

UNIVERSITY OF KWAZULU-NATAL

**Entrepreneurship at Further Education and Training Colleges
in Durban: A Demand side perspective**

By

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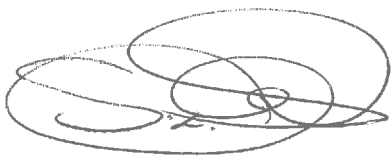
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Abstract

Entrepreneurship has long been considered an important factor in stimulating economic growth and in reducing unemployment. The youth, in particular, constitute the largest portion of the South African population, making them the most vulnerable to unemployment. Further Education and Training (FET) Colleges have received considerable government interest as a platform to empower young people to become economically active. The aim of this study, therefore, was to ascertain whether young people at Further Education and Training (FET) Colleges in the Durban area had any intentions towards entrepreneurship. Consequently, the study investigated FET College students' perceptions and attitudes towards entrepreneurship. In so doing, students' awareness of the existence of entrepreneurial initiatives at their colleges was also assessed. In order to achieve this, a quantitative research approach was used. FET College students in the Durban area were selected as the population of interest. This comprised of 3 FET Colleges with a joint population size of 29 200 students. A total of 670 students participated. Data was collected by means of a structured questionnaire. All 670 questionnaires that were administered were returned. The study found that overall FET College students had positive perceptions and attitudes towards entrepreneurship. Students also demonstrated high levels of self-efficacy and entrepreneurial intention. The majority of students who had self-employed parents indicated that in light of this they would like to start their own businesses. However, parent and family entrepreneurial background did not have any influence on collective students' decisions to start their own businesses. Neither did gender nor age demonstrate any significant influence on student perceptions of, and intentions towards, entrepreneurship. This study highlighted the need to invest in efforts to heighten entrepreneurial awareness at FET Colleges. It is recommended that FET Colleges respond to students' demands for entrepreneurship-related initiatives, to expand current entrepreneurship offerings and to extend their offerings to all College students. The study was not without its challenges. Significant limitations encountered included student strikes and logistical challenges.

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Abbreviations and Acronyms

ANOVA	-	Analysis of Variance
BRICS	-	Brazilian, Russian, Indian, Chinese and South African
EBR	-	Established Business Rates
EI	-	Entrepreneurial Intention
EO	-	Entrepreneurial Orientation
FET	-	Further Education Training
GDP	-	Gross Domestic Product
GE	-	General Education
GEM	-	Global Entrepreneurial Monitor
GUESSS	-	Global University Entrepreneurial Spirit Students' Survey
HE	-	Higher Education
HEI	-	Higher Education Institution
HSREC	-	Human and Social Science Research Ethics Committee
ILO	-	International Labour Organization
IYDS	-	Integrated Youth Development Strategy
JSE	-	Johannesburg Securities Exchange
MS	-	Microsoft
NATED	-	Natural Technical Diploma
NCV	-	National Certificate Vocational
NEET	-	Not in employment, education nor training
NQF	-	National Qualifications Framework
NYDA	-	National Youth Development Agency
OECD	-	Organization for Economic Development
SAS	-	Statistical Analysis Software
SAQA	-	South African Qualifications Authority
SETA	-	Sectorial Education Training Authority
SPSS	-	Statistical Packages for the Social Sciences
TBE	-	Theory of Planned Behaviour
TEA	-	Total Early- Stage Entrepreneurial Activity

CHAPTER ONE

Introduction

1.1. Introduction

Entrepreneurship has long been considered an important factor in stimulating economic growth and in reducing unemployment. Young people in particular, are seen as the agents to propel economic growth. Further Education and Training (FET) Colleges have received significant government interest as a platform with which to empower young people towards becoming economically active. This research, therefore, assessed the attitudes and perceptions of FET College students, in the broader Durban area, towards entrepreneurship.

Chapter one presents the problem statement and sets the foundation for the study. The stakeholders that will derive benefit from its outcomes are also identified. Study objectives and methodologies used are presented. The chapter concludes with an outline of forthcoming chapters of the dissertation which focus on understanding study participants' outlook towards entrepreneurship.

1.2. Motivation for the Study

The study is motivated by the high rates of unemployment experienced in South Africa. Young people, in particular, are the most affected by this. They also constitute the majority of the South African population. A tremendous responsibility has been placed on their shoulders to ensure that South Africa has an economically viable future. 'Education is key' is an often coined phrase thought to be the solution to solving the problem of youth unemployment. Unfortunately, education is not without its challenges for young people.

