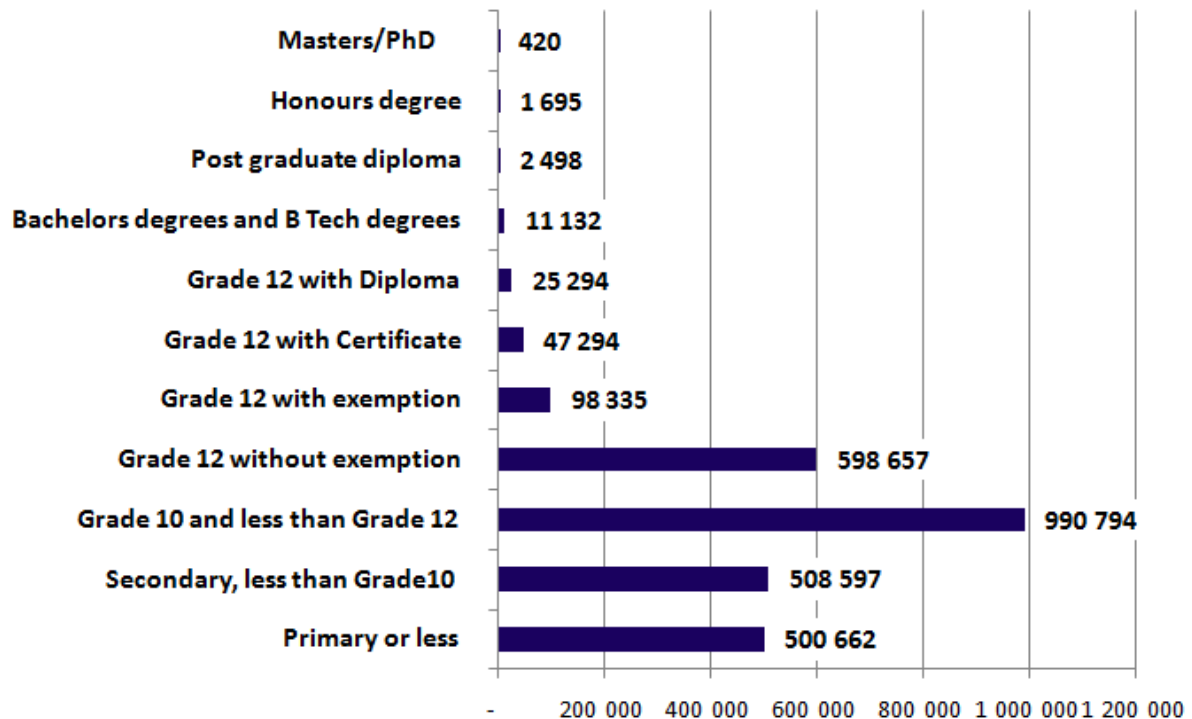
Umsobomvu Youth Fund and the National Youth Policy Framework; the National Youth Development Agency, and the Presidency's publication of the second Generation National Youth Policy 2009-2014 (Van Aardt *et al.*, 2011:8).

According to Herrington *et al.* (2010:11), South Africa faces many challenges relative to the high unemployment rate, whereby contribution of many factors is of reason to its existence but the predominant element is lack of education in conjunction with skills scarcity and experience. Lack of financial assistance or access to financial aids is one of the factors if not the primary element that has worsened the revitalisation programs of entrepreneurship especially towards cultivating the culture of entrepreneurship among young people (Herrington *et al.*, 2010:15). Therefore, demoralising variables such as the lack of finance, poor quality education and skills scarcity are at the crux of persistent failure with regards to harnessing entrepreneurship in South Africa.

According to Herrington *et al.* (2010:31), the prospect of education in South Africa is highlighted by the contributions made by the government. In which an amount equivalent to R189.5 billion was allocated to education during 2011, but not much has been achieved with regards to improving the state of education. Relative to this prevalent poor performance is the poor quality infrastructure, lack of books and high absenteeism of teachers. Hence, it is expected for this poor situation to further cascade into the state of entrepreneurship education.

According to the DG Murray Trust report (2011), lack of higher education is driven by high drop-out rates. The result from their research shows that the attendance of young people at higher educational institutions remains poor and thereof lack of continuity among individuals with their studies is also prevalent. This clearly exposes some of the educational predicaments facing South Africa if not properly addressed. If attendance at an educational institution is in such a dire state as illustrated in figure 2.2, then an imperative means of fostering and promoting entrepreneurship is urgently required before an unforeseeable bleak picture is painted.

Figure 2.2: Attendance at an educational institution amongst persons aged 5 to 24 years (2002–2007)



Source: StatsSA (2007)

Figure 2.2 shows a decline in a number of students instituted on grade 12 as compared with a cluster of grade 10 and 11 pupils. Furthermore, it indicates a marginal number of learners are exposed to tertiary education. Therefore, a call to assess the state of entrepreneurship education is prompted by these unsatisfying results.

2.4 ENTREPRENEURSHIP EDUCATION AND TRAINING

Education systems are important in the development of creativity and idea formulation. Creative thinking can be enhanced or constrained by the education system and this will affect the way opportunities are viewed (Deakins & Freel, 2003:58). Bygrave and Zacharakis (2011:22) widely believe that levels of educational attainment have implications on entrepreneurial behaviour.

2.4.1 Education and training defined

Feinstein, Mann and Corsun (2002:739) (Cited by Steenkamp, Van Der Merwe & Athayde, 2011:50) stipulate that education and training fundamentally have different meanings: “Education is a process whereby knowledge is transferred to students primarily in theory-based lecturers, while developing critical thinking skills and the ability to ask questions and formulate answers”. Contrast to education is training in which it relates to an on-the-job exchange program, capability to effectively communicate and have practical methods entailed with decision-making. Furthermore, “Education focus on the product rather than the process, and training is more concerned with the process”. Hence, within the entrepreneurial fraternity, there is a growing concern of entrepreneurship education.

Ogundele, Akingbade and Akinlabi (2012:151) and Isaacs, Visser, Friedrich and Brijlal (2007:614) add that entrepreneurship education is the structured formal conveyance of entrepreneurship competencies which in turn refers to the concepts, skills and mental awareness used by individuals during the process of starting and developing their growth oriented ventures. Furthermore, training is “the process of systematically acquiring job related knowledge, skill and attitude in order to perform with effectiveness and efficiency specific tasks in an organization”.

Furthermore, Ogundele *et al.* (2012:151) accentuate that the acquisition of knowledge and skills during the training phase is not only designed for personal achievement but also for commercial enterprises. Education is a utility that predisposes an organisation to invest financial and material resources in the entrepreneurial environment. Skills required by an entrepreneur can be classified into three main components being technical skills, business management and personal entrepreneurial skills.

2.4.2 State of entrepreneurship education in South Africa

Entrepreneurship education ranks high on policy agendas in Europe and the United States (Graevenitz, Harhoff & Weber, 2010:90). While in South Africa the government is trying to solicit the driving forces that promotes entrepreneurship, one

distinctive constraint has been identified as lack of higher education (Smith, 2011:11). South Africa has established a few institutions such as the National Youth Development Agency (NYDA), Small Enterprise Development Agency (SEDA), Ntsika Enterprise Promotion Agency and the Umsobomvu Youth Fund (UYF) in order to nudge individuals towards a direction of entrepreneurial field, particularly among the youth (Mahadea, Ramroop & Zewotir, 2011:67). Entrepreneurship education is regarded as an enhancing measure that intensifies the value adding object among the youth participating in entrepreneurship (Nieuwenhuizen & Groenewald, 2008:130). The impact of entrepreneurship education has been recognised as one of the crucial factors that assist the youth to understand and display a positive attitude towards entrepreneurship (Chen & Lai, 2010:2).

A model for entrepreneurial process and economic growth as proposed by Schaper and Volery (2004:12) opine to the inclusion of entrepreneurial coaching and education in the learners' curriculum, in which these elements are subjected to confide within the entrepreneurial framework as the primary elements that brings forth entrepreneurial opportunities. Burns (2008:34) points out that an entrepreneur is much better if educated.

South Africa has failed when it comes to imposing methods of entrepreneurship education and training, including offering the best quality elementary education in the schools (Herrington *et al.*, 2010:88). Thus it calls for an urgent revolution towards entrepreneurship education with a convincing aptitude. According to Herrington *et al.* (2010), the current primary restraining force towards the development of entrepreneurship in the country is education and training. The South African experts consider lack of entrepreneurship education as a number one factor leading the pack with 69% as compared to an average of 28% as proposed by the GEM report experts. The GEM experts regard government policies as the major hurdle towards economic and entrepreneurial development (Herrington *et al.*, 2010).

2.4.3 Inculcation of entrepreneurship through education

According to Gibson, Harris, Mick and Burkhalter (2011:12), “the effective educational programs require the use of multiple learning tools and strategies, often through collaborative efforts”. Efforts including experimental training activities and participation by higher education institutions to allow students to obtain their entrepreneurial potential through skill transfer programs need to be devised. According to Othman and Ishak (2009:431), the positive attitude can be moulded through the education system. Furthermore, a change in the education system is much needed in order to widen the scope of career choices among learners.

Entrepreneurship education and teaching programs are influencing student’s entrepreneurial intentions and behaviours (Fayolle & Gailly, 2004:4). According to North (2002:24), the primary objective of the various formal and informal programmes in entrepreneurship education is to cultivate entrepreneurial creativity and to develop the entrepreneurial skills. Encouraging students to become active in their learning endurance accompanied by hands on experiences will enable them to learn for competency building (Izquierdo & Buelens, 2008:7).

Nieuwenhuizen and Groenewald (2008:129) argue that entrepreneurial education and training can be derived from two perspectives. Firstly, it explains the business planning, functions and management skills. Secondly, the influence as carried over from parents and educators are bound to foster the entrepreneurial skills and traits. Furthermore, Nieuwenhuizen and Groenewald (2008:130) concur with Ogundele *et al.* (2012) that the main focus of entrepreneurial education and training is concentrated on business skills training, technical skills training and entrepreneurial skills training.

Table 2.2 presents recommendations by various South African authors which details the critical traits needed in order to advance with entrepreneurship education. The prevalent element among these recommendations is teaching methods encapsulated by the process to be followed during the entrepreneurship education.

Table 2.2: Recommendations for entrepreneurship education in South Africa

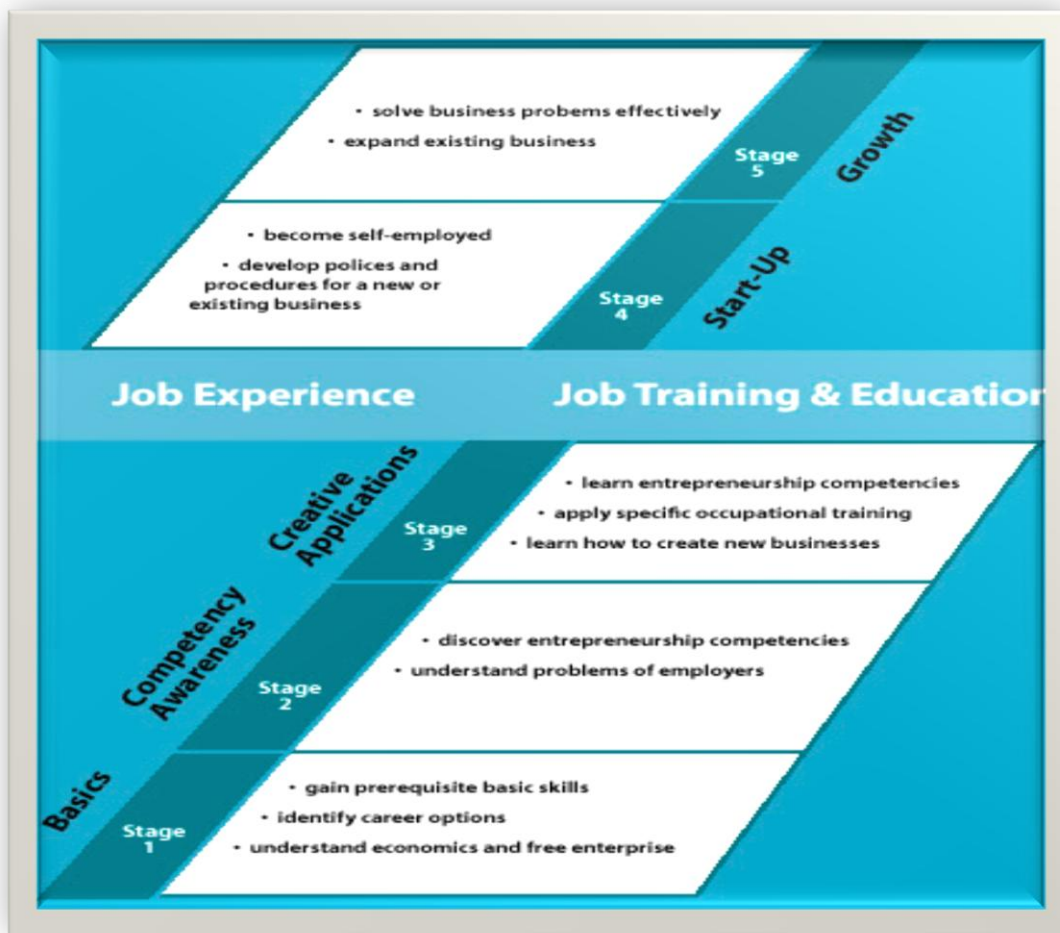
Scholar	Recommendations
Nieuwenhuizen and Groenewald (2008)	Teach learners self-concept (exposure to role models and mentors), creativity and innovation (how to compose ideas and approaches), risk orientation (how to evaluate risk) and good human relations (how to persuade people)
Isaacs <i>et al.</i> (2007)	Include enterprise education in schools and tertiary institutions. Teachers and academics must create and nurture interest in enterprise education. Organised business must be involved as role models and for financial support. Networking between all stakeholders is vital. International affiliation with 'like-minded' organisations should be sought to establish contact on a global basis and promote the transfer of knowledge and feasible methodology.
Co and Mitchell (2006)	Curriculum development should be an on-going process with cooperation between government, higher education and secondary schools. Present teaching methods must be re-assessed to ensure they are effective. Partnerships with local communities and small business owners are crucial for support and mentorships. Academics must continuously update themselves on the latest developments and trends in entrepreneurship education.
Horn (2006)	Teachers must continuously acquire relevant knowledge of new developments in their disciplines and learners should be prepared for the realities of the South African environment (part-time employment, flexibility and life-long learning). Teachers must have the ability to assist learners in developing entrepreneurial and critical thinking. Subjects need to be made more attractive and imitable through a positive attitude and enthusiasm on the part of teachers.

Source: Steenekamp (2009:84)

2.4.4 Models of entrepreneurship education

Isaacs *et al.* (2007:615) and Ogunlele *et al.* (2012:152) concur on a model that stage entrepreneurship education development as depicted in figure 2.3.

Figure 2.3: Five stages of entrepreneurship training



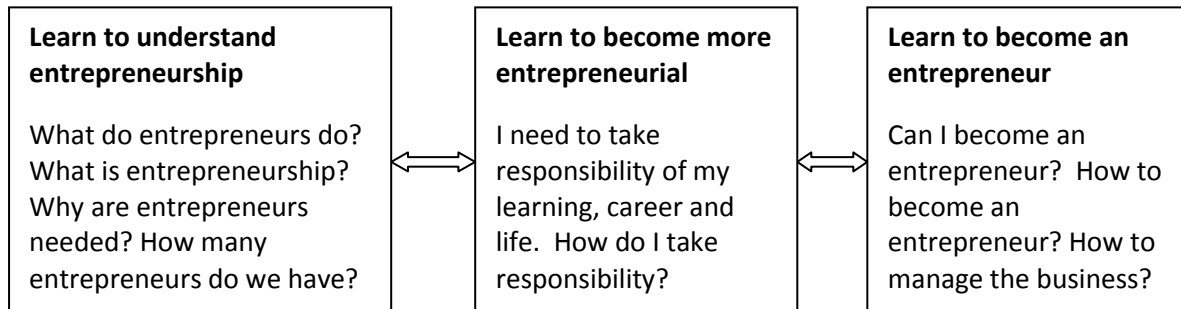
Source: Ogundele *et al.* (2012) (Adapted from Isaacs *et al.* (2007))

Basically, the model has five critical stages in which the first stage is focused on promoting an acquirement of essentials relevant to skills, and importantly understands the economics and free enterprise dimensions. The stage two is designed to cater for discovery of entrepreneurial competencies. Subsequently, cater for the creative mode applicable to learning entrepreneurial competencies and applying the specific training. Post acquirement of the necessary skills is subjected to start-ups and growth of the business.

Isaacs *et al.* (2007:623) add that the Hytti model promotes the fundamental understanding of entrepreneurship through learning processes as shown in figure 2.4, and it follows the basic principles expected from an entrepreneur. The model

integrates elements that are deemed essential in entrepreneurial education and training.

Figure 2.4: Hytti model of entrepreneurship education



Source: Isaacs *et al.* (2007) (Adapted from Hytti, 2002)

According to Obisanya, Akinbami and Fayomi (2010:91), the conceptual Hytti model embodies some elements of a model employed and developed at Obafemi Awolowo University (OAU), known as Model of Entrepreneurship Education in OAU. The University introduced studies of entrepreneurial education aimed at assisting graduates to be job creators rather than being job seekers. Hence, the modules focused on teaching methods and contents are based on three essential concepts:

- Enterprising behaviour/ attitude
- The entrepreneurial process
- The student's self-knowledge of their own competences in relation to carrying out entrepreneurial processes.