Based on socio-economic conditions, a strong disparity exists in the education received by less fortunate *vis-a-vis* their better-off counterparts. Young people with a better educational background have better chances of meeting the minimum requirements needed to pursue academic studies at universities. As far as the hierarchy goes, university students are the

first to be identified as future leaders, and hence employees of choice for many organisations.

As the majority of learners do not qualify for university admission, many pursue skills development and training at FET Colleges. These colleges are, for the most part, geared towards creating artisans. However, successfully obtaining a qualification from an FET College does not guarantee employment. Entrepreneurship brings forth a possible solution for young people to become self-employed and to create employment for others. It is on this premise that this study is based. Presently the thoughts of FET College students on entrepreneurship are not yet known. It is also not known whether these students are aware of entrepreneurial offerings at FET Colleges. This study, therefore bridges the gap between the supply and demand of entrepreneurship at FET Colleges in the Durban area.

The study is therefore intended to be of benefit to:

- Policy makers
This study will assist in strategizing for future projects geared at empowering young people. It will also enable them to get a sense on whether policy implementation is working.
- FET Colleges
The feedback received from students could be used to identify and respond to gaps in current offerings. This will enable the colleges to be more relevant in their offerings to their students.
- Students
The study presented student views of entrepreneurship at their colleges. The hope is that their concerns or demands will be noted by their colleges and policy makers. Resultant alterations or changes to curricula will be strongly influenced by students and will hence be of greater value to them.

While the study has focussed on FET College students in the Durban area, it has potential generalizability to the wider FET College sector. It also provides the basis for which further studies can be modelled.

1.3. Study Focus

The study focussed on assessing FET College students' perceptions of entrepreneurship in the Durban area. It is guided by the Theory of Planned Behaviour (TPB). The TPB states that attitudes, subjective norms and self-efficacy (perceived behavioural control) are antecedents to entrepreneurial intention (EI), which in turn predicts entrepreneurial behaviour. In this study, attitudes and self-efficacy are used as antecedents to entrepreneurial intention. This differs from the TPB in that the study does not focus on subjective norms.

Student perceptions were assessed based on their understanding of entrepreneurship, their personal attitudes towards it; and their specific desirabilities. Entrepreneurial intentions were assessed using self-efficacy scales and by asking students directly what their intentions were towards entrepreneurship. Self-efficacy was also used to assess students' confidence in their abilities by means of the entrepreneurial orientation (OE) construct. This construct involved assessing their risk propensity, proactivity and innovativeness. The study also sought to investigate whether having self-employed parents had any influence on students' entrepreneurial intentions. In some instances, the study also sought to investigate gender and age differences in student responses.

In addition, the study also investigated students' state of awareness of entrepreneurial initiatives at their colleges. The use of existing entrepreneurial offerings by College students was also investigated. Finally, the study focussed on gathering students' general views of entrepreneurship at their colleges.

1.4. Problem Statement

In an effort to reduce unemployment and stimulate economic growth, the government and like-minded groups have made significant resources available to the youth of South Africa. The National Youth Development Agency (NYDA), under the directive of the National Youth Development Agency Act 54 of 2008, developed an Integrated Youth Development Strategy (IYDS) and Plan that details strategies targeted at absorbing youth into the economy (NYDA, 2012). Central to this plan is the role of entrepreneurship as a tool to alleviate the unemployment problem faced by the youth. FET Colleges have received national attention from the South African government in the role that they can play in

providing intermediate level skills needed to meet the country's national development challenge (Akoojee, 2008). However, it is not yet known how prepared FET College students are to embracing the "responsibility" of stimulating this growth. This study therefore aims to answer the question, "What are FET College students' attitudes towards entrepreneurship?"

1.5. Research Sub-questions

In addressing the research question, it was necessary to seek answers to the following sub-questions:

- Do students regard entrepreneurship as important to them?
- Do students consider entrepreneurship as a viable career option for them?
- Do students have any intentions towards becoming entrepreneurs?
- Are students aware of efforts made by their institutions to equip them for entrepreneurship?

1.6. Study Objectives

The study had as its objectives to:

- evaluate students' general perception of entrepreneurship
- gauge students' attitudes towards entrepreneurship
- assess students' belief in their abilities to execute desired outcomes
- evaluate students' awareness of entrepreneurial efforts at their institution

1.7. Study Limitations

The following limitations were experienced in conducting the study:

- Access to students and campuses

It was not possible to conduct the study at all identified campuses mainly due to student strikes and campus management resistance.