All modules were designed with the aim of assisting students to develop a positive perception towards starting and owning a business. Further, to induct students into an established environment in order to acquire the basic knowledge and skills in entrepreneurship (Obisanya *et al.*, 2010:91). Tam (2009: 652) agrees that the teaching methods should not just transfer knowledge, but develop the building-up of skills and attitude in favour of entrepreneurship. Tam also expands on GIBB'S model and describes the two different styles of teaching and learning, the didactic approach and the enterprising style. The didactic approach emphasises lecturing and

examination whereas the enterprising approach emphasises constructivist learning. GIBB's model has been summarised in figure 2.5.

Figure 2.5: GIBB'S model

DIDACTIC AND ENTERPRISING LEARNING MODES

Learning from teacher alone	Learning from each other
Passive role as listener	Learning by doing
Learning from written texts	Learning from personal exchange and debate
Learning from 'expert' frameworks of teacher	Learning by discovering (under guidance)
Learning from feedback from one key person (the teacher)	Learning from reactions of many people
Learning in well organised, timetabled environment	Learning in flexible, informal environment
Learning without pressure of immediate goals	Learning under pressure to achieve goals
Copying from others discouraged	Learning by borrowing from others
Mistakes feared	Mistakes learned from
Learning by notes	Learning by problem solving

Source: Tam (2009), adapted from Gibb (1993)

Henry, Hill and Leitch (2003:99) support the preceding model by further on illustrating the main differences between classroom and real world entrepreneurial learning as outlined in table 2.3. In view of the differences as illustrated in table 2.3, the appropriate measures need to be devised in order to fill up the entrepreneurial educational gaps.

Table 2.3: Learning processes

University/ Business School- Classroom	Entrepreneurial- Real World
Critical judgement after analysis of large amount of information	'Gut feel' decision with limited information
Understanding and recalling the information itself	Understanding the values of those who transmit and filter information
Assuming goals away	Recognising the widely varied goals of others
Seeking verification of the truth by study of information	Making decisions on the basis of judgement of trust and competence of people
Understanding basic principles of society in the metaphysical sense	Seeking to apply and adjust in practice to basic principles of society
Seeking the correct answer with time to do it	Developing the most appropriate solution under pressure
Learning in the classroom	Learning while and through doing
Gleaning information from experts and authoritative sources	Gleaning information personally from any and everywhere and weighing it up
Evaluation through written assessments	Evaluation by judgement of people and events through direct feedback
Success in learning measured by knowledge-based examination passed	Success in learning by solving problems and learning from failure

Source: Henry *et al.* (2003)

The effect of entrepreneurial education is eminent when considering the determination process of attitude, social norms, perceived behavioural control and self-efficacy among individuals when gauging the entrepreneurial intentions.

The study shows that entrepreneurship education and training has a critical role to play in cultivating entrepreneurship, and harnessing the entrepreneurial environment. To a certain extent, it can also determine the long-life success of the venture and

stimulate the entrepreneurial spirit among individuals. People are more inclined to become entrepreneurs if correct entrepreneurial information is gained through education and training. Therefore, it requires the government to support efficient or potential initiatives. The government agencies such as SEDA, the National Youth Development Agency and the Development Corporation should organise practical training for students involved in entrepreneurship education or for those interested in being involved with entrepreneurial practice (Olufunso, 2010:93).

2.5 ASSESSMENT OF ATTITUDE

The following section is informed by different tools that assess the attitude towards entrepreneurship and factors that engages one to be entrepreneurially active. The development of a tool used to measure the entrepreneurial attitude enables the quantification of the entrepreneurial attitude among students. Some of the researchers such as Tam (2009:653), Luiz and Mariotti (2011:65); Musengi-Ajulu (2010:5) and Olufunso (2010:91), embarked on clarifying the usage of different measuring tools.

2.5.1 Attitude towards entrepreneurship

According to Gibson *et al.* (2011:13), entrepreneurial attitude “is a complex mental state involving beliefs, feelings, values, and dispositions to act in a certain ways”. For example, the extent to which people think there are good opportunities for starting a business, or the degree to which they attach high status to entrepreneurs, might be termed entrepreneurial attitudes (GEM global report, 2009). Tamizharasi and Panchanatham (2010: 215) add that attitude refers “to an object, be it a specific person, place, thing, event, activity, mental concept, cognitive orientation, life style or even combinations of the various categories”.

Chen and Lai (2010:2) surfaced four statements that describe the view of attitude towards entrepreneurship, i.e.:

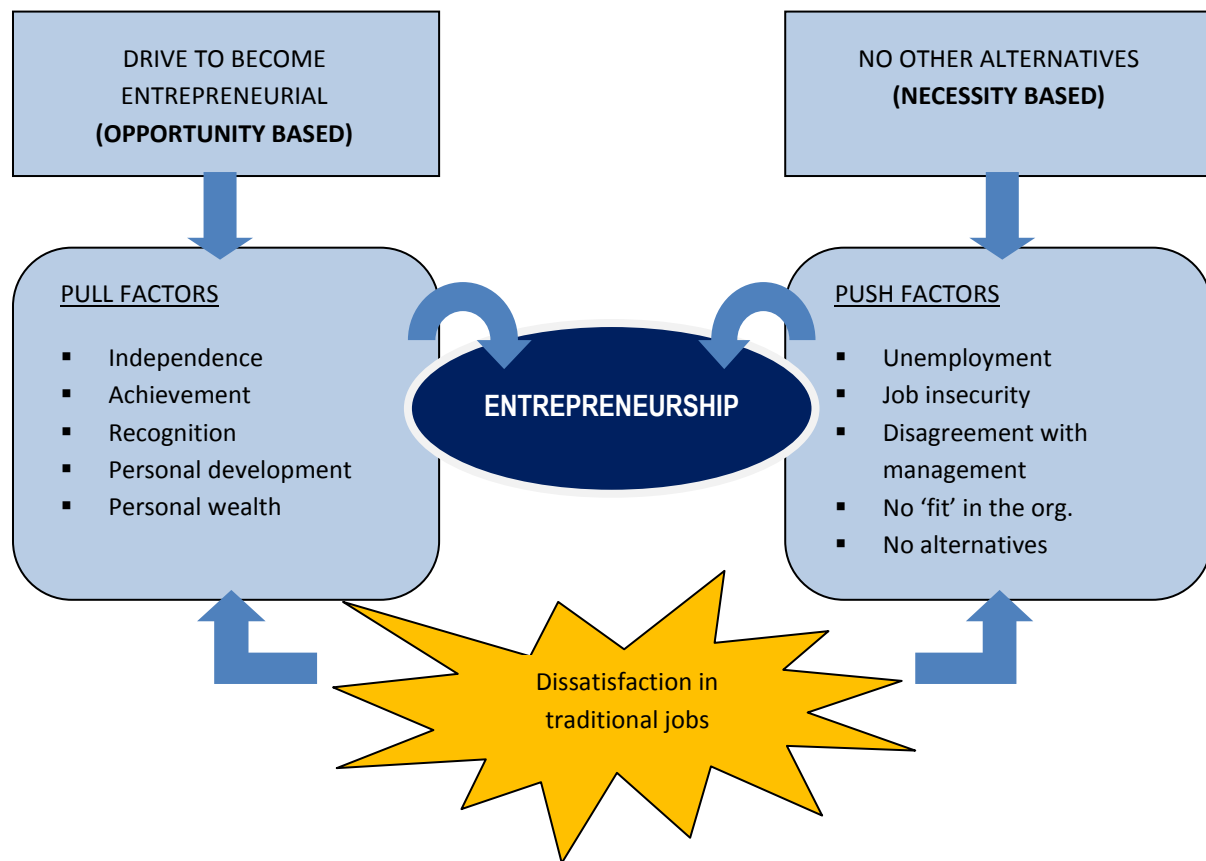
- Attitude is a viewpoint or a mental dimension as perceived by an individual about the situation or the effect of environment. “Attitude encompasses general knowledge and comprises the cognitive, emotions and actions”.
- The attitude must be dominant with an acquirable focus on a specific target which comprises of a viable proposition or significant thought.
- “Attitude is analogous to inclination”- preferably, people are more inclined to react positively to a situation as it was initially endorsed onto them.
- Environmental factors such as cultural traditions, level of achievement in educational prosperity and family backgrounds, are prompted towards the development of attitude.

2.5.2 Push and pull factors

The motivation of an individual to be involved in entrepreneurship can be attributed between push factors and pull factors. The push factors “incorporate frustrations that are obscurely relating to socio-economic factors, cultural propensity and inherited circumstances”. Pull factors are promoted by the intuitive psychological dimension and financial opportunity which can be interpreted as being ‘*greedy*’ (Shariff & Saud, 2009: 130). Pull factors are considerably associated with opportunity based conditions and push factors are pressured by necessity conditions, as depicted in figure 2.6.

According to Kautonen (2008:6), positive factors that ‘pull’ people into business ownership are such as independence, increased earning and opportunities for carrying out their own ideas. ‘Push’ factors, on the other hand, comprise negative impulses such as redundancy, a lack of alternative career opportunities and dissatisfaction with the current job. According to Startiene and Remeikiene (2009:61), “the conclusion is made that the ‘push’ (unemployment encourages to start a business) and ‘pull’ (business reduces unemployment) effects exist both in practice and theory, and their operation is based on economic and cultural factors”.

Figure 2.6: Push and pull factors in entrepreneurial activity

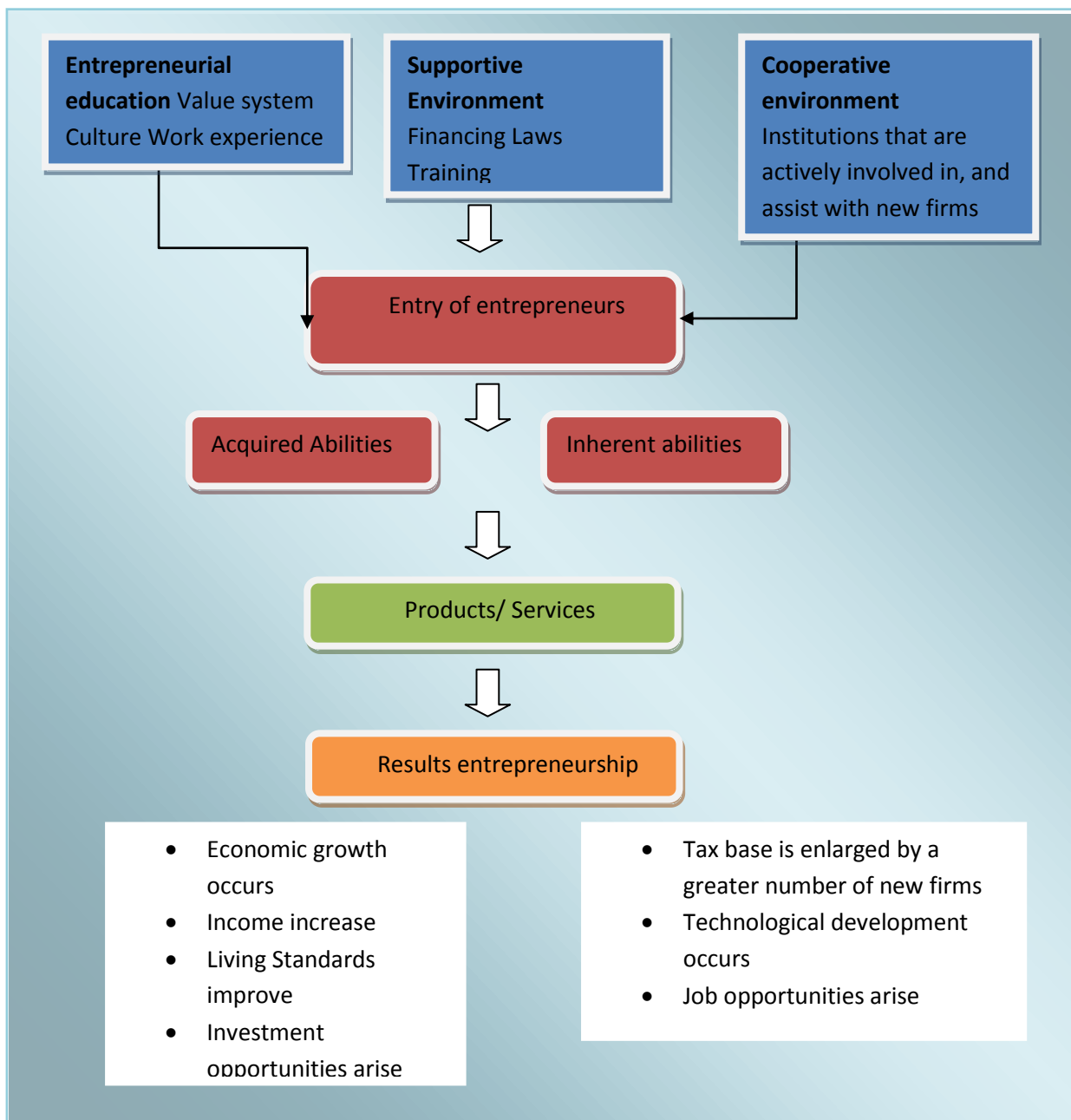


Source: Nieman, Hough and Nieuwenhuizen (2003: 31)

2.5.3 Entrepreneurial development

Among the models that assess attitude of individuals is entrepreneurial orientation, in which this model measures and is a prerequisite test for entering the entrepreneurial arena. Nieman and Nieuwenhuizen (2009:11) established a model used to estimate the survival and growth of organisations, and to also develop critical economic prosperity of the society. These authors refer to the following proposed model on figure 2.7, which depicts the elements needed for entrepreneurial development. In order to identify external variables that affect entrepreneurship in any country, the model seeks to provide such impetus that evaluates the influence of the business environment.

Figure 2.7: Model for entrepreneurship development



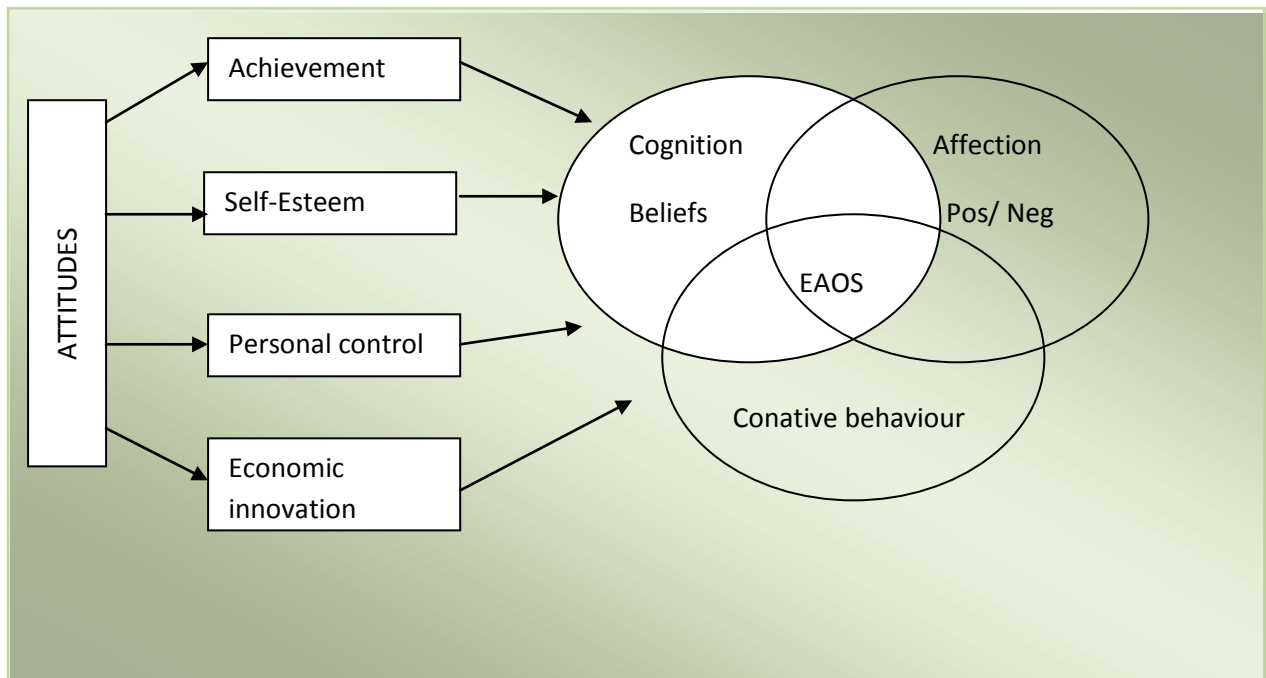
Source: Nieman and Nieuwenhuizen (2009:11)

According to Nieman and Nieuwenhuizen (2009:11), entrepreneurial orientation is fostered by a unique blend of factors, such as culture, family, and role models, level of education, work experience and personal orientation.

2.5.4 Entrepreneurial attitude orientation scale

Attitude towards entrepreneurship can be determined and monitored by a few measuring tools in which one of those models seeks to complement the orientation towards entrepreneurial advancement (Van Wyk *et al.*, 2004:16). Figure 2.8 depicts the model that measures four entrepreneurial attitudes namely: “achievement in creating business activities, economic innovation in response to business incentives, display of personal control and influence over business incentives, and perceived competence in business affairs” (Van Wyk *et al.*, 2004:16).

Figure 2.8: Attitudes in relation with cognition, affection and conation



Source: Van Wyk *et al.* (2004:16)

Shariff and Saud (2009:131) refer to an adapted theory of Robinson, Stimpson, Huefner and Hunt (1991) that summarised components relating to entrepreneurial attitude as follows: “Cognitive component consists of the beliefs and thoughts about an attitude object”, the affection component consists of positive and negative feelings towards the object, and the conative or behavioural component consists of behavioural intentions and predisposition to behave in a certain way towards the object.

2.5.5 Entrepreneurial Intensity

According to Morrison (1998:69) and Barringer and Bluedorn (1999:422), a combination of parental and family support in addition to the right circumstance such as life experiences, education, and encouraging environment, can drive young people to generate an intuition towards entrepreneurship and that impetus is considered as an entrepreneurial intensity. Furthermore, it is characterised by a single-minded focus to start a business and working towards its survival and growth, often at the expense of other admirable and essential goals.

2.6 ENTREPRENEURIAL INTENTIONS

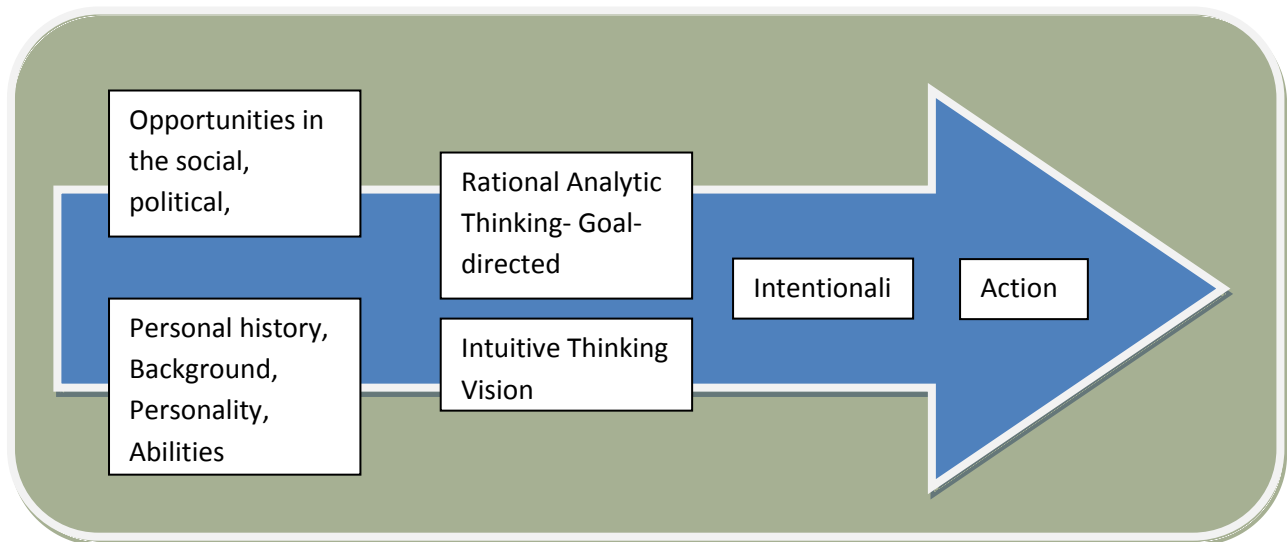
According to Guerrero, Rialp and Urbano (2008:37), the evolution of entrepreneurial intentions has since emerged in the early eighties. In the eighties and nineties, the six main models developed in this entrepreneurial field were: The Entrepreneurial Event Model (Shapiro, 1982), The Theory of Planned Behaviour (Ajzen, 1991), Entrepreneurial Attitude Orientation (Robinson *et al.* 1991), Intentional Basic Model (Krueger & Carsrud, 1993), Entrepreneurial Potential Model (Krueger & Brazeal, 1994) and Davidsson Model (Davidsson, 1995).

Several models have effectively been dominating the ranks in showcasing the entrepreneurial intentions, in which speculative thoughts by Musengi-Ajulu (2008:3) are as follows:

- The perception to an extent of which it is desirable to become an entrepreneur.
- Entrepreneurial intention is influenced by perceptions of feasibility, which focus on one's ability to adopt entrepreneurial behaviour, given the prevailing conditions.
- Factors that influence entrepreneurship development are considered to be political-legal, economic conditions, infrastructure development, social and cultural norms.

Coulter (2003:21) derives on the issues of entrepreneurial intentions by detailing the two models that highlights factors contributing to entrepreneurial intentions. The bird's model encompasses the rationality associated with thinking and intuitive mindset as depicted in figure 2.9.

Figure 2.9: Bird's Model of Entrepreneurial Intentionality

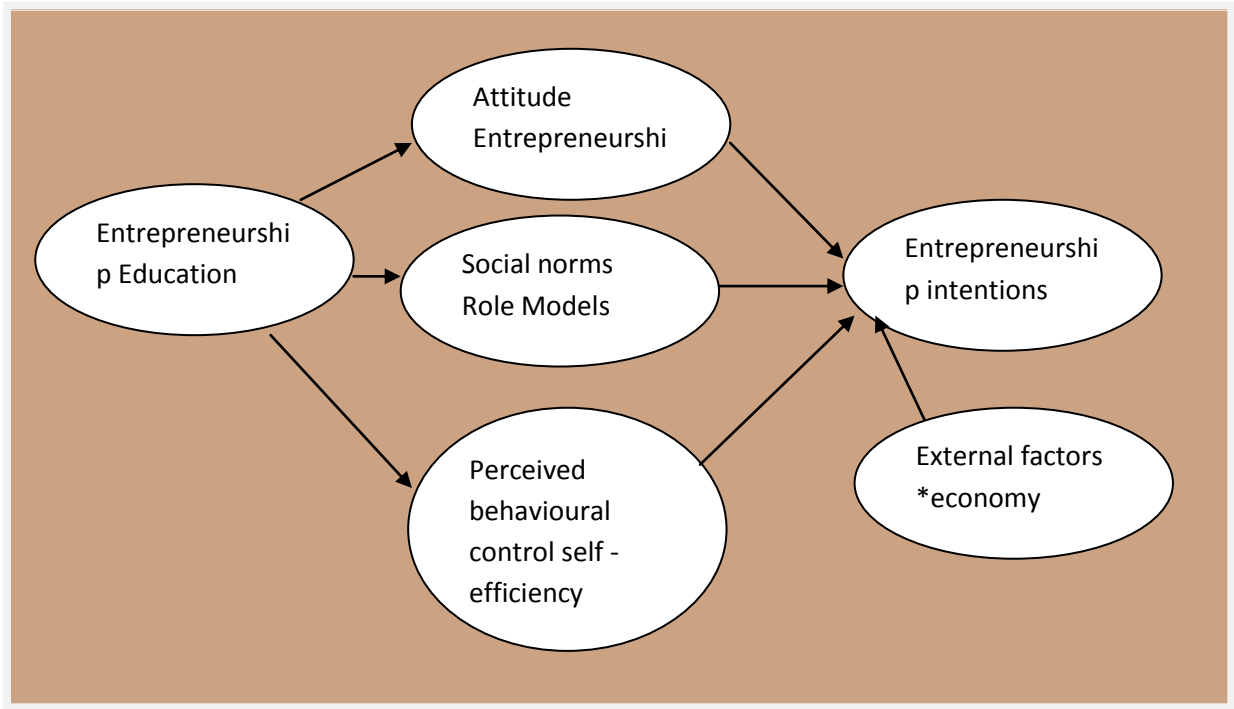


Source: Coulter (2004:31)

The “ACE model of intention to start a business” is another model as proposed by Coulter that predicts the intention to start a business in which the perceptions are based on personality traits, national identity, positivity portrayed by an entrepreneur, origins and level of cultural tenacity and the effectiveness of entrepreneurship process.

The model adapted from Ajzen (2002) preface the theory of planned behaviour in which the link between entrepreneurial education and entrepreneurial intentions is processed through antecedents that indirectly links the elements. All of indirect links are renounced in figure 2.10, which outlines the interaction of factors contributing towards entrepreneurial intentions including the external factors which no one has control over such as economic, political and social (Muofhe & Du Toit, 2011:6).

Figure 2.10: Integrative Models for Assessing Entrepreneurial Intentions



Source: Muofhe and Du Toit (Adapted from Ajzen (1991))

The integrative model as shown in figure 2.11 illustrates the expected outcome of entrepreneurship intentions which is governed through entrepreneurial education with the internal and external factors such as attitude, social norms, role models and behavioural control and which finally emancipate the entrepreneurial intentions of individuals.

2.7 OPPORTUNITY RECOGNITION

2.7.1 Opportunity defined

According to Kumar *et al.* (2003:24), opportunity is defined as an attractive and excellent project idea which the entrepreneur searches for and accepts such an idea on the basis for investment decision. Van Aardt *et al.* (2011:48) define a viable business opportunity as a perceived means of generating economic value that has not been previously explored. Bessant and Tidd (2011:165) agree that opportunity is

the basic area of need or challenge on which the problem-solver's efforts will be focused, remaining broad enough to allow many perspectives to emerge as one looks more clearly at the situation. Hisrich and Peters (2002:652) confirm the opportunity identification as the process by which an entrepreneur comes up with the opportunity for a new venture. According to Kumar *et al.* (2003:22), an entrepreneur is supposed to be an opportunity seeker. For the potential entrepreneur underlies the scope to identify, explore, and then selecting an attractive business opportunity.

The entrepreneur is market driven, continuously seeking that idea on which the window of opportunity is opening and which offers the prospects of a worthwhile return on an effort and resources (Morrison, 1998:13). Timmons and Spinelli (2009:150) established that opportunities are created using ideas and entrepreneurial creativity. An idea remains an imperative aspect in contributing to opportunity recognition (Bygrave & Zacharakis, 2011:57). According to Van Aardt *et al.* (2011:48), an entrepreneur will have to use a cognitive approach and develop objectives (the ability to let go of their personal biases, likes and dislikes) in order to recognise and deal with risks in their pursuit of the most viable opportunity. Therefore, an opportunity based-entrepreneurship (one that seeks out new opportunities in a more proactive way) is characterised or pivotal in this section rather than a necessity-based entrepreneurship (has little choice but to start their own business) (Stokes & Wilson, 2010:38). Stokes, Wilson and Mador (2010:38) propose two distinctive features for the process of opportunity recognition which are as outlined:

- Cognitive and rational decision-making and judgement
- Resource recombination

2.7.1.1 Cognitive approach

The cognitive approach deals with the entrepreneur's preferred way of gathering, processing, and evaluating information (Van Aardt *et al.*, 2011:48). Cognitive elements include but is not limited to risk perception, biases of overconfidence, planning fallacy (strong tendencies to underestimate deadlines), the use of limited number of informational inputs, and the illusion of control directly influence risk

perception and the decision to start a business. According to Hisrich and Peters (2002:44), commitment to opportunity is an added element in cognitive style, in which entrepreneurial domain (the ways entrepreneurs make decisions) explicitly outlines the thought relative to opportunity identification.

Stokes *et al.* (2010:48) introduced cognitive behaviour theory in order to conceptualise entrepreneurship, in which entrepreneurship can be explained by looking at the impact of personality, environment, experience, acquired attitudes and learning. All these factors combined contribute to the competitive behaviours required by the entrepreneur to stir the market environment.

Stokes *et al.* (2010:36) adopted the cognitive approach for entrepreneurship from Baron and Shane (2008), herewith the cognitive elements underlying the concept of entrepreneurship:

- The more experience people have in a given field, the probability of identifying the opportunities also becomes high, thereof.
- Create cognitive frameworks that help to interpret new information as compared to the existing information.
- *“An example is prototype – idealised representations of the most typical member of a category – which is important for idea generation and creativity”.*
- Rely on simple rules known as heuristics for making complex decisions in a rapid and relatively effortless manner.
- Various heuristics (such as optimistic bias, planning fallacy, confirmation bias) ultimately confers to making wrong decisions.

Cognitive skills refers to the “intellectual ability and dynamics of a person including to think creatively (lateral thinking), to solve problems creatively, to recognise opportunities, to think abstractly and to apply knowledge” (De Beer, Zeelie, Groenewald, Watson, Rossouw & Jacobs, 2008:166). Cognitive styles contribute to opportunity recognition process, in which individuals are more inclined to make reasonable entrepreneurial decisions.

2.7.1.2 Resource recombination

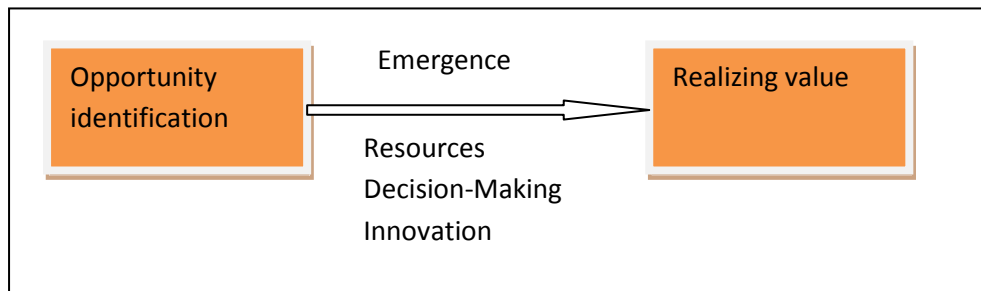
Stokes *et al.* (2010:38) review Schumpeter's theory that refers to the entrepreneur as a person that assembles together a new combination of resources. The task of the entrepreneur is to assemble a bundle of resources and to capture synergies so that revenues generated (returns from sale of outputs and net of costs of inputs) exceeds expenditures paid on the resources utilised; this is the task of producing positive entrepreneurial profits (Mathews, 2002:35). The entrepreneur creates new resource combinations, which then allow for the generation of new activities, requiring the construction of new routines by personnel hired for the purpose (Mathews, 2006:4). Bygrave and Zacharakis (2011:61) acknowledge that the smart entrepreneur find ways of controlling critical resources without owning them. According to Mathews (2007:14), the entrepreneur is the economic agent who lacks resources (but knows where to find them), who becomes aware of profit opportunities, and acts to realise these opportunities through resource mobilisation and activation.

2.7.2 Entrepreneurial process

The entrepreneurial process is the process of starting a new venture, but embodies distinct phases such as identification and evaluation of an opportunity, development of the business plan, determination of the required resources, and management of the resulting enterprise (Hisrich & Peters, 2002:39). Within this process the identification and evaluation of an opportunity is of vital concern to the researcher. Opportunity identification requires an entrepreneur to be alert to aspects of the entrepreneurial process such as creation and length of opportunity, real and perceived value of opportunity, the risks and returns of opportunity, opportunity versus personal skills and goals, and competitive situation (Hisrich & Peters, 2002:40).

Stokes and Wilson (2006:31) suggested that an opportunity identification and realising value has to be transformed through resources, mandated by a decision-making process and innovative culture as depicted in figure 2.11. Hence, the opportunity recognition is reviewed.

Figure 2.11: Overview of entrepreneurship process

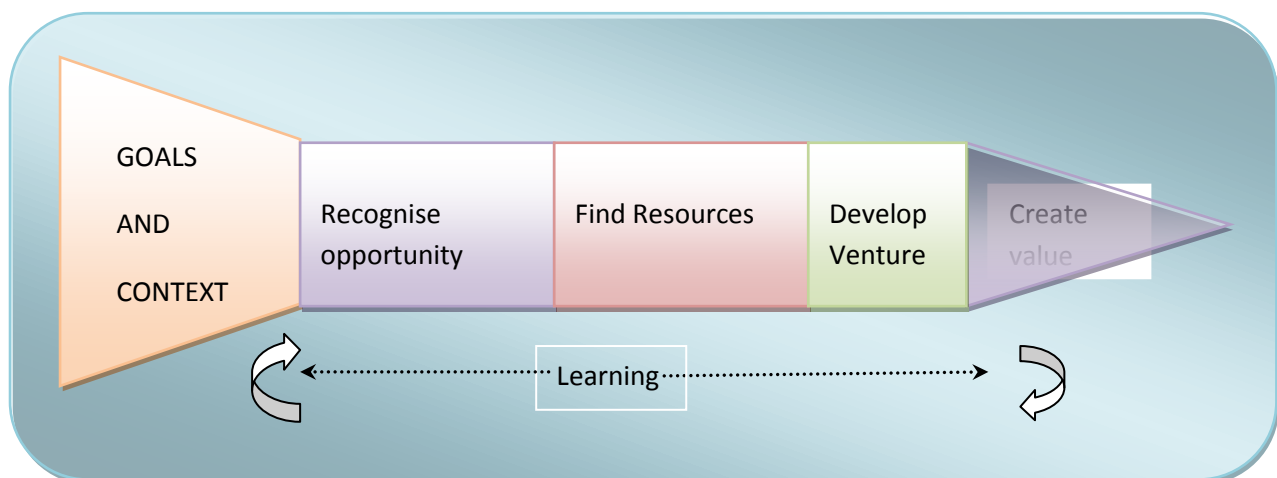


Source: Stokes and Wilson (2006:31)

Bessant and Tidd (2011:171) propose that within the opportunity recognition process, abilities must be displayed by an individual such as the rare combination of skills, experience, aptitude, insight and circumstances. Tolerance of uncertainty and ambiguity constitutes risk taking. It depends on how risk averse one is, to challenge the high risk-taking climate in which one can have bold new initiatives that can results in unknown outcomes.