- Questionnaire Design

The questionnaire was lengthy and possibly caused comprehension challenges for the majority of the respondents as many did not speak English as their mother tongue.

- Research sample

Although the research participants were randomly selected, it was not possible to get representation from all study disciplines.

1.8. Summary

This chapter outlined the reason for the study. It also identified the study focus, the likely beneficiaries; and the study aims and objectives. The chapter ends by listing the challenges that were experienced when conducting the study. In the following chapter a review of the literature forming the theoretical framework for the study is discussed.

CHAPTER TWO

Theoretical Framework

2.1 Introduction

Entrepreneurship has long been considered an important factor in stimulating economic growth and in reducing unemployment. The youth, in particular, constitute the largest portion of the South African population. This makes them the most vulnerable to unemployment. Further Education and Training (FET) Colleges have received considerable government interest as a platform to empower youth to becoming economically active. In efforts to reduce unemployment and stimulate job creation, the South African government has made available significant resources to aid the youth in becoming self-sufficient. However, it is not yet known whether young people at FET Colleges are aware of efforts by the government and / or their institutions towards this goal. Neither is it known what their attitudes and perceptions are towards self-employment.

The purpose of this study is to gain insight into the state of entrepreneurship at FET Colleges from the youth (or student) perspective. In this context, perspective refers to both students' perceptions of; and attitudes towards, entrepreneurship. The study also aims at evaluating FET College students' awareness of the measures taken by their institution in preparing them for entrepreneurship.

In the paragraphs that follow, the South African unemployment state as well as its entrepreneurial position will be discussed. This will then be followed by a discussion of youth and education in the context of entrepreneurship. Finally, a review of the literature on student attitudes and perceptions towards entrepreneurship will be presented. As part of the review, a brief description of the FET College landscape will also be presented.

2.2 Unemployment

The official definition of unemployment, as used by Statistics South Africa (2010), applies specifically to individuals within the economically active population who meet three criteria. By economically active, it is meant any individual aged between 15 and 65 who is available to work, whether employed or unemployed, or is actively seeking employment

within a relevant time period (Statistics South Africa, 2010). The first criterion of an unemployed person is that the person must not have been working seven days before a reference interview event. The second criterion is that the individual must want to work and be available to work within two weeks of the reference interview event. Lastly, the person must have taken active steps at seeking employment or have started some form of self-employment four weeks prior the interview event.

2.2.1 General Unemployment in South Africa

Unemployment in South Africa continues to pose a challenge to the country's social and economic status. The Organisation for Economic Development (OECD) mentions that high levels of unemployment contributes to poverty, crime, inequality and ill-health (OECD, 2013). South African unemployment statistics do not offer any solace to the plight experienced by many South Africans. Statistics South Africa's (Stats SA) quarterly labour force surveys, for instance, reveal that unemployment has steadily increased from the fourth quarter of 2012 to the second quarter of 2013.

Despite the 0.6 % decrease in unemployment experienced from the third to the fourth quarter of 2012 (Stats SA, 2013b), unemployment had increased by 0.3 % and 0.4 % over the first and second quarters of 2013 respectively. This means that unemployment increased by 100 000 persons over the last quarter of 2012 and first quarter of 2013; and by 122 000 persons over the first and second quarters of 2013 (Stats SA, 2013a, Stats SA, 2013b).

As at the second quarter of 2013, the total number of unemployed people was just over 4.7 million. This represents 14 % of the population aged between 15 and 65 years old; and 25.6 % of the labour force. These statistics illustrate the need for a joint effort by government and both the public and private sector to find creative interventions that will create employment opportunities and help to alleviate the country's high unemployment burden.

2.2.2 Youth Unemployment in South Africa

The National Youth Development Agency (NYDA), as custodian of youth development in South Africa, defines youth to include all persons between the ages of 14 and 35 years.

Herrington and Kew (2014) report that unemployment among South African youth between the ages of 14 and 19 was at 64.5%. They also report that the unemployment rate among older youth (i.e. 30 to 34 years old) was much less with approximately 27.5% of these youth not being officially employed. In light of this, youth unemployment is particularly critical. The International Labour Organisation (2013) describes this cohort as a “lost generation” over which there is heightening concern.