Value creation process has few elements that contribute towards the advancement of entrepreneurship, in which Bessant and Tidd (2011:25) structured the process in the following manner as depicted on figure 2.12.

Figure 2.12: Model for innovation and entrepreneurship

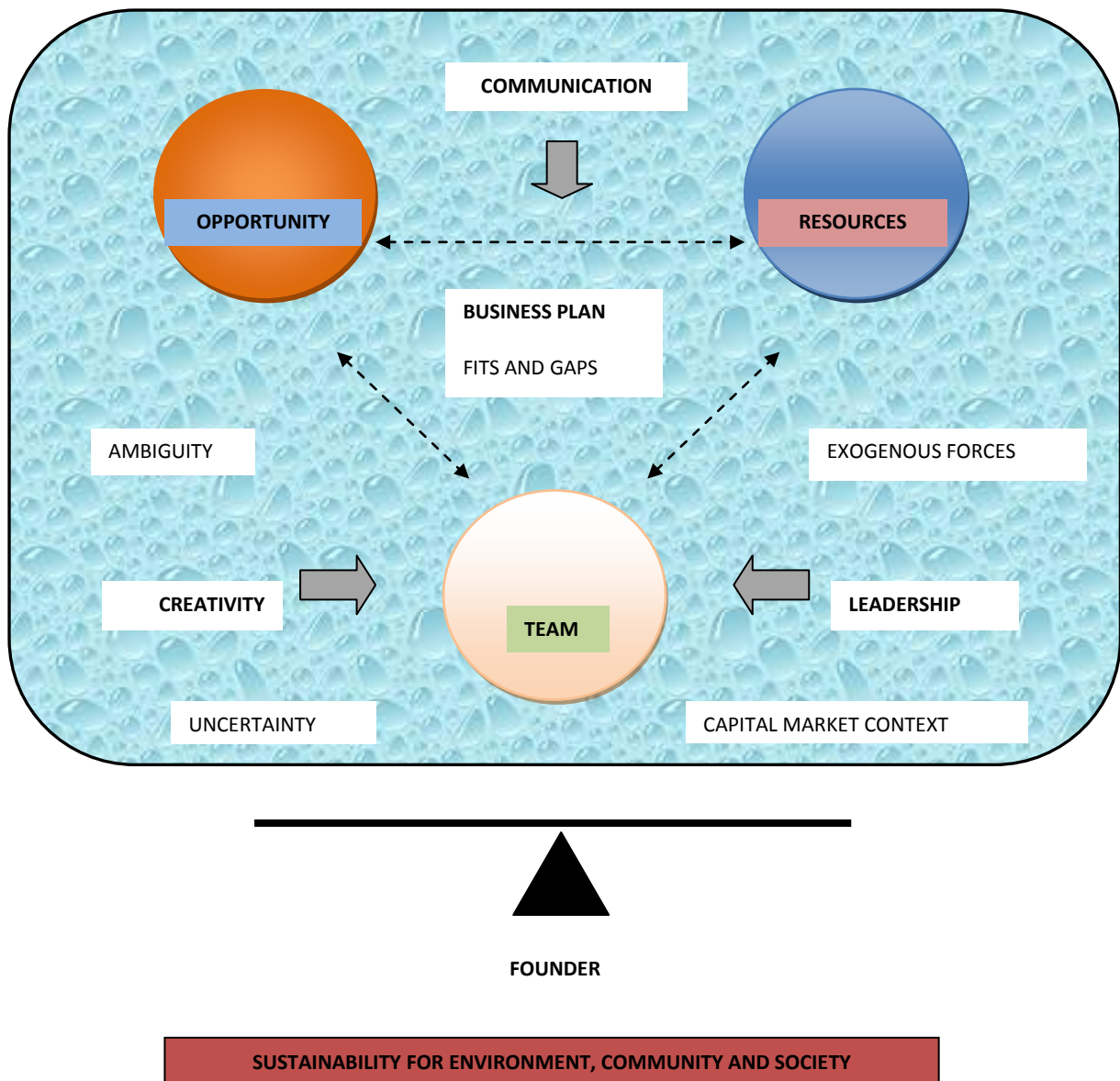


Source: Bessant and Tidd (2011:299)

The value chain process shown above, critically dispose elements that highlights crucial participation of opportunity recognition measures and resources utilisation in order to create value.

Timmons and Spinelli (2009:110) support the notion of opportunity identification as outlined by Bessant and Tidd (2011), but maintain a strong reflection on Timmons’ model of entrepreneurial process, in which opportunity, resources and the team are variables that constitutes the entrepreneurial environment.

Figure 2.13: The Timmons model of the entrepreneurial process



Source: Timmons and Spinelli (2009:110)

Timmons' model of the entrepreneurial process is shown in figure 2.13. This represents all dynamic forces that cultivate and sustain the entrepreneurial environment. Timmons' model is based on the ability of a team to create the sustainable and conducive environment in which the team will exercise its creativity and leadership skills to generate an opportunity. This model remarks on a good fit between opportunity and resources which constitute communication and a business plan as complements of the business model or value proposition of the organisation.

2.7.4 Sources of opportunities

According to Timmons and Spinelli (2009:150), "in a free enterprise environment, continuous changing circumstances, vulnerability, chaos, inconsistencies, lags or leads, knowledge and information gaps, and a variety of other vacuums in the market spawn opportunities". According to Kumar *et al.* (2003:24), two major characteristics of a business opportunity such as the good and wide market scope (gap between present or likely demand and supply), and the attractive, acceptable and reliable return on investment constitute entrepreneurship.

Schaper and Volery (2004:31) identified three different categories of opportunities, in which individuals can seize the moment and the prevailing opportunity:

- Inefficiencies within existing markets due to either information asymmetries or limitations in technology to satisfy certain known but unfulfilled market demands.
- The emergence of significant changes in social, political, demographic and economic forces.
- Inventions and discoveries that produce new knowledge.

2.8 ENTREPRENEURIAL TRAITS

Preferably, an entrepreneur should be qualified in traits such as the ability to create an enterprise, organising function, innovation, risk bearing capacity, managerial and leadership functions and closing up gaps to promote entrepreneurship (Kumar *et al.*, 2003).

According to Barringer and Ireland (2006:7), there are four main characteristics that are conceptually depicted by successful entrepreneurs. The following qualities need to be possessed by entrepreneurs as perceived by Barringer and Ireland:

- *Passion for the business* – a degree to which one presumes or believes on the success of the business, particularly expose the positive intentions of the entrepreneur.
- *Product/ customer focus* – the offering of these two elements has a potential of building or destroying the business, therefore it is equally important to cater for this elements as an entrepreneur.
- *Tenacity despite failure* – the failure rate of new business ventures is alarming, due to the natural effect of pursuing for opportunities ‘no matter what attitude’ is portrayed by entrepreneurs.
- *Execution intelligence* – the ability to fashion a solid business idea into a viable business is the key characteristic of successful entrepreneurs.

Mariotti and Glackin (2012:4) regard an entrepreneur as a person that should be able to derive and identify opportunities as opposed to other competitive potential candidates. Therefore, entrepreneurs should have qualities that will enable them to explicitly relate to opportunity recognition that is supposedly connected to psychological approval. Coulter (2003:19) probes into characteristics of the entrepreneur from a different angle in which the focus is on the demographic profile that pertains to the entrepreneurs. Coulter examines the effect of demographic characteristics but that does not entirely lock the idea on presumptions of being effectively applicable to all situations. Some of the significant demographic traits as affirmed by Coulter are family birth, gender, work experience, entrepreneurial education, entrepreneurial family, marital status, age, education level of parents and

socio-economic status. Coulter expand on the subject by distinguishing entrepreneurs and non-entrepreneurs, and extrapolate that entrepreneurs are more inclined to possess qualities that entails proactive personality, and exhibit the intentional profile of entrepreneurs.

Schaper and Volery (2004:35) present the subject in a manner that is of a behaviourist in which figure 2.14 concur with the elements as perpetuated by other researchers.

Figure 2.14: Characteristics of successful entrepreneurs

Self-confidence	Tolerance of ambiguity
Risk-taking propensity	Responsiveness to suggestions
Flexibility	Dynamic leadership qualities
Independence of mind	Initiative
Energy and diligence	Resourcefulness
Hard-work ethic	Good communication skills
Creativity	Perseverance
The need for achievement	Profit-orientation
Internal locus of control	Perception with foresight

Source: Schaper and Volery (2004:35)

Although focal characteristics as specified by most authors in table 2.4 are encroached on factors such as the need for achievement, internal locus of control and risk-taking propensity but in essence the elements do not underlie the critical views of others. Timmons and Spinelli (2009:44) had assembled and trended views as prescribed by various authors, in which table 2.4 outlines the timeline commonality or pattern that pertains to infatuated traits:

Table 2.4: Characteristics of entrepreneurs

Date	Authors	Characteristics
1848	Mill	Risk bearing
1917	Weber	Source of formal authority
1934	Schumpeter	Innovation, initiative
1954	Sutton	Desire for responsibility
1959	Hartman	Source of formal authority
1961	McClelland	Risk taking; need for achievement
1963	Dauids	Ambition; desire for independence, responsibility, self-confidence
1964	Pickle	Drive/ mental; human relations; communication ability; technical knowledge
1971	Palmer	Risk measurement
1971	Hornaday and Aboud	Need for achievement; autonomy; aggression; power; recognition; innovative/ independent
1973	Winter	Need for power
1974	Borland	Internal locus of power
1982	Casson	Risk; innovation; power; authority
1985	Gartner	Change and ambiguity
1987	Begley and Boyd	Risk taking; tolerance of ambiguity
1988	Caird	Drive
1998	Roper	Power and authority
2000	Thomas and Mueller	Risk; power; internal locus of control; innovation
2001	Lee and Tsang	Internal locus of control

Source: Timmons and Spinelli (2009:44)

According to Rozell, Meyer, Scroggins and Guo (2011:65), the distinguishing elements that characterises the entrepreneur are as outlined below, in which the results were retrieved from their research.

- *Passionate and hardworking* – several participants indicated their inclination towards being passionate entrepreneurs.
- *Exploratory and adventurous/visionary* – creativity relate to the potential characteristics of an entrepreneur.
- *Willingness to learn* – being able to constantly learn new methods and refresh on the existing procedures, while cultivating the entrepreneurial capability.
- *Knowledge and competent* – prerequisite to being an entrepreneur is identified as being competent and knowledgeable in the given field of expertise.
- *Exercise good judgement* – successful entrepreneurs can make a qualifying decision, and stick with it.
- *Communication and networking* – trait that is desperately needed by an entrepreneur is establishing a competitive database of relevant business compatriots.
- *Determined and resolute* – readiness to fight and not being afraid of hardships.
- *Strong moral character* – the high moral character should be positively identified in the entrepreneur.
- *Focus is on the collective* – the competitive advantage can be gained by successfully integrating concepts as identified by an entrepreneur.
- *Identifies with country culture* – ‘many of the respondents noted that they value their culture deeply and experienced a source of nationalisation’.

The covered content as presented by Rozell *et al.* (2011:65) has had an international aspect as the research was conducted in China. Nonetheless, some of the aspects have been vaguely covered by Schaper and Volery (2004) such as communication, but the basic theory is considerably of the same thought.

2.9 SUMMARY

Entrepreneurship as a phenomenon is obscurely defined, in essence no school of thought has proclaimed to appropriately define the metaphor of entrepreneurship. Nonetheless, few definitions have been posted in which various directive definitions have a common view. To a large extent the phenomenon has been understood as an opportunity driven matter, which is subjected to resource utilisation. Furthermore entrepreneurship has risk taking propensity and allocated to introduce innovation as a component important for entrepreneurial development. An attempt by various authors to cover definitions relating to entrepreneurship as a phenomenon has been outlined.

In order to understand the intentions of individuals towards entrepreneurship, some of the traits have been presented. This chapter also focused on perceptions based on the reviews of researchers which expressed different characteristics, those prone by individuals into becoming entrepreneurs or being interested in entrepreneurship. Attitude towards entrepreneurship have been identified as a prominent feature in some of the prescribed models by researchers. Clear objectives of entrepreneurial education set apart the persuasive intentions but it rather points out the influential act associated with education.

Globally, South Africa is lacking in job creation, and that has pushed individuals in venturing into business. But not much awareness has materialised, due to counter accessibility of finance, in-efficient institutions in educating youth, diverse culture varies the adaptation process, and many more. Lack of awareness is evident from an uninspiring lack of total-early entrepreneurial activity ranks. This chapter has faceted some of the skills that need to be possessed by entrepreneurs such as technical skills, business management and personal entrepreneurial skills.

Certain higher education institutions have embarked on promoting entrepreneurial education in which informative programmes address the issue of lack of entrepreneurial education. Entrepreneurial modules covered by OAU in promoting entrepreneurship are relevant to models defined such as Hytti model of

entrepreneurial education. Coulter (2004) introduced two models called the Bird's and ACE model which seeks to identify elements that indicate the entrepreneurial intentions amongst individuals and businesses.

Finally, Timmons and Spinelli (2009) extrapolated on Timmons' model that expands on the correlation between variables responsible to create and sustain entrepreneurship. Opportunity recognition is a dominant force in developing entrepreneurship, subsequently, possession and utilisation of resources to assist with advancing the entrepreneurial process.

CHAPTER 3

RESULTS AND DISCUSSION OF THE EMPIRICAL STUDY

3.1 INTRODUCTION

This chapter outlines the sequential steps followed in order to gain and analyse the empirical data of this study. Similarly, the presentation of the survey results is accompanied with the statistical measurements. Subsequently, the evaluation of the entrepreneurial attitude among grade 12 learners with the use of a measuring instrument is adapted from Luiz and Mariotti (2011).

In January 2012, a request to conduct a research within the Kgetlengrivier Local Municipality was proposed to the Department of Education, in which an authorisation letter was granted mid-March 2012 (see ANNEXURE B). While the researcher was awaiting the approval from the Department of Education, a personal visit to school managers was established intended to gauge the level of interest on the study. All managers approved the researchers' idea of assessing learner's perceptions towards entrepreneurship and a go-ahead was granted by all participating schools. The study was conducted in July 2012, in which a simple but effective distribution and collection process was followed, which was supported and handled by subject coordinators and the researcher.

All of the six schools consisting of 299 grade 12 learners in the region as clustered by the Department of Education participated in this study. Of the 299 learners, 274 respondents were counted back. Furthermore, this chapter will discuss all the relevant results as captured, coded and analysed by the Statistical Consultation Services.

3.2 GATHERING OF DATA

An option to voluntarily participate in the survey was the preferred mode of operation. The process which was followed in order to gather the survey information will be discussed in this section.

3.2.1 Study population

The target population of this study was among grade 12 learners in the Kgetlengrivier Local Municipality of the North-West Province, with a distinctive approach of zooming into the Elands circuit as clustered by the Department of Education (DoE). The Elands circuit consists of six schools, which are geographically demarcated within the Kgetlengrivier Local Municipality and the schools have 299 grade 12 learners. Of the 299 actively involved learners, a response equivalent to 274 was achieved, which represents a 92% response rate. The success of the response rate was based on the influence the teachers and school managers have on their learners. The teachers assisted with the distribution and collection, while the researcher was monitoring and controlling the survey situation and assisting where deemed necessary.

3.2.2 Questionnaire used in this study

The questionnaire used in this study was adapted from Luiz and Mariotti (2011) from a study known as *Entrepreneurship in an emerging and culturally diverse economy: a South African survey of perceptions*. The questionnaire was initially intended for university students but the contents were also relevant for use in determining the attitude of individuals towards entrepreneurship among grade 12 learners. The questionnaire is designed with few highlighted aspects on the cover page that outlines the confidentiality clause, the example of how to mark or indicate the appropriate answer, and a note from the researcher to acknowledge the participation of learners in this study. Refer to ANNEXURE A for further details on the questionnaire including the thank you note to all respondents.

The questionnaire consists of five sections, namely:

Section 1 - Personal Information

This part of the questionnaire focuses on the demographics of the respondents; its objective is to cluster all relevant information pertaining to gender, race, age, and parents' or guardian's background relative to education, parents' monthly income and their business relations or intentions. This part consists of nine statements with different scales of measurement such as **yes** or **no** and **male** or **female** options. Furthermore, it will serve to draw correlations between demographic information and results as per constructs, with intentions to evaluate the attitude of respondents towards entrepreneurship.

Section 2 - Attitude towards entrepreneurship

For the purpose of assessing attitude towards entrepreneurship among participants, 17 statements had to be constructed in line with the proposed objectives as mentioned on chapter 1. The statements within this part contains a number of positive and several negative elements, positive synergies include a statement such as **I want to start my own business**, and as for a negative statement being **I can earn more money working for someone else**. Positive and negative statements are considered from an entrepreneur's perspective. The questionnaire was based on a five-point Likert scale instrument, with an option to select between the ranges of strongly agree and strongly disagree.