In addressing the increasing challenges faced by young people in the labour market, Stats SA (2013b) included information on people who were not in employment, education or training (NEET) as part of its fourth quarter of 2012 labour force survey. According to Kraak (2013) NEET has acquired increased global importance as a conceptual tool for capturing a range of challenges facing young people after leaving formal schooling and entering the world of unemployment. Approximately one third of young people aged between 15 and 24 years fell within this category (Stats SA, 2013). This translated to approximately 3.3 million individuals, falling within this age group, being neither employed nor receiving any form of education or training. In light of this, Kraak (2013) mentions that there is a widespread view that NEET youngsters should be given a second chance to complete their schooling and / or enter post school education.

Mayer (2011) argues that the exclusion of youth from the labour market makes the transition from youth to adulthood very difficult for them. It also prevents them from becoming responsible and empowered adults and parents. According to the National Treasury (2011), high youth unemployment meant that young people were not gaining the abilities or experience needed to propel the economy forward. In support of this, (Mayer, 2011) states that the longer youth remain unemployed the more challenging it is to bring them into the system as it becomes more difficult to stay apace of technological advances and to meet skills requirements needed to be employable. This restricts economic development and places a larger burden on the government to provide social assistance (National Treasury, 2011). Mayer (2011) adds that youth unemployment undermines social cohesion. This suggests that youth-specific measures need to be part of unemployment alleviation strategies (OECD, 2013).

Entrepreneurship has been widely recognised as an appropriate intervention to alleviating unemployment and to economically empower individuals. The OECD suggests that

programmes to develop entrepreneurship among the young in disadvantaged groups should be expanded. Entrepreneurship, mainly among young people, is vital for innovation, employment and growth (Prokop, Ruiz and Sedov, 2012). According to Prokop *et al.* (2012) there is an urgent need for entrepreneurship to be positioned on political agendas as a means of providing hope to young people. This, they argue, will create a favourable environment that is conducive to fostering more young entrepreneurs to create more employment.

2.3 Entrepreneurship

Entrepreneurship, as a concept, is ill-defined (Carree and Thurik, 2002) and has been very difficult to articulate into a cohesive definition (Shane and Venkataraman, 2000; Ahmad and Hoffman, 2007; Fatoki and Chindoga, 2011). Rwigema and Venter (2004, p6) define entrepreneurship as the “process of conceptualising, organizing, launching and... nurturing a business opportunity into a potentially high growth venture in a complex, unstable environment”. Entrepreneurship has also been defined as a phenomenon associated with entrepreneurial activity, which can be referred to as “enterprising human action in pursuit of the generation of value, through the creation or expansion of economic activity, by identifying and exploiting new products, processes or markets” (Ahmad and Hoffman, 2007, p4). The Kauffman Foundation views entrepreneurship as the transformation of an innovation into a sustainable enterprise that generates value. Hence, entrepreneurship is about the commercialisation of an innovation (Kauffman Foundation, 2008). Ellis and Williams (2011), on the other hand, define entrepreneurship as having the ultimate objective of generating income. Subsequently, they refer to entrepreneurs as “those individuals who are, or want to become self-employed or who have started, or want to start, a new business, in either the formal or informal sector, in order to generate income” (Ellis and Williams, 2011, p9).

Despite the difficulty in articulating a uniform definition for entrepreneurship there is some agreement of what it entails. In summary, it is thought to involve opportunity seeking, venture creation, risk taking, value generation, invention, innovation, creativity and commercialisation. However, entrepreneurship cannot be reduced to any single one of these. Rather, it is a combination of all of these (Kauffman Foundation, 2008).

It is widely accepted that entrepreneurship plays an important role in the economic development of a country or region (Carree and Thurik, 2002, Bosma and Levie, 2009, Arthur *et al.*, 2012). Entrepreneurs play a specific role in the economy in stimulating relatively high levels of job creation, productivity growth and commercialising innovations of relatively high quality (Van Praag and Versloot, 2007). Arthur, Hisrich and Cabrera (2012) argue that entrepreneurship alone cannot entirely account for economic development. In their assessment on the scholarly work of the relative contribution of entrepreneurs to the economy, Van Praag and Versloot (2007) observed that non-entrepreneurial enterprises contributed more towards Gross Domestic Product (GDP). These enterprises also had more secure labour markets, had more innovations; and adopted more innovations when compared to entrepreneurial ventures. Despite this, there is general agreement that entrepreneurship does facilitate economic development through employment, increased tax revenue, improved service delivery, local income retention; and motivational effects (Arthur *et al.*, 2012).

According to the Global Entrepreneurial Monitor's (GEM) findings, South Africa's Total Early-stage Entrepreneurial Activity (TEA) rate had increased from 8.9% in 2010 to 9.1% in 2011 (Simrie *et al.*, 2012) and decreased by 1.8 % in 2012 (Turton and Herrington, 2013). The GEM describes TEA as including all entrepreneurs that have been in business for less than three and a half years. South Africa's TEA rate still remained far below the average of comparable economies around the world over the 2010 to 2011 and 2011 to 2012 periods. South Africa also had the lowest established business rates (EBR) of all the Brazilian, Russian, Indian, Chinese and South African (BRICS) economies, and one of the lowest EBR across all GEM countries. The EBR refers to businesses that have survived beyond three-and-a-half years (GEM, 2011).

South Africa's TEA rates for young people between the ages of 18 - 24 and 25 - 34 were the second lowest of the BRICS economies. This, according to Simrie *et al.* (2012), was of great concern, especially with the high youth unemployment rate. According to Simrie *et al.* (2012), the low EBR translated to relatively few jobs being available for young people. In light of this, they advised that targeting small business development among youth should be of high priority. Despite these challenges, entrepreneurship continues to hold a vital role in the South African economy (Nicolaidis, 2011).

2.3.1 Entrepreneurship and Youth

“Young people’s aspirations, energy, enthusiasm, skills and knowledge are part of South Africa’s greatest national asset” Kroon, de Klerk and Dippenaar (2003, p319).

In its efforts at mobilising and empowering the youth, the South African government has developed policies and made resources available to facilitate this. The National Youth Development Agency Act 54 of 2008, for instance, made provision for the establishment of the NYDA to create and promote the co-ordination of youth development matters. Under the Act, the NYDA is instructed to develop an Integrated Youth Development Strategy (IYDS) and Plan. This plan details strategies that aim at absorbing youth into the economy (NYDA, 2012). A prominent theme of this document is the importance of entrepreneurship as a tool in alleviating the unemployment problem faced by young people. This document aims at integrating youth and entrepreneurship to reduce unemployment and stimulate economic growth.

According to Awogbenle and Iwuamadi (2010) youth development and empowerment are crucial to building human capital and in relieving poverty. In addition, empowered youth are seen as an important determinant for long term national growth and are, therefore, a valuable investment (Awogbenle and Iwuamadi, 2010). The International Labour Organisation (ILO) reiterates the importance of promoting youth development for the benefit of not only the youth, but the broader economy. Similarly, Kroon *et al.* (2003) state that the youth play a critical role in determining the future and direct economic growth and development. To facilitate this, the International Labour Organisation encourages policy makers to play an active role in promoting youth employment (ILO, 2013).

Although entrepreneurship is identified as a viable option for youth empowerment and development, investigators have offered possible reasons for its poor adoption, especially among youth. Co and Mitchell (2006) suggest that a significant reason why the South African entrepreneurial base is limited lies within the psyche of individuals. They explain that owing to the lack of an entrepreneurial culture, the majority of South African youth are not exposed to entrepreneurship. Consequently, they do not identify themselves as such. Literature generally supports the idea that there is a positive association between entrepreneurial activity and cultural values (Levenburg and Schwarz, 2008).

Altman and Marock (2008) mention that apartheid actively discouraged entrepreneurship. They also observed that current educational reforms did not adequately cater for entrepreneurship in education syllabi. This translates to the inflexibility of academic institutions to adapt to economic demands. An additional criticism is that higher education institutions (HEI) have continued with past practices of providing a resource pool for large corporations. This, unfortunately, has conditioned student mindsets in favour of employment in big business in the formal sector (Co and Mitchell, 2006).

The education system in South Africa has also been considered to be inefficient in addressing the entrepreneurial skills shortage. Kroon, de Klerk and Dippenaar (2003) observed that the South African secondary education system lacked the ability to successfully convey skills and practical experience to equip youth for starting and successfully running their own businesses. To bridge this gap they proposed a model in which businesses aided learners in acquiring the necessary skills and experience. On a similar vein, Isaacs, Visser, Friedrich and Brijlal (2007) assessed the level of entrepreneurship education and training at the Further Education and Training (FET) level in South Africa. They found that several problems in schools hampered the effective implementation of entrepreneurship education. These included poorly trained educators, inadequate resources; and lack of execution of policies designed to promote entrepreneurship implementation.