Section 3 - Entrepreneurial opportunities

The source of entrepreneurial opportunities can be presumptuously devised from different aspects of the world. This part of the questionnaire evaluates the ideas relative to opportunity recognition within the entrepreneurial arena. This questionnaire has nine statements which has a mixture of positive and negative variables. Positive statements such as **I have many ideas for business ventures** and negative statements being **All the good ideas have been taken** are typical items outlined for this section.

Section 4 - Entrepreneurship environment within the secondary school

This part of the questionnaire consists of nine statements constructed on a five-point Likert scale instrument, in order to evaluate the entrepreneurial environment within the secondary schools. Few factors can be considered instrumental in fostering entrepreneurship in schools. Hence, this construct seeks to evaluate the environment within the secondary schools with an objective to assess the drivers responsible for an appealing entrepreneurial environment.

Section 5 - The South African entrepreneurial environment

In this section, five items were identified to measure the South African entrepreneurial environment with the use of a five-point Likert scale instrument. This statements looks at South Africa as an entrepreneurial country including the role played by the local communities and programmes provided by the government in order to assist with business start-ups.

3.3 DATA PROCESSING

Data capturing, coding and statistical analysis was conducted by the Statistical Consultation Services (SCS) of the North-West University (Potchefstroom-Campus) using Statistica (Statsoft, 2008) and Statistical Package for Social Science (SPSS, 2008). The results from the SCS were presented in a tabular form and the researcher constructed tables, bar graphs and pie charts in order to graphically present the results.

In view of the results the mean will be employed as a measure of central tendency and the standard deviation to indicate dispersion of data around the central point. Thus the correlation between constructs and demographic information will be presented. Hence, the calculation of the t-test and Anova will highlight the correlation or independent test results between constructs and demographic variables as deemed critically important and similarly to conduct a reliability test that ensures the respondents' understanding towards the posed constructs.

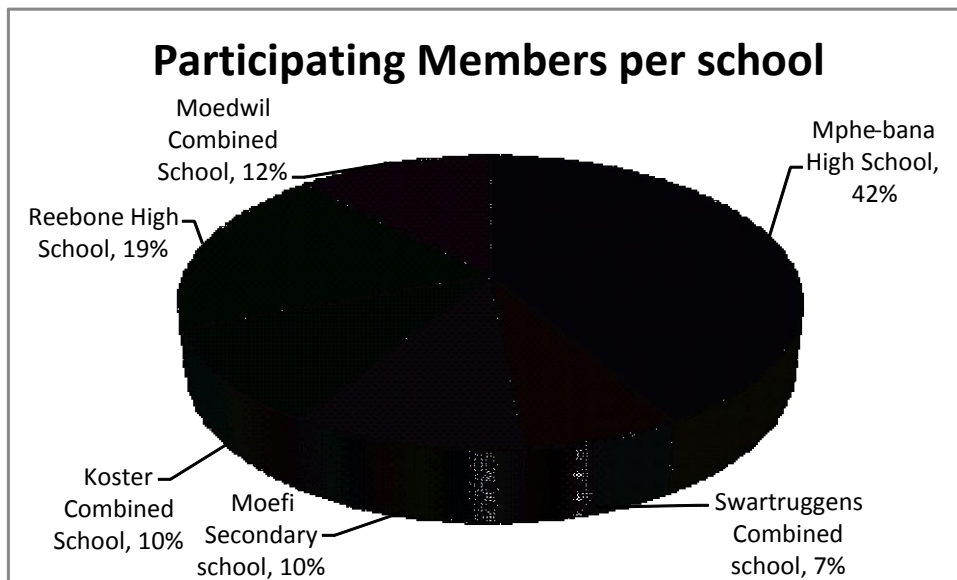
3.4 RESULTS AND DISCUSSION

This section discusses the results according to demographic information provided by the questionnaire.

3.4.1 Participating schools

The following result zooms into the biographical profile of respondents including the demographic elements which entails the number of participating schools in the study. Figure 3.1 illustrates the percentage of grade 12 learners per school that participated in this research. The result shows that the majority (42%) of the sample population are from Mphe-bana High School, followed by 19% contributed by Reebone High School. The remaining schools such as Moedwil Combined School, Koster Combined School, Moefi Secondary School and Swartruggens Combined School, constituted a percentage equivalent to 12%, 10%, 10% and 7% respectively.

Figure 3.1: Participating schools



The result above was manually captured, not as part of the main questionnaire, but questionnaires were shelved according to a school's participation.

3.4.2 Gender participation

The objective of this statement was to indicate the number of respondents based on their gender composition. The composition of the respondents is classified according to gender as depicted in table 3.1.

Table 3.1: Gender classification

Gender classification	Frequency	Percentage
Male	121	44.2%
Female	153	55.8%
Total	274	100%

Of the 274 respondents, 121 (44.2%) are male while 153 (55.8%) are females.

3.4.3 Age classification

The purpose of this question was to determine the age group distribution of learners that were actively involved in grade 12 schooling during the year 2012. Age could have an influence on the choice one makes to become involved in entrepreneurship.

Table 3.2: Age classification

Age Distribution	Frequency	Percentage
16-17 yrs	14	5.1%
18-19 yrs	196	71.5%
20-22 yrs	60	21.9%
23 yrs and above	3	1.1%
Missing data	1	0.4%
Total	274	100%

Table 3.2 indicates the age distribution with a reasonable majority (71.5%) of respondents falling between the age group of 18 and 19 years. Of the 274 respondents, only 14 (5.1%) were aged 17 years old while 60 (21.9%) were between the ages of 20 and 22 years old, and respondents above the age of 23 years old

were a marginal 3 (1.1%). Typically, no learners under the age of 16 years old were recorded.

3.4.4 Race count

Respondents were requested to indicate their racial group according to the South African racial group classification. The objective of this statement was to acquire the race classification in order to determine the extent to which race is subjected to influence entrepreneurship. The results are summarised in table 3.3.

Table 3.3: Race group classification of respondents

Race classification	Frequency	Percentage
African	226	82.5%
White	43	15.7%
Asian/ Indian	0	0%
Coloured	5	1.8%
Total	274	100%

Most of the respondents (82.5%) were African, followed by White respondents which constituted a 15.7%, and subsequently a marginal composition of 1.8% by Coloureds and with no Asians or Indians represented.

3.4.5 Parents owning business

It is imperative to assess the background of learners, particularly parental influence on becoming an entrepreneur. Therefore, a question with a measuring variable to evaluate the parental involvement in business is crucial. Table 3.4 indicates the survey results.

Table 3.4: Parents owning business

Parents own a business	Frequency	Percentage
Yes	33	12%
No	237	86.5%
Missing data	4	1.5%
Total	274	100%

Of the 274 respondents, 237 (86.5%) indicated that their parents own no business, and 33 (12%) clearly indicated that their parents are somehow involved in business, or have their own businesses. Only four respondents did not answer the question relative to their parents' involvement in business.

3.4.6 Parent or guardian education

The purpose of this question was to determine the level of parents' or guardian's education, with the selectable options ranging from tertiary education to no schooling. Table 3.5 presents the summarised result according to parents' level of education.

Table 3.5: Parents' level of education

Parents education level	Frequency	Percentage
Tertiary education	36	13.1%
Completed grade 12	91	33.2%
High school	60	21.9%
Primary school	61	22.3%
No schooling	23	8.4%
Missing data	3	1.1%
Total	274	100%

Table 3.5 shows that of the 274 participated students, a large number (91) of parents' or guardians have completed grade 12. The remainder of the total number is accounted for, by parents with the following: primary school (61), high school (60)

tertiary education (36) and no schooling (23). Only 3 respondents did not indicate their parents' or guardian's level of education.

3.4.7 Given pocket money at school

The purpose of this question was to supplement to the background data mining information with regards to being given pocket money while at school. Table 3.6 indicated the number of respondents with and without monetary injection while at school.

Table 3.6: Pocket money while at school

I was given pocket money while at school	Frequency	Percentage
Yes	140	51.1%
No	131	47.8%
Missing Data	3	1.1%
Total	274	100%

An evident equal distribution had been achieved in this regard, with a marginal difference of 1.1% between the two groups (yes and no respondents). Most of the respondents (51.1%) indicated being offered pocket money while at school, and an impetus of 47.8% indicated no pocket money while at school. Of the 274 respondents, only 3 did not answer the question that evaluates the offering of pocket money while attending school.

3.4.8 Job while at school

The purpose of this question was to establish the participation of learners in a work environment while at school. The effect of having a job while at school can be regarded as a positive or either a negative driver towards influencing entrepreneurship. Table 3.7 indicates the frequency of respondents proportional to percentages in this study.

Table 3.7: Job while at school

I have a job while at School	Frequency	Percentage
Yes	25	9.1%
No	243	88.7%
Missing data	6	2.2%
Total	274	100%

Table 3.7 indicates that the majority (88.7%) of respondents have no jobs while at school, and 9.1% indicated as individuals having a job while at school. Only 6 of the 274 respondents did not indicate their desired option.

3.4.9 Studying business subjects

Business subjects can be regarded as a possible gear to leverage individuals towards participating in entrepreneurship. Therefore, an appropriate measure to indicate the variable associated with business subjects was posed and results were presented in table 3.8.

Table 3.8: Studying business subjects

<i>I am currently studying business subjects</i>	<i>Frequency</i>	<i>Percentage</i>
Yes	114	41.6%
No	154	56.2%
Missing data	6	2.2%
Total	274	100%

The majority of respondents (56.2%) who participated in this study indicated not studying any business subjects, as opposed to 41.6% of the respondents that are currently busy with business subjects. Six respondents (2.2%) did not answer the question.

3.4.10 Parents' monthly income

The purpose of this question was to determine their parents' monthly income in order to test the level of poverty, and therefore substantiate on the reasons behind lack of or interest in entrepreneurship. Table 3.9 presents the monthly income of a respondent's parent, in which the scale takes into account the five options as commonly adapted on the South African salary scales.

Table 3.9: Parents' monthly income

<i>Parents monthly income</i>	<i>Frequency</i>	<i>Percentage</i>
Below R2000	117	42.7%
R2000 to R5000	44	16.1%
R5001 to R10 000	26	9.5%
R10 001 to R20 000	22	8%
Above R20 000	15	5.5%
Missing data	50	18.2
Total	274	100%

Most of the respondents (42.7%) indicated that their parents' monthly income is below R2000. While the second largest number of respondents (16.15%) indicated that their parents' monthly income is between R2000 and R5000. Furthermore, a 9.5% of students indicated that their parents' monthly income is in the region between R5001 and R10 000. Similarly, the trend have remained declining with 8% respondents declaring that their parents' monthly income is between R10 001 and R20 000. Marginal students (5.5%) indicated that their parents' income is more than R20 000. A large number (18.2%) of respondents did not answer the question.

3.5 ATTITUDE TOWARDS ENTREPRENEURSHIP

The statements from B1 to B17 (see ANNEXURE A) have been adapted to determine the perception portrayed towards entrepreneurship by grade 12 learners. The primary objective of these statements was to determine the attitude towards entrepreneurship with a detailed summary containing all relevant variables from the questionnaire as presented in table 3.10. Respondents had to assess their entrepreneurial attitude by indicating on the five-point Likert scale questionnaire. In respect of each statement, respondents had to indicate their degree of agreement (5) or disagreement (1). The statements had a mixture of positive and negative elements if regarded from the point of view of an entrepreneur. Thus a higher number (5) represent a true condition for an entrepreneur and subsequently the lower number (1) indicates a weak function of the statement.

Table 3.10: Attitude towards entrepreneurship

STATEMENTS	N	Mean	Std. Deviation
I want to start my own business	272	3.706	1.114
Entrepreneurs are almost inventors	259	3.660	0.889
Buying a business is not entrepreneurship	264	2.701	1.254
Owning a franchise is not entrepreneurship	257	2.588	1.183
Entrepreneurs will do anything for profit	272	4.114	0.952
Entrepreneurs are largely responsible for new innovations, technologies and products	269	3.877	1.038
I can earn more money working for someone else	273	2.623	1.312
I seriously consider entrepreneurship as a career option	269	3.547	1.157
High schools should encourage students to consider entrepreneurship	270	3.915	1.019
I am too busy with classes to consider starting my own business	269	3.145	1.280
My parents are entrepreneurs	263	2.091	1.238
It is too risky to start my own business	269	2.807	1.240
I am a risk taker	265	3.600	1.314
Entrepreneurship is a good way to make lots of money	272	4.077	0.862
Entrepreneurship is an honourable profession	269	3.643	0.985
A tertiary education is not necessary to be an entrepreneur	268	2.683	1.278
I prefer to work for a large company, for better career prospects	273	4.322	0.890
Average	274	3.359	1.118

The average mean of all the statements indicated in table 3.10 reveals a mean (\bar{x}) of 3.3587 out of the five-point Likert scale, indicating that the positive attitude towards entrepreneurship is moderately experienced among respondents. The mean scores of this part two of the questionnaire are graphically illustrated in a bar chart in figure 3.2. With specific comparison on the mean value across the statements ranked from the lowest to highest mean score.

Figure 3.2: Attitude towards entrepreneurship ranked per mean from lowest to highest



Ten of the 17 statements, **I want to start my own business** (\bar{x} = 3.706), **Entrepreneurs are almost inventors** (\bar{x} = 3.660), **Entrepreneurs will do anything for profit** (\bar{x} = 4.114), **Entrepreneurs are largely responsible for new innovations, technologies and products** (\bar{x} = 3.877), **I seriously consider entrepreneurship as a career option** (\bar{x} = 3.547), **High schools should encourage students to consider entrepreneurship** (\bar{x} = 3.915), **I am risk taker** (\bar{x} = 3.600), **Entrepreneurship is a good way to make lots of money** (\bar{x} = 4.077), **Entrepreneurship is an honourable profession** (\bar{x} = 3.643) and **I prefer to work**

for a large company, for better career prospects ($\bar{x}=4.322$) evaluated had a mean above the average mean ($\bar{x}=3.359$), and that indicates respondents' inclination towards entrepreneurship.

The other seven statements such as **Buying a business is not entrepreneurship** ($\bar{x}=2.702$), **Owning a franchise is not entrepreneurship** ($\bar{x}=2.588$), **I can earn more money working for someone else** ($\bar{x}=2.623$), **I am too busy with classes to consider starting my own business** ($\bar{x}=3.145$), **My parents are entrepreneurs** ($\bar{x}=2.091$), **It is too risky to start own business** ($\bar{x}=2.807$), and **A tertiary education is not necessary to be an entrepreneur** ($\bar{x}=2.683$) resulted with a mean below the average ($\bar{x}=3.359$).

The highest mean have been achieved from the construct relative to respondents preferring to work for a large company for a better career prospect as opposed to starting their own business. This shows a contradicting thought among learners, nonetheless, it also reveals an independent opinion among learners.

3.6 ENTREPRENEURIAL OPPORTUNITIES

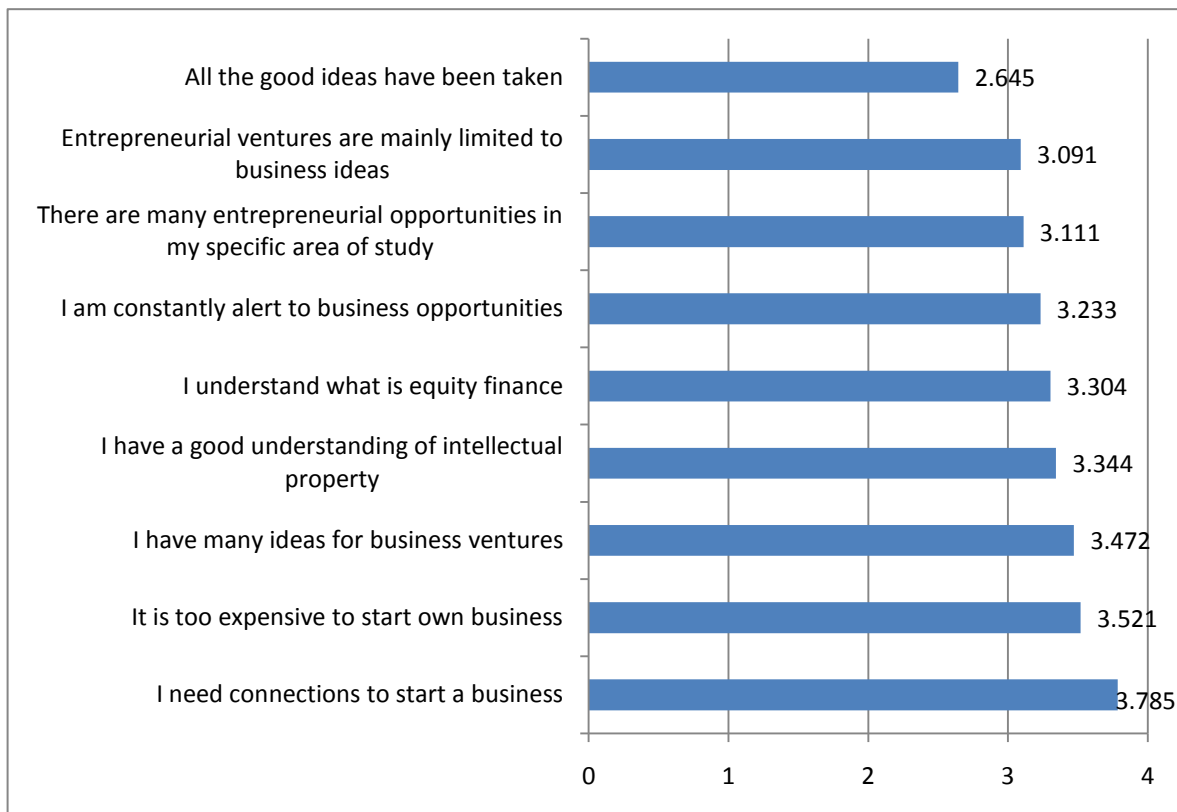
This part of the questionnaire was designed to determine how respondents view and identify entrepreneurial opportunities within their area of study and environment. Table 3.11 presents mean scores and standard deviation relative to the statements (C1 to C9, see ANNEXURE A) in no particular order.