In similar fashion, Co and Mitchell (2006) investigated educator perspective of whether entrepreneurial courses were offered at tertiary institutions and the relevance of the coursework in preparing students for entrepreneurship. They found that the methods of teaching entrepreneurship had not evolved in tandem with the passage of time. Consequently, teaching methods were not relevant and focused more on theory as opposed to being application-based. Dhliwayo (2008) states this a bit differently in saying that entrepreneurship in tertiary institutions should focus more on creating entrepreneurs as opposed to the current practice of entrepreneurial education. Entrepreneurial education is understood to mean a strong theoretical foundation of entrepreneurship.

2.3.2 Entrepreneurship and Education

The South African education system owes its legacy to an era that was intensely shaped by social, political and economic inequalities of a 'race', class, gender, institutional and a geographical nature (Steenekamp *et al.*, 2011). According to the GEM 2011 report, approximately 55% of the South African population did not have a secondary schooling education. In addition, the level of primary education received by the majority of the population was of an inferior standard (Simrie *et al.*, 2012). This paints a bleak picture of the *status quo* of education in South Africa and highlights the need for creative interventions that will empower young people to add a meaningful contribution towards both their futures and the country's.

Teffo (2008), for instance, suggests that entrepreneurship should form an integral part of curricula from the primary school level. Similarly, Nicolaides (2011) stresses that it is very important that the overall level of education and training be improved and entrepreneurship be promoted as a viable career option. Such reforms could assist in alleviating frustrations experienced by graduates who are unable to secure or find employment (Teffo, 2008).

2.3.3 Influence of Education on Entrepreneurship

Taken in isolation, education is seen as being insufficient in preparing prospective or budding entrepreneurs to becoming successful. Nonetheless, it is thought to greatly improve their chances of success (Cheng *et al.*, 2009, Nicolaides, 2011, Arthur *et al.*, 2012). It also appears that in developing countries, there exists a negative return on investment on training. This, according to Mason (2011), implies that providing training is only effective if suitable infrastructure, economic stability and technological readiness are in place. Furthermore, the authors suggest that when developing entrepreneurship education and training policy, both economic and social contexts must be taken into account. Education, as defined by the Oxford Dictionary (2005), is the process of teaching or learning. Training, on the other hand, refers to teaching a particular skill or type of behaviour (Oxford Dictionary, 2005).

According to Mason (2011), the importance of the roles that education plays in poverty eradication; and entrepreneurship in catalysing economic development, has increased in many nations around the world. Education is linked to many elements which may potentially influence and enable an entrepreneur to cope successfully with challenges

(Peters and Brijlal, 2011). Peters and Brijlal (2011) describe these elements to include knowledge, skills, discipline, problem solving abilities, self-confidence and motivation. These authors argue that education forms the basis for sustaining and growing a business.

2.3.4 Entrepreneurship Education

Gibcus *et al.* (2012) state that entrepreneurship education has as its goal to prepare young people to be responsible and enterprising. They also state that entrepreneurial education assists students in developing the necessary attitudes, skills and knowledge to achieve their goals and live fulfilled lives. In their study of European Higher Education alumni, Gibcus *et al.* (2012) found that entrepreneurial education had a positive impact on the mindset of young people. This included their intentions towards entrepreneurship, their employability; and their role in society and the economy. They also observed that students who went through entrepreneurial programmes and activities displayed more entrepreneurial attitudes and intentions, were more innovative, and started more companies.

The role of entrepreneurship education has traditionally rested on the shoulders of educators. However, it is not sufficient to view entrepreneurship education purely as the responsibility of educators. Arthur *et al.* (2012) posit that students' demand for entrepreneurship education has a significant impact on the system. This highlights the need to synchronise both the demand and supply of entrepreneurship education to align offerings with student needs (Peters and Brijlal, 2011).

2.4 The South African Education System

The South African education system consists of three broad education bands, namely General Education (GE), Further Education and Training (FET) and Higher Education (HE). The first band of the education system, General Education, includes basic education up to and including grade 12. This band covers pre-primary schooling; primary schooling and secondary schooling (see Figure 2.1).

The enactment of the South African Schools Act 84 of 1996 made it compulsory for all South African learners to “attend a school from the first school day of the year in which such [a] learner reaches the age of seven years until the last school day of the year in which

such [a] learner reaches the age of fifteen years or the ninth grade, whichever occurs first.” – South African Schools Act 84 of 1996 (1996, p3). It is therefore, compulsory for all South African learners to attend school up to and including grade 9. Thereafter, a learner is not compelled to complete their secondary education and can opt to pursue employment or further their education through the Further Education and Training Colleges.