Table 3.11: Entrepreneurial opportunities

Statements	N	Mean	Std. deviation
I have many ideas for business ventures	271	3.472	1.128
It is too expensive to start my own business	267	3.521	1.227
There are many entrepreneurial opportunities in my specific area of study	270	3.111	1.217
Entrepreneurial ventures are mainly limited to business ideas	274	3.091	1.043
I have a good understanding of intellectual property	270	3.344	1.030
I understand what is equity finance	270	3.304	1.184
I am constantly alert to business opportunities	271	3.233	1.155
All the good ideas have been taken	273	2.645	1.340
I need connections to start a business	274	3.785	1.279
Average	274	3.278	1.178

The average mean of 3.2784 derived from table 3.11 indicates a fair amount of respondents declaring that opportunity identification is an acceptable construct in determining the entrepreneurial attitude. The results of the survey are graphically depicted in figure 3.3 in order to compare the mean scores across the statements ranked from the lowest to highest mean score.

Figure 3.3: Rank entrepreneurial opportunities per mean



Five of the nine Statements being **I understand what is equity finance** ($\bar{x}=3.303$), **I have a good understanding of intellectual property** ($\bar{x}=3.344$), **I have many ideas for business ventures** ($\bar{x}=3.472$), **It is too expensive to start my own business** ($\bar{x}=3.521$) and **I need connections to start a business** ($\bar{x}=3.785$) obtained high scores indicating a relative strong agreement with the respective statements as compared to the average mean of 3.279.

Of the remaining four Statements, **All the good ideas have been taken** ($\bar{x}=2.645$) have the lowest mean with a relative disagreement towards the statement. The rest of Statements, **There are many entrepreneurial opportunities in my specific area of study** ($\bar{x}=3.111$), **I am constantly alert to business opportunities** ($\bar{x}=3.233$) obtained mean scores below the average mean. But still remains marginally higher than the three of the five point Likert scale measure.

3.7 ENTREPRENEURSHIP ENVIRONMENT WITHIN THE HIGH SCHOOLS

Methods of indulging the secondary school learners within the entrepreneurial environment can be attractive tools used to fast track entrepreneurship awareness programmes. The purpose of this section was to determine the entrepreneurial activities, programmes, mentoring issues, and various factors that assess the entrepreneurial environment within secondary schools, particularly among grade 12 learners.

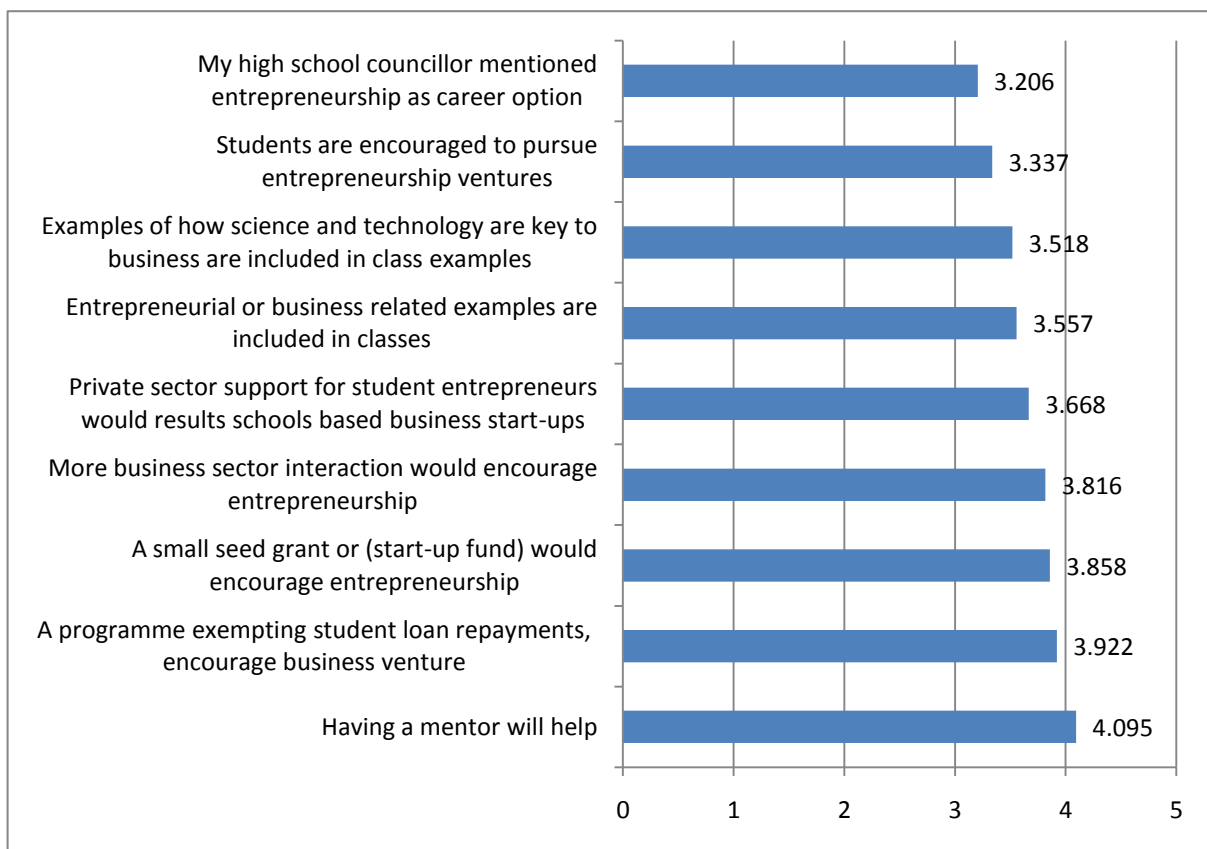
Table 3.12: Entrepreneurship environment within the secondary schools

Statements	N	Mean	Std. Dev
Students are encouraged to pursue entrepreneurship ventures	273	3.337	1.171
My high school councillor mentioned entrepreneurship as a career option	272	3.206	1.304
Examples of how science and technology are key to business are included in class examples	272	3.518	1.187
Entrepreneurial or business related examples are included in classes	271	3.557	1.188
Having a mentor will help	264	4.095	0.980
A small seed grant or (start-up fund) would encourage entrepreneurship	268	3.858	1.036
More business sector interaction would encourage entrepreneurship	271	3.816	0.925
Private sector support for student entrepreneurs would result in more schools based business start-ups	271	3.668	0.993
A programme exempting student loan repayments, for student entrepreneurs would encourage more students to pursue a business venture	269	3.922	0.980
Average	274	3.664	1.085

Table 3.12 presents the results of the survey, particularly highlighting the mean scores and standard deviations of the respective statements (D1 to D9, see ANNEXURE A) in no particular order.

Most of the respondents indicated a strong approval with the average mean score of 3.664 and also with an acceptable standard deviation of 1.085. This average mean score indicates a reasonable agreement among respondents against the environmental conduciveness of the secondary schools towards entrepreneurship. Figure 3.4 depicts the mean scores of statements ranked from the lowest to the highest mean score.

Figure 3.4: Entrepreneurial environments within secondary schools ranked from lowest to highest value



Of the nine Statements in this section, five of the statements being **Private sector support for student entrepreneurs would result in more schools based business start-ups** ($\bar{x}=3.668$), **More business sector interaction would encourage entrepreneurship** ($\bar{x}=3.816$), **A small seed grant or (start-up fund) would encourage entrepreneurship** ($\bar{x}=3.858$), **A programme exempting student loan repayments, for student entrepreneurs would encourage more students to pursue a business venture** ($\bar{x}=3.922$) and **Having a mentor will help** ($\bar{x}=4.095$)

obtained a mean value more than the average mean., with the statement **Having a mentor will help**, outweighing other statements with a mean score of 4.095.

The rest of the statements scored more than three of the five-point Likert scale and marginally low relative to the average mean score ($\bar{x}=3.664$). The results were as follows of the mean values: **Students are encouraged to pursue entrepreneurship ventures** ($\bar{x}=3.337$), **My high school councillor mentioned entrepreneurship as a career option** ($\bar{x}=3.206$), **Examples of how science and technology are key to business are included in class examples** ($\bar{x}=3.518$) and **Entrepreneurial or business related examples are included in classes** ($\bar{x}=3.557$).

3.8 THE SOUTH AFRICAN ENTREPRENEURIAL ENVIRONMENT

This part of the questionnaire is designed to evaluate the South African entrepreneurial environment with specific reference to its conduciveness, support system from the society and the effect of government regulations on entrepreneurship programmes.

Table 3.13: The South African entrepreneurial environment

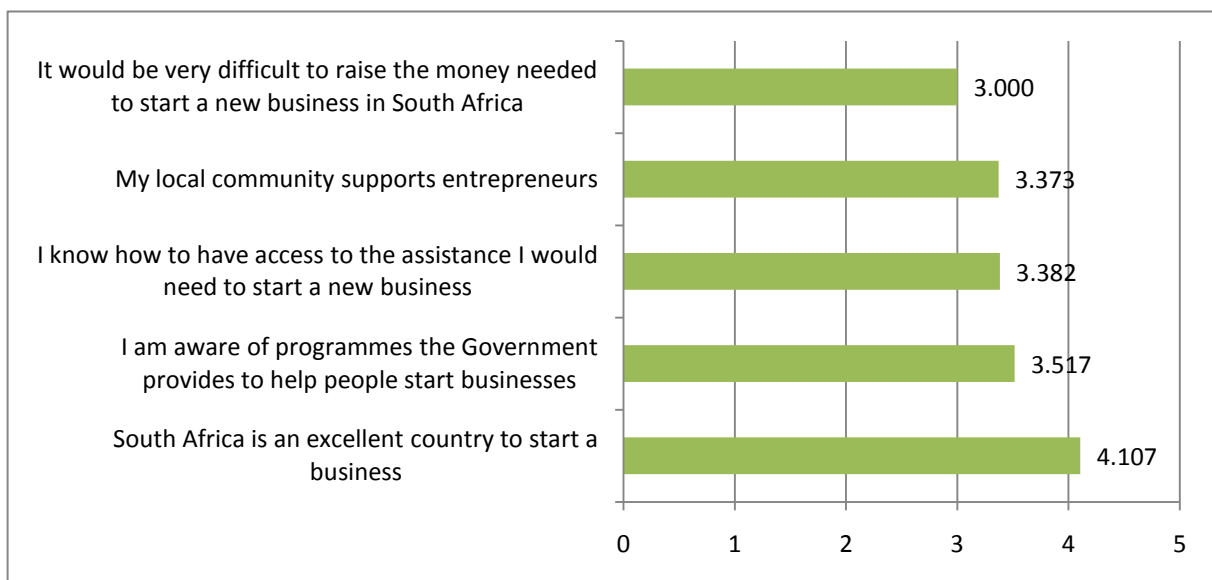
Statements	N	Mean	Std. dev
South Africa is an excellent country to start a business	272	4.107	1.045
My local community supports entrepreneurs	271	3.373	1.189
It would be very difficult to raise the money needed to start a new business in South Africa	270	3.000	1.270
I know how to have access to the assistance I would need to start a new business	272	3.382	1.169
I am aware of programmes the government provides to help people start businesses	273	3.517	1.312
Average	274	3.476	1.197

Table 3.13 presents the mean scores and standard deviations of the statements which provide an indication of how inclined respondents are towards the South African entrepreneurial environment.

The average mean ($\bar{x} = 3.4756$) from the total respondents (274) have indicated their agreement with the current South African entrepreneurial environment.

In order to dissect the South African entrepreneurial environment, the mean score have been calculated and ranked from the lowest to highest mean score as depicted in figure 3.5.

Figure 3.5: Ranked from lowest to highest of the South African entrepreneurial environment



Five statements were constructed to evaluate the entrepreneurial environment with the use of a measuring five-point Likert-scale tool, the selective options ranging between strongly agree (5) and strongly disagree (1) were provided. The highest mean of 4.107 was obtained among respondents which consider South Africa as an excellent country to start a business. Subsequently, a statement, **I am aware of the programmes the government provides to help people start businesses** obtained a mean score of 3.517 that is marginally above the average mean. Statement being **It would be very difficult to raise the money needed to start a new business in South Africa** ($\bar{x} = 3.000$) has a function of equivalent to neutral as

seen from its mean score. The remaining statements are below the average mean but more than three of the five-point Likert-scale instrument, the statements are as follows: **My local community supports entrepreneurs** ($\bar{x}=3.373$) and **I know how to have access to the assistance I would need to start a new business** ($\bar{x}=3.382$)

3.9 RELIABILITY

The internal consistency of the questionnaire was determined by the calculation of Cronbach alpha. The establishment of Cronbach alpha was developed by Lee Cronbach in 1951 in order to check the internal consistency, and it is expressed with the number between 0 and 1. Internal consistency describes the extent to which all items or statements in the test measures the same construct (Tavakol, 2011:53). Thus table 3.14 presents the Cronbach alphas, calculated for this study.

Table 3.14: Cronbach alpha values

Constructs	Cronbach alpha
Attitude towards entrepreneurship	0.558
Entrepreneurial opportunities	0.606
Entrepreneurship environment within the secondary schools	0.615
The South African entrepreneurship environment	0.466

Table 3.14 indicates that out of the four calculated Cronbach alpha coefficients, three coefficients are reasonably accepted, in which the cut-off point value has been reduced to 0.5 as concurred and approved by SCS. Therefore, results should be discussed or interpreted with caution as the normal cut-off point is above 0.7. Field (2005:668) concurred with SCS that it is not necessary to ignore the constructs less than 0.7 particularly when attitude is measured except if ability is assessed then 0.7 cut-off points should be considered. The construct, **The South African entrepreneurship environment** is relatively low (0.466) as compared with other constructs but it is satisfactorily behind the target with a marginal difference. Hence, items or statements used to test this construct should be further investigated in order to improve its internal consistency.

3.10 RELATIONSHIP BETWEEN DEMOGRAPHIC VARIABLES AND ENTREPRENEURIAL ATTITUDE CONSTRUCTS

In order to test for practical significance, the independent (two-sample) t-test had to be performed. The constructs are measured on preference of significance level in which the benchmark ratings are confined within $d \sim 0.2$ which represents a small or no practical significant effect, $d \sim 0.5$ indicates a medium effect with visible practical difference, and $d \sim 0.8$ reveals a large effect practically significant difference (Ellis & Steyn, 2003:51). Demographic variables used in this questionnaire (see ANNEXURE A) were correlated with the selected constructs in order to evaluate the statistical significance. However, the p-value will also be utilised to determine the statistical significance difference and has a desirable benchmark value of less than 0.05 to have any statistical significance.

3.10.1 Relationship between entrepreneurial constructs and gender of respondents

Table 3.15 presents the relationship between the seven constructs measuring the entrepreneurial attitude and the demographic variable gender, with the mean (\bar{x}) standard deviation (s), t-test (p) and effect size (d).

Table 3.15: Relationship between the construct measuring entrepreneurial attitude and gender

	GENDER						Comparison	
	Male			Female			p	D
Construct	n	\bar{x}	S	n	\bar{x}	s		
Attitude	121	3.564	0.461	153	3.596	0.468	0.572	0.07
Opportunities	121	3.300	0.618	153	3.220	0.689	0.351	0.11
Schools environment	120	3.600	0.517	153	3.708	0.562	0.100	0.19
Excellent country	120	4.033	1.012	152	4.165	1.070	0.302	0.12
Community support	119	3.244	1.081	152	3.474	1.260	0.107	0.18
Access assistance	120	3.433	1.158	152	3.342	1.180	0.523	0.08
Government programmes	120	3.400	1.318	153	3.608	1.304	0.195	0.16

The demographic variable gender (male or female) classification did not have a statistical (p -value < 0.05) significant on the selected constructs measuring entrepreneurial attitude.

Furthermore, the results indicate that the demographic variable gender classification have no practical significant effect on the mentioned tabulated constructs. The d -value varies between a low of 0.07 and a high of 0.19.

3.10.2 Relationship between entrepreneurial constructs and age group of respondents

Table 3.16 presents the relationship between the seven constructs measuring the entrepreneurial attitude and the age group distribution, with the mean (\bar{x}), standard deviation(s), t-test (p -value) and effect sizes (d -value).