Figure 2.1: The South African Education System

FET Colleges form the second band of the South African education system. These colleges provide vocational and occupational education and training to learners over the age of 16 years. In addition, FET Colleges also cater for grades 10 through to 12. In general, FET College students are thought to be 24 years of age or younger, with older students enrolling at Universities or Universities of Technology, depending on eligibility (Dalton, 2008). Universities and Universities of Technology fall into the final band, namely Higher Education. Since FET Colleges are the main focus of this study, a more detailed account follows in the next section.

2.4.1 The Further Education and Training College Landscape

FET Colleges came into existence in 2002 owing to the FET Act 98 of 2008. Through this Act, former technical colleges, colleges of education and / or manpower training sites were declared FET Colleges (McGrath, 2004, Sheppard and Sheppard, 2012). This essentially merged these former institutions into one body comprising 50 public FET Colleges. In

addition, the FET sector also consists of 499 private FET Colleges (Higher Education and Training, 2013).

The 50 FET Colleges are spread over approximately 300 campuses nationally and enrol in the region of 400 000 students (Higher Education and Training, 2013). Kwazulu-Natal has 9 FET Colleges spread across 55 campuses and enrol just over 88 000 learners. Three of these FET Colleges are located in the broader Durban area. These are Coastal FET College (8 campuses), Elangeni FET College (8 campuses) and Thekwini FET College (6 campuses). According to the Department of Higher Education and Training (2013), these three colleges have a combined total of 29 200 learners.

Sheppard and Sheppard (2012) state that the merging of these colleges was to combine smaller and weaker colleges into stronger institutions. McGrath (2004) mentions that part of the reason for FET College formation was to address the negative images associated with the former technical college system, which primarily catered for white students during the apartheid era. He also points out that the merger highlighted the importance of uniting educational values and relevance to the workplace. The merger, therefore, would increase economies of scale and increase capacity to educate more students with a wider variety of offerings. Further, Sheppard and Sheppard (2012) add that FET Colleges were intended to become a central feature of the government's strategy to address skills shortages, unemployment and to stimulate economic growth.

In accordance with the South African Qualifications Authority (SAQA), FET Colleges offer national certificates that are recognised by the National Qualifications Framework (NQF) to cover NQF levels 2 to 4. The National Qualifications Framework Act No. 97 of 2008 has as its objectives to:

- create a single integrated national framework for learning achievements
- facilitate access to, and mobility and progression within, education, training and career paths
- enhance the quality of education and training
- accelerate the redress of past unfair discrimination in education, training and employment opportunities

The National Qualifications Framework Act, states that these objectives are designed to contribute to the full personal improvement of each learner and the social and economic development of the nation at large.

The National Certificate (Vocational) qualifications offered by FET Colleges gives students, who have successfully completed their Grade 9 in the General Education system, a vocational alternative to an academic Grade 10 to 12. These qualifications are designed to offer industry-focused training on the NQF Levels 2 to 4 for grades 10 to 12 respectively. In addition, these qualifications seek to provide training at both the theoretical and practical levels. The practical component may be offered in a real workplace environment or in a simulated environment. It provides students with the opportunity to experience work situations during the period of study. The qualification also provides an opportunity to enter Higher Education studies at Universities or Universities of Technology (dependent on appropriate subject combinations and in meeting the required admission requirements for these institutions).

FET Colleges also offer National Technical Diploma (NATED) N1 to N6 qualifications. In 2008, the Education Minister, Naledi Pandor, formally approved the phasing out of NATED programmes N4-N6 as well as the National N diploma qualifications offered at FET Colleges. However, a recent media statement by the Chair of Umalusi Council, Sizwe Mabizela, in 2012 reports that the decision to phase out NATED programmes was reversed when the new Ministry of Higher Education and Training was established. Consequently, these qualifications were to be offered with the approval and backing of industry. In addition, FET Colleges also offer occupational and skills programmes which are accredited and funded by the Sectorial Education Training Authorities (SETA).

2.4.1.1 General Perception of FET Colleges

Further Education and Training (FET) colleges have received national attention from the South African government in the role that they can play in providing intermediate level skills needed to meet the country's national development challenge (Akoojee, 2008). According to Akoojee (2008), public FET Colleges in South Africa represent a crucial component of the success of education and training undertakings, particularly since these colleges are technical and vocational skills development entities. This is supported by

Dalton (2008), who states that much depends on the FET College sector to address large scale unemployment. Dalton (2008) also adds that FET Colleges play an important role in expanding access, participation and promoting social inclusion.