Table 3.16: Relationship between the constructs measuring entrepreneurship attitude and age groups

	AGE GROUP						Comparison	
	16-19			20 and above				
Construct	n	\bar{x}	S	n	\bar{x}	s	p	D
Attitude	210	3.527	0.449	63	3.780	0.446	0.000	0.56
Opportunities	210	3.202	0.681	63	3.449	0.543	0.003	0.36
Schools environment	209	3.653	0.563	63	3.693	0.480	0.582	0.07
Excellent country	208	4.072	1.068	63	4.238	0.962	0.245	0.16
Community support	207	3.329	1.198	63	3.524	1.162	0.249	0.16
Access assistance	209	3.373	1.166	63	3.419	1.195	0.789	0.04
Government programmes	209	3.431	1.329	63	3.794	1.233	0.047	0.27

The variable age group distribution has a statistical significance on the perceptions regarding **Attitude** ($p=0.000$), **Opportunities** ($p=0.003$) and **Government programmes** ($p=0.047$). While other constructs rated higher than the threshold (0.05) value, hence no statistical significance on other five constructs measuring entrepreneurial attitude.

The results furthermore indicated that the demographical variable age group classification have a small to medium effect on the constructs. The construct **attitude towards entrepreneurship** (d -value= 0.56) is the only variable constituting a medium effect distortion in the sample. The other constructs were ranged from a d -value of 0.04 to 0.36.

3.10.3 Relationship between entrepreneurial constructs and race group of respondents

Table 3.17 presents a race group as clustered between black and white, in which a relationship between the seven constructs and the race group is determined, with the use of a mean score (\bar{x}), standard deviation (s), t-test (p -value) and the effect size (d -value).

Table 3.17: Relationship between the constructs measuring entrepreneurship attitude and race group

	RACE GROUP						Comparison	
	African			White				
Construct	n	\bar{x}	S	n	\bar{x}	s	p	D
Attitude	226	3.588	0.4685	43	3.548	0.460	0.597	0.09
Opportunities	226	3.286	0.671	43	3.085	0.586	0.048	0.30
Schools environment	225	3.640	0.558	43	3.764	0.423	0.101	0.22
Excellent country	224	4.277	0.958	43	3.209	1.059	0.000	1.01
Community support	223	3.431	1.194	43	3.070	1.100	0.057	0.30
Access assistance	224	3.366	1.194	43	3.488	1.055	0.498	0.10
Government programmes	225	3.698	1.245	43	2.651	1.270	0.000	0.82

The perceptions regarding **Opportunities** ($p=0.048$), **Excellent country** ($p=0.000$), **Community support** ($p=0.057$) and **Government programmes** ($p=0.000$) were revealed to be influenced to a statistically significant extent by race group.

In all instances the effect size has no effect on the sample, apart from the variables **South Africa is an excellent country to start your own business** (d -value= 1.01) and **Government programmes** (d -value= 0.82) which have a practical significant difference on the sample, due to the large effect experienced on the sample.

3.10.4 Relationship between entrepreneurial constructs and parent’s business involvement of respondents

Table 3.18 indicates the relationship between the demographic variable parents own business and seven constructs which evaluates the entrepreneurial attitude, including the mean (\bar{x}), standard deviation (s), t-test (p -value) and effect size (d -value).

Table 3.18: Relationship between the constructs measuring entrepreneurship attitude and parents owning business

	PARENTS' OWN BUSINESS						Comparison	
	Yes			No				
Construct	n	\bar{x}	S	n	\bar{x}	s	p	D
Attitude	33	3.658	0.429	237	3.569	0.470	0.276	0.19
Opportunities	33	3.040	0.685	237	3.284	0.646	0.061	0.36
Schools environment	33	3.653	0.450	236	3.663	0.559	0.909	0.02
Excellent country	33	3.424	1.251	235	4.204	0.983	0.001	0.62
Community support	33	3.030	1.186	234	3.432	1.185	0.076	0.34
Access assistance	33	3.576	1.091	235	3.353	1.187	0.284	0.19
Government programmes	33	2.818	1.310	236	3.610	1.285	0.002	0.60

Table 3.18 indicates a statistical significant difference ($p < 0.05$) in the mean values regarding the demographic variable **Parents owning business** relative to the constructs **Excellent country** ($p = 0.001$), **Opportunities** ($p = 0.061$) and **Government programmes** ($p = 0.002$).

The results furthermore indicate that the demographic variable (parents owning business) have a small to medium effect on the constructs measuring entrepreneurial attitude and the state of entrepreneurship in South Africa. The *d*-value varies between a low (0.02) to a high (0.62). The constructs, **Opportunities** (*d*-value= 0.36), **South Africa an excellent country to start your own business** (*d*-value= 0.62), and **Community support** (*d*-value= 0.34) have a medium effect.

3.10.5 Relationship between entrepreneurial constructs and respondents given pocket money while at school

Table 3.19 presents the statistical and practical significance of the influence of being given pocket money while at school on perception of assessing attitude towards entrepreneurship.

Table 3.19: Relationship between the constructs measuring entrepreneurship attitude and being given pocket money

	GIVEN POCKET MONEY						Comparison	
	Yes			No			p	D
Construct	n	\bar{x}	S	n	\bar{x}	s		
Attitude	140	3.569	0.448	131	3.593	0.486	0.657	0.05
Opportunities	140	3.268	0.610	131	3.238	0.711	0.716	0.04
Schools environment	140	3.660	0.529	130	3.656	0.565	0.957	0.01
Excellent country	140	4.121	1.083	129	4.109	1.010	0.920	0.01
Community support	138	2.906	1.366	129	3.085	1.153	0.823	0.13
Access assistance	140	3.085	1.156	129	3.349	1.197	0.685	0.05
Government programmes	140	3.621	1.272	130	3.408	1.357	0.184	0.16

Table 3.19 indicates that a selected demographic variable did not have a statistical (p-value <0.05) significant on the seven constructs measuring attitude towards entrepreneurship among grade 12 learners.

The results furthermore indicate *d*-values that rated between the ranges of 0.01 to 0.16. Hence, the sample can be confirmed that it is not distorted, in all no practical significant effect on the results has been experienced.

3.10.6 Relationship between entrepreneurial constructs and respondent with jobs while at school

Table 3.20 presents the statistical and practical significance of the influence of having a job while at school on the attitude one has towards entrepreneurship.

Table 3.20: Relationship between the constructs measuring entrepreneurship attitude and having a job while at school

	JOB WHILE AT SCHOOL						Comparison	
	Yes			No			p	D
Construct	n	\bar{x}	S	n	\bar{x}	s		
Attitude	25	3.593	0.457	243	3.589	0.466	0.963	0.01
Opportunities	25	3.443	0.602	243	3.242	0.669	0.127	0.30
Schools environment	25	3.671	0.345	242	3.660	0.565	0.888	0.02
Excellent country	25	3.880	1.013	241	4.133	1.052	0.252	0.24
Community support	25	3.600	0.764	240	3.354	0.079	0.246	0.20
Access assistance	25	4.040	0.840	241	3.307	1.182	0.000	0.62
Government programmes	25	3.640	1.411	242	3.512	1.296	0.668	0.09

Table 3.20 indicates that the selected demographic variable had no statistical significance on the constructs measuring attitude, except the construct **Access assistance** ($p=0.000$) which was shown to be influenced by having a job while at school in a statistical significant way.

Furthermore, the results indicate that the sample size had three variables with no practical significance effect being **Attitude** (d -value=0.01), **Environment** (d -value=0.02) and **Government programmes** (d -value=0.09). The results also indicates a small effect experienced on the sample, on the three constructs being **Opportunities** (d -value=0.3), **Excellent country** (d -value=0.24) and **Support** (d -value=0.2) are influenced by having a job while at school. An outlier d -value was registered with a medium effect distortion on the variable **Government assistance** (0.62).

3.10.7 Relationship between entrepreneurial constructs and respondents' subject choice

Table 3.21 presents the relationship between the demographic variable being involved with business subjects and the seven constructs used to assess the

entrepreneurial attitude and the conduciveness of the South African environment towards entrepreneurship.

Table 3.21: Relationship between the constructs measuring entrepreneurship attitude and studying business subjects

	STUDYING BUSINESS SUBJECTS						Comparison	
	Yes			No				
Construct	n	\bar{x}	S	n	\bar{x}	s	p	D
Attitude	114	3.722	0.476	154	3.495	0.427	0.000	0.48
Opportunities	114	3.442	0.564	154	3.133	0.699	0.000	0.44
Schools environment	114	3.837	0.441	153	3.534	0.582	0.000	0.52
Excellent country	113	4.035	1.035	153	4.163	1.060	0.325	0.12
Community support	114	3.500	1.154	151	3.298	1.204	0.167	0.17
Access assistance	113	3.735	0.955	153	3.137	0.101	0.000	0.48
Government programmes	114	3.623	1.244	153	3.451	1.347	0.282	0.13

From table 3.21, it can be deduced that the perceptions regarding **Attitude** ($p=0.000$), **Opportunities** ($p=0.000$), **School environment** ($p=0.000$) and **Access to assistance** ($p=0.000$) were shown to be influenced to a statistically significant extent by studying business subjects.

Furthermore, the result indicates that three constructs being **Excellent country** (d -value=0.12), **Community support** (d -value 0.17) and **Government programmes** (d -value 0.13) have no practical significant effect on the sample. The other factors indicated a small to medium effect towards studying business subjects.

3.11 SUMMARY

The empirical study consists of a questionnaire adapted from Luiz and Mariotti (see ANNEXURE A), which attempts to assess the attitude towards entrepreneurship among grade 12 learners in the Kgetlengrivier Local Municipality of the North-West Province, based on the seven constructs that measures the perceptions and conduciveness of the entrepreneurial environment in schools and South Africa.

Six schools participated in the study and they originate from a single circuit (Elands) as clustered by the DoE. The sample size was composed by a study population equivalent to 299 potential candidates, but resulted in a response count of 274. Furthermore, the resulting data was captured, coded, and analysed by SCS.

The results of this study were presented in a tabular format with the inclusion of variables such as the demographic information relative to the respondents; including the calculations of mean scores, standard deviation and standard mean errors. The demographic information of the respondents were analysed in terms of gender (male 121 or female 153), race (African 226, Coloured 5 and White 43), age group (16-19 or 20 and above), parents own business (yes 33 or no 237), studying business subjects (yes 114 or no 154), having a job while studying (yes 25 or no 243) and being offered pocket money while at school (yes 140 or no 131).

This chapter also ranked mean scores of variables relative to measuring the attitude towards entrepreneurship. Prior to presenting the results, a reliability test had to be calculated in which the Cronbach alpha indicated the internal consistency of the constructs. Only one construct was rated below the threshold, hence it was discarded as a construct but its variables were considered when determining the relationship between demographic information and constructs.

This chapter has revealed few interlinks between demographic information and the seven constructs. In which some of the demographic data are not effectively affecting the attitude of learners towards entrepreneurship. Therefore, the following chapter will outline the relevancy, conclude on the findings, make recommendations on the necessary interventions, and finally, expand on distinguishable effects the research has on the community.

CHAPTER 4

CONCLUSIONS AND RECOMMENDATIONS

4.1 INTRODUCTION

This chapter aims to make conclusions on the specific subjects covered by the empirical study chapter. Firstly, it will promptly conclude on the demographic data gained from the study. Secondly, it includes a detailed discussion on constructed variables that measures different constructs such as the attitude towards entrepreneurship and the South African entrepreneurial environment. Furthermore, it will conclude on various relations between demographic information and the constructs used to measure attitude including the South African entrepreneurial environment.

Finally, this chapter will make practical recommendations and holistically revisit and assess the achievement of the secondary objectives in conjunction with the primary objective. The chapter will conclude with suggestions for future research topics.

4.2 CONCLUSIONS

The conclusions will be structured in a way to highlight the data obtained from the results of the survey, in which conclusions will follow a structured sequential flow format such as the one in chapter 3. It will point out variables inclusive in the study such as demographic information, thereafter the attitudes towards entrepreneurship, followed by the opportunity recognition. Subsequently it will make conclusions on the entrepreneurship environment within the secondary schools and also the South African environment relative to entrepreneurship. Similarly, it will make reasonable conclusions on the statistical significance of the relationship between demographic variables and constructs measuring attitude.

4.2.1 Demographic information of respondents

The demographic information of respondents included the following variables which were used for analysis: gender classification, age group distribution, race group classification, parental status with regards to owning a business, parents' level of education, parents' monthly income, students' accessibility to pocket money while at school, having a job while at school, and learners studying business subjects.

The following general conclusions can be drawn:

- Six schools participated in this survey, with most of the respondents accounted for by Mphe-bana High School (42%), followed by Reebone High School (19%), and other schools constituted a percentage of students less than 12%. It is imperative to acknowledge that Mphe-bana High School is overpopulated with regards to grade 12 learners. Therefore, the government must build high schools in order to relieve the pressure on the teachers with regards to offering individual attention to learners.
- The participation of respondents was mainly populated by females (55.8%), followed by males (44.2%). Therefore, it can be concluded that almost an equal distribution was achieved; if further surveys are prompted then it could result in an equal distribution. The results of this study were not dependent on any specific gender.
- Age group distribution indicates that most of the respondents (71.5%) are between the age group of 18 and 19 years old. This is mainly due to the nature of the sampled population, which is only catering for grade 12 learners rather than the participation of all school members. Furthermore, the results also indicate that 21.9% of respondents are between the age group of 20 and 22 years, this can be due to a high failure rate, therefore a further assessment on the cut-off point should be investigated, to establish the reasons why old students are still allowed to participate in normal schools rather than attending adult based education schools.
- Race was classified according to the South African race classification, in which most of the respondents (82.5%) were made up of African learners, followed by Whites (15.7%). This result is due to the nature of the selected

area of study where the majority of schools are in the rural areas and also a typical number of learners are from nearby farms.

- Most of the respondents (86.5%) indicated that their parents' involvement in business is subtle. Therefore, not much can be expected in terms of parents' involvement in fostering entrepreneurship behaviour in their children.
- Most of the respondents (33.2%) indicated that their parents have completed grade 12, followed by an equal distribution of those that completed high school (21.9%) and primary school (22.3%). Only 13.1% indicated that their parents have a tertiary education and subsequently, 8.4% have no schooling. Therefore, this could be lethal if education is considered an important element in influencing learners towards entrepreneurship as only 13.1% of parents have higher education qualifications.
- The majority of respondents (88.7%) were not linked with having a job while at school and with 9.1% indicating they have a job while at school. It is encouraging to see that a large number of learners are not working, therefore, it is expected that they can focus on their schooling.
- Most of the respondents (56.2%) indicated that they are not studying any business subjects and 41.6% are studying business subjects.
- The question that requested respondents to indicate their parents' monthly income resulted with the majority of respondents (42.7%) indicating an income less than R2000, followed by parents earning between R2000 and R5000 at 16.1%, and only 5.5% is accounted for by parents earning more than R20000. Therefore, results shows that the selected area of study is hard stricken by poverty based on the level of monthly income. Furthermore, results have shown that 18.2% of respondents did not indicate their parents' income, in which this can be presumptuously associated with the sensitivity of the subject matter.

4.2.2 Attitude towards entrepreneurship

This section will conclude on the perception of grade 12 learners towards entrepreneurship, by discussing statements measuring this construct. The construct included 17 statements that relatively measured the attitude or perceptions towards entrepreneurship. The majority of respondents prefer **to work for a large company** in order to be guaranteed financial security. The preceding statement is highly regarded as opposed to the statement **I want to start my own business**. Nonetheless, this reveals that most of the respondents are concerned with their future security more than starting a business. In contrary, respondents also agreed that they have interest of venturing into business, which is considered to be a positive attitude. While the following variables, **entrepreneurs will do anything for profit** and **entrepreneurship is a good way to make lots of money** rated the mean values of 4.114 and 4.077 respectively. This results show that more students thinks entrepreneurship is all about making money and profit, they are not aware of the responsibilities and risks associated with business.

Most of the respondents agreed with the statement that **high school should encourage students to consider entrepreneurship** as a possible career pursuit. This means it is vital to promote entrepreneurship programmes among learners; it is evident from the results that entrepreneurial awareness is lacking within the high schools. The majority of respondents agreed with the statements which stipulate that **entrepreneurs are largely responsible for new innovations, technologies and products, entrepreneurs are almost inventors**, and that **entrepreneurship is an honourable profession**. Furthermore, respondents regard themselves as risk takers, while they are considering entrepreneurship as a career. Respondents indicated that they are too busy with their studies to consider starting a business.

Most of the respondents had a neutral expression with regards to the following statements: **it is too risky to start my own business, buying business is not entrepreneurship, a tertiary education is not necessary to be an entrepreneur, I can earn more money working for someone else**; and **owning a franchise is not entrepreneurship**. Based on these results, it can be concluded that learners cannot clearly define the basis of entrepreneurship. Hence, learners should be taught the

risks involved in starting a business, similarly the spin-off effects of buying a business.

4.2.3 Entrepreneurial opportunities

From figure 3.3, it can be deduced that high mean values derived from the following statements: **I need connections to start a business, it is too expensive to start my own business, I have many ideas for business ventures, I have a good understanding of intellectual property, and I am constantly alert to business opportunities** are prominently regarded in opportunity identification. Therefore, these results indicate that learners are scared to face challenges of starting a business because they mostly consider high start-up capital involved in business as a demoralising factor for venturing into business. Although the students are opportunistic in nature and have a good understanding of business terminologies such as intellectual property, and also possess too many ideas for starting a business nonetheless they still remain pessimistic to execute or put into practice their business ideas.

Furthermore, most of the respondents expressed a neutral position with regards to the following statements: there are many entrepreneurial opportunities in my specific area of study and entrepreneurial ventures are mainly limited to business ideas. It can be concluded that learners are not considerate of opportunities in their area of study, therefore measures to promote opportunity recognition is imperative. While the majority of respondents disagreed with the statement **all good ideas have been taken**. This indicates that learners are still positive towards identifying good ideas in order to spot the entrepreneurial opportunities.

4.2.4 Entrepreneurship environment within the schools

An evident high mean values are achieved on the following statements: **having a mentor will help, a programme exempting students loan repayments for students entrepreneurs would encourage more students to pursue a business venture, a small seed grant or start-up fund would encourage entrepreneurship, more business sector interaction would encourage entrepreneurship, private**

sector support for student entrepreneurs would result in more schools based business start-ups. These results indicated that a large number of learners are ready to participate in entrepreneurship but obviously they recommend the implementation of the exempting entrepreneurial programmes to foster entrepreneurial attitude, and having a good role model to set the platform in order to uniquely introduce them to entrepreneurship.

Most of the respondents evaluated the following statements below the average mean value (3.664): **entrepreneurial or business related examples are included in classes, example of how science and technology are key to business are included in class examples, students are encouraged to pursue entrepreneurship ventures, and my high school councillor mentioned entrepreneurship as a career option.** But these statements had a neutral expression on the five-point Likert scale. Therefore, it can be concluded that most of the respondents partly concur with the introduction of business examples in classes, and believe that science and technology are key factors towards seizing an entrepreneurial opportunity. It can be derived from the results that students are encouraged to pursue entrepreneurship as a career and high school councillors are trying to provide guidance with regards to choosing entrepreneurship as a career. But this situation needs to be improved through entrepreneurship awareness and educational programmes. Hence, education and training can be regarded as an imposing tool to foster entrepreneurial awareness among students.

4.2.5 South African entrepreneurial environment

As indicated by the high mean value (4.107), the respondents agreed with the statement that **South Africa is an excellent country to start a business.** It was followed by most of the respondents agreeing to the fact that they are aware of **programmes the government provides to help people start businesses.** Hence, sustainability and continuation of the awareness with regards to government programmes should be motivated in order to improve on the current status quo.

The following statements had a neutral expression in terms of the support system towards potential entrepreneurial candidates: **I know how to have access to the**

assistance I would need to start a new business, my local community supports entrepreneurs and it would be very difficult to raise the money needed to start a new business in South Africa. Therefore, it can be concluded that much improvement in this regard is urgently required. Similarly, it is also evident in chapter 2 when entrepreneurial dialogues had been established to deal with some of the issues (lack of financial assistance and poor support structures) facing South Africa today with regards to entrepreneurship.

4.2.6 Relationship between demographical variables and the constructs tested in the questionnaire

The conclusions based on the results of the analysis regarding the relationship between the demographic variables such as gender, race, and age group will be discussed in this section:

4.2.6.1 Relationship between gender and constructs measuring attitude

Based on the results of the analysis regarding the relationship between gender and entrepreneurial attitude construct, it has been concluded that gender does not influence respondents' perception towards entrepreneurship in the Kgetlengrivier Local Municipality. Furthermore, results did not indicate a statistical significant difference ($p < 0.05$) in the mean values between the perceptions of male and females with regards to the constructs measuring attitude.

Although female respondents rated five of the seven constructs slightly more positive than their counterpart, the differences were not practically significant for all of the constructs without any practical significant effect being determined.

4.2.6.2 Relationship between age variable and constructs measuring attitude

Age group classification was into two groups, with merging respondents between the age of 16 to 19 years and the ones from 20 years and above. Overall, the age group of 20 years old and above have a more positive attitude towards entrepreneurship than the learners between 16 and 19 years old. In fact, they are also able to identify

new opportunities and are highly aware of the government programmes that assist entrepreneurs. Therefore, this indicates that maturity also has a role to play with regards to instigating a positive mind set towards entrepreneurship. Although the results had four variables which were above the threshold value ($p=0.05$), the practical significance difference was not obtained.

Furthermore, the study indicated two of the seven constructs expressed a small ($d\sim 0.36$) and medium effect ($d\sim 0.56$) on the sample size. Therefore, a small distortion has been realised in this sample. Nonetheless, the differences were not practically significant regarding the remaining constructs with a small effect being determined.

4.2.6.3 Relationship between race group and construct measuring attitude

The race classification was clustered into African and White, due to lack of representatives from other ethnic groups. The results indicated a statistical significance difference in the mean values between the perceptions of African and White respondents. With African learners being strongly agreeing with the constructs; **opportunities, community support, government programmes and regarding South Africa as an excellent country to venture into business.** Various factors may be of reason for this observation, but a logical one could be the state of politics or legacy of apartheid in the country as the focus is adjusted to a specific racial group.

Only one construct (**government programmes**) evaluated a large effect on the sample, however, the rest of the constructs had no visible effect on the sample size. It can be concluded that African respondents are more positive towards government programmes rather than White counterparts. Therefore, an imperative measure needs to be devised in order to attract white respondents towards entrepreneurial government activities.

4.2.6.4 Relationship between parents' involvement in business and construct measuring attitude

Based on the results of the analysis regarding the relationship between parents owning a business and the seven constructs measuring attitude, overall it has been deduced that parents' background with regards to owning a business does not have a statistically significant influence on the respondents' perception towards entrepreneurship. Although the three constructs (**excellent country, opportunities and government programmes**) indicated that respondents with parents not owning business have a more positive attitude. The reason for this observation might be due to the apathy associated with parents' already owning businesses and will try to foster entrepreneurship into their children.

Furthermore, results indicated that there is a visible effect on the sample specifically on two constructs (**excellent country and government programmes**). This can be attributed to the cascaded positive synergies from parents owning business to their children about the South African environment.

4.2.6.5 Relationship between being given pocket money and construct measuring attitude

Overall, it can therefore be generalised that being given pocket money while at school has no practical significant influence on the attitude one has towards entrepreneurship.

No practical visible effect was noted on all constructs used to measure attitude towards entrepreneurship.

4.2.6.6 Relationship between having a job while at school and construct measuring attitude

The results indicated three constructs (**access to assistance**) with statistical significant difference in the mean values between **having a job while at school**. Therefore, based on these results, it can be concluded that having a job is partly

influencing the awareness one has towards accessing the financial assistance. This could be attributed to the exposure individuals receive when employed. Other constructs evaluated a p-value larger than 0.05, hence no statistically significant difference could be deduced.

A visible effect on the sample was effectively deduced from the construct that measures provisional access to assistance particularly with regards to financial aids. The differences were not practically significant on six out of the seven constructs evaluating attitude towards entrepreneurship.

4.2.6.7 Relationship between studying business subject and constructs measuring attitude

Based on the results of the analysis regarding the relationship between **learners' studying business subjects** and constructs measuring attitude towards entrepreneurship, it has been concluded that learners with business subjects are more positive and aware of entrepreneurial opportunities, are prone to engage in entrepreneurial activities, and they are more informed with regards to accessing assistance. Furthermore, the results indicated that business subject learners can be able to seize an opportunity and perceives the school environment conducive for entrepreneurship.

Four of the constructs being **attitude**, **opportunities**, school environment and **access to assistance** evaluated a visible medium effect on the sample size. Therefore, it can be concluded that the majority of constructs revealed that learners studying business subjects are more inclined to choosing entrepreneurship as a career. This could be as a result of the subject matters covered during teaching of business subjects.

4.3 RECOMMENDATIONS

It is deduced from the above mentioned conclusions that entrepreneurial perceptions are fortified and driven by various factors. Therefore, it is imperative to foster entrepreneurship among learners, a closer look into initiatives by the government to grow entrepreneurship awareness in schools and advancing with the programmes needs to be promoted. Herewith, some of the topics covered in chapter 2, which needs to be purported and sustained to grow the entrepreneurial behaviour of learners are highlighted.

4.3.1 Education and training

It is derived from the literature study that education and training are important for individuals in order to understand entrepreneurship and all its successes or failures surrounding the entrepreneurship environment. The Department of Education together with all stakeholders should introduce a subject relative to entrepreneurship; this could gear learners towards entrepreneurship and also focus them to the right direction. Most of entrepreneurial programmes are promoted within the higher education institutions; therefore a fundamental program based on changing attitudes towards entrepreneurship should be established.

The literature further concentrated on different models that can be utilised to change the learners' attitude. It is recommended that the basics of identifying career options, understating the economics and free enterprise, and gaining the prerequisite basic skills by learners can enhance their understanding of entrepreneurship. The literature review intensified on the merits of education and training as essentials to business planning, functions and management skills, and secondly the influence as carried over by parents and educators to learners in view of promoting entrepreneurship. Overall, it is however recommended that schools should be more involved in entrepreneurial affairs.

4.3.2 Perceptions towards entrepreneurship

According to Chen and Lai (2010:2), attitude is a viewpoint or a mental dimension as perceived by an individual about the situation, hence various contributing factors can be attributed to influencing attitudes. The literature review recommends that entrepreneurial development measures should be regarded in order to advance within the entrepreneurial arena. Furthermore, the literature suggests that behavioural elements such as cognition, affection and conative behaviour are important in determining the attitude one has towards entrepreneurship. Therefore, it is recommended that learners should be introduced to the entrepreneurial environment with the effective use of these behavioural tools. Furthermore, they should develop entrepreneurial characteristics such as the ones discussed in chapter 2, which means the collaboration of entrepreneurship education is vital in this regard.

Overall, the perceptions of learners towards entrepreneurship are moderately low due to hurdles facing learners such as the demoralising entrepreneurial government programmes, financial aid accessibility and initial start-up capital funds. Hence, the South African government should provide more awareness programmes through the use of latest technologies such as the World Wide Web, social sites and word of mouth advertisement. A positive perspective can be achieved if learners are provided with a platform to engage on the matters of entrepreneurship while at school. Contingency plan: schools should impose debates on the subject matter, create awareness through subject coordinators specifically life orientation teachers and create hype around the subject among learners. Long term plan: introduction of entrepreneurship curriculum.

4.3.3 Entrepreneurial opportunities

Opportunity is at the pivotal point of entrepreneurship, obviously in conjunction with the team and resources (Timmons and Spinnelli, 2009:11). Bessant and Tidd (2011: 71) extrapolate that a combination of skills, experience, aptitude, insight and circumstances should be portrayed by one in order to seize opportunities. Therefore, it is recommended that learners should become more aware of the processes

involved in accessing an opportunity. Furthermore, they should be taught of the risks involved in business, similarly the returns associated with a successful business.

4.3.4 State of entrepreneurship in schools

Grade 12 learners in this study are considered more risk averse towards starting a business; they feel more comfortable with working for a large company rather than owning a business. Hence, it would be appropriate for government and the society to invest in awareness programmes that will advance on the pronounced setback. Most of the respondents prefer a mentor in order to guide them towards entrepreneurship, and further on regard an initial start-up fund for a business as equally important for one to undertake entrepreneurship as a career.

Therefore, subject coordinators should be used by schools for guiding students, particularly life science teachers, towards entrepreneurship. It is also important that schools invite some of the successful entrepreneurs in their community to motivate learners. It is evident from the survey that students are often not encouraged to pursue entrepreneurship as a career. Therefore, the Department of Education needs to re-design the curriculum offered at schools in order to include entrepreneurship as a compulsory subject or be able to discuss entrepreneurship at least once in a week.

4.3.5 The South African entrepreneurial environment

South Africa has failed in creating an environment conducive for business start-up as it is reflected on the current state of entrepreneurship; it is evident on the TEA rating. It has marginally advanced to 8.9% in 2011, but it still lags behind other countries which are in the same efficiency driven category. Therefore, interventions by the government, small and medium business houses, private sectors, and successful entrepreneurs should be brought forward to assist by investing in the initial start-ups of business ventures and share the business risk associated to start-ups. Refer to chapter 2 for the literature with recommendations of how to advance in the entrepreneurial environment within South Africa.

4.4 ACHIEVEMENT OF OBJECTIVES

The measurement of the success of this study is based upon the achievement of primary and secondary objectives, hence a revisit on this specific section.

4.4.1 Primary objective

The primary objective of this study was to determine and assess the attitudes and behavioural patterns or trends towards entrepreneurship among grade 12 secondary school learners in the Kgetlengrivier Local Municipality of the North-West Province, in South Africa. The empirical study was conducted on the selected area of research, analysis, conclusions and recommendations were compiled in chapter 3 and 4.

4.4.2 Secondary objectives

Secondary objectives were developed with an approach of fulfilling the primary objective:

- To conduct a literature review in order to gain an understanding of the phenomenon “entrepreneurship”.
- To determine the entrepreneurial characteristics that is reflected on learners such as their ultimate understanding of entrepreneurship, cultural concerns, family environment and entrepreneurial prejudice.
- To study the present government policies that subsequently addresses the entrepreneurial awareness programmes and execution plan in secondary schools, and thus the implementation of those strategic policies in rural areas, while monitoring the state of entrepreneurship in schools and in South Africa.
- To conduct an empirical study that assesses the attitude of learners towards entrepreneurship among grade 12 learners.
- To develop guidelines and recommendations on filling gaps between the current and desired state of entrepreneurship in schools.
- Furthermore, to make practical recommendations concerning the entrepreneurship education in the demographic area of the study.

Chapter 2 covered the first to the third objective, in which a detailed account of defining the phenomenon have been achieved. Subsequently, the characteristics of entrepreneurs have been discussed. Similarly, the government programmes together with the current state of entrepreneurship in South Africa have been dissected, which also covered the findings and deliberations made from entrepreneurial dialogues commissioned in South Africa.

The fourth objective was achieved and covered in chapter 3, in which the population consisted of the Kgetlengrivier Local Municipality grade 12 learners. Refer to chapter 3 for a detailed analysis of this objective.

The fifth and sixth objectives were achieved in chapter 4, whereby conclusions and recommendations were made towards the current state of entrepreneurship in schools and in South Africa. Subsequently, recommendations concerning the opportunity identification and the portrayed attitude towards entrepreneurship were also discussed.

Overall, it can be confirmed that all the objectives have been achieved, based on the achievement of the secondary objectives and recommendations put forward in this chapter.

4.5 SUGGESTIONS FOR FURTHER RESEARCH

The scope of this study was limited to the selected geographic area and actively participating learners in grade 12 during the year 2012. Therefore, it is recommended that the study be expanded to all schools including all the learners within the Province. It should also be kept in mind that no study such as this one has ever been conducted in the selected area, therefore much still needs to be done.

Based on the findings of this study, the following suggestions are put forward for consideration pertaining to related future research topics on determining attitudes towards entrepreneurship among grade 12 learners:

- Financing and support structures in rural areas.

- Entrepreneurial curriculum designed to foster entrepreneurship.
- The effect of government programs in entrepreneurship.
- An assessment of attitudes towards entrepreneurship amongst high school learners.
- An assessment of perceptions towards the current state of entrepreneurship in the Province.
- Application process in identifying opportunities within the South African entrepreneurial environment.
- Further assessment on the reliability of the statements used to assess the South African environment construct used in this study.

4.6 SUMMARY

The main objective of this chapter was focused on concluding on the results obtained in chapter 3. Furthermore, to make practical recommendations on the assessment of attitudes towards entrepreneurship among grade 12 learners. This chapter discussed the demographic information such as age, gender, and parents' involvement in business, race, and many more.

After reflecting on the demographic information, conclusions were drawn on the constructs that measures the attitudes towards entrepreneurship including the opportunity identification and the South African environment in schools elements. This was followed by concluding on the relations between demographic information and the constructs measuring attitude together with determining the conduciveness of the South African environment towards entrepreneurship.

Practical recommendations were made on how to engage and to promote entrepreneurial behaviour among students and the community. Recommendations included education and training programs that can be used to enhance or develop entrepreneurship in schools. Subsequently, the researcher revisited the primary objective, with a remarkable concern on the secondary objectives because they inform the achievement of the primary objective, which was achieved. Furthermore, the chapter suggested a few topics that can be considered for future research.

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ANNEXURE A

ATTITUDES TOWARDS ENTREPRENEURSHIP AMONG GRADE 12 LEARNERS

PLEASE NOTE:

THIS QUESTIONNAIRE MUST ONLY BE COMPLETED BY GRADE 12 PUPILS

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.

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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 16	16–17	18 – 19	20- 22	23 Above
		1	2	3	4	5

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

A4	Parents/ Guardians own a business	Yes	No
		1	2

A5	My parents/ Guardians education	Tertiary Education	Completed grade 12	High school	Primary school	No schooling
		1	2	3	4	5

A6	I'm given pocket money at school	Yes	No
		1	2
A7	I have a job while at School	1	2
A8	I am currently studying business subjects	1	2

A9	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 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	High Schools 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 my 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 my 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 SECONDARY SCHOOLS						
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 schools 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	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 government provides to help people start businesses	1	2	3	4	5

WE THANK YOU FOR YOUR PARTICIPATION AND TIME.

ANNEXURE B