Despite the positive intention of government to provide students with this resource, namely the opportunity to better themselves through the FET College institutions, Nkosi (2013) mentions that South African matriculants (learners who are currently in grade 12) have negative views of the quality of education at FET Colleges. Consequently, they prefer universities and universities of technology as their first choice. Their views have been supported by Pauw *et al.* (2008) who point out that the quality of education at FET Colleges is a source of major concern. In addition, matriculants fear that an FET College qualification is not as competitive as a qualification obtained from either universities or universities of technology. Their fears are propounded by Pauw *et al.* (2008) who argue that some FET College service providers offer inappropriate courses that potential employers do not value. Consequently, this decreases their chances of obtaining employment. It is further argued that FET Colleges do not appear to play a supportive role in assisting college graduates find employment (Kraak, 2013, Gewer, 2010). Parents, on the other hand, are of the opinion that government initiatives with respect to FET Colleges are at best pretentious. Instead, they see these efforts as the government providing dumping sites for their children (Nkosi, 2013).

In spite of the negative perception of FET College education, thousands of would-be students view FET Colleges as a valuable resource for their future careers (Magome *et al.*, 2013). The majority of these students turned to FET Colleges in order to strengthen their poor matric (grade 12) results and increase their chances for enrolment into universities and universities of technology, specifically in response to not being admitted into these institutions on their first attempt (Magome *et al.*, 2013). Although the motivation supports the popular view that FET Colleges are not the first choice for students, it does demonstrate that these colleges provide a valued service to students. It has also been reported that there are some matriculants who favour FET College education over study at higher education institutions (Magome *et al.*, 2013, Nkosi, 2013).

Traditionally, these colleges have taken the role of preparing students for employment (or to make them employable). Given the focus that has been placed on both employment and

entrepreneurship in South Africa, it follows that merging these two offers a possible solution to South Africa's economic development challenges. As such, entrepreneurship should form an integral part of FET academic curricula. However, caution should be exercised when implementing entrepreneurship education. Dhliwayo (2008) argues that in the South African context, entrepreneurship education should aim to create entrepreneurs (or train students to become entrepreneurs) as opposed merely granting students entrepreneurship qualifications. Entrepreneurship education is understood to equip students with academic know-how. However, more than this is needed to allow students to benefit from such qualifications. It can, therefore, be argued that Dhliwayo (2008) motivates for a more inclusive approach to entrepreneurship education that combines both theory and practice.

Creating an entrepreneurial culture within the FET College sector is not without its challenges. Treu *et al.* (2009) argued that the negativity and pessimism about policy implementation and curriculum change at FET Colleges posed a threat towards creating such a culture at these colleges. In spite of this, Treu *et al.* (2009) also observed the existence of a professional readiness and willingness of FET staff to contribute towards effective implementation of FET policy and curriculum change.

2.5 Antecedents to Entrepreneurial Behaviour

It emerges from the literature that the desired end result of entrepreneurship is to have potential entrepreneurs actually becoming entrepreneurs. As such, many entrepreneurship theories and predictive models have been devised. These include the Theory of Reasoned Action (Fishbein & Ajzen, 1975), Model of the Entrepreneurial Event (Shapero, 1982), Theory of Planned Behaviour (Ajzen, 1991), Model of the Entrepreneurial Potential (Krueger & Brazeal, 1994), Self-efficacy Theory (Bandura, 1997) and Competence Theory (Driessen & Zwart, 2005). These theories and models typically aim to predict entrepreneurial behaviour. In the following paragraphs, some of the antecedents of entrepreneurial behaviour will be discussed.

2.5.1 Attitudes and Perceptions

do Paço, Ferreira, Raposo, Rodrigues and Dinis (2011) define attitude as a product of an individual's beliefs and their evaluation of those beliefs. Gibson *et al.* (2011) define attitude as a complex mental state that involves feelings, beliefs, values, and behaviours to act in a particular way. Integrally linked to attitudes is perception. Robbins (2005) defines perception as a process by which an individual organises and interprets his / her sensory impressions to give meaning to their environment. People's behaviour, therefore, is influenced by their perception of reality, rather than the actual reality. It can thus be argued that future behaviour is influenced by the attitude towards that behaviour and the perceptions of that behaviour. A prospective entrepreneur, for instance, with a positive attitude and perception of entrepreneurship, *ceteris paribus*, is likely to exhibit entrepreneurial behaviour. This relationship is depicted in Figure 2.2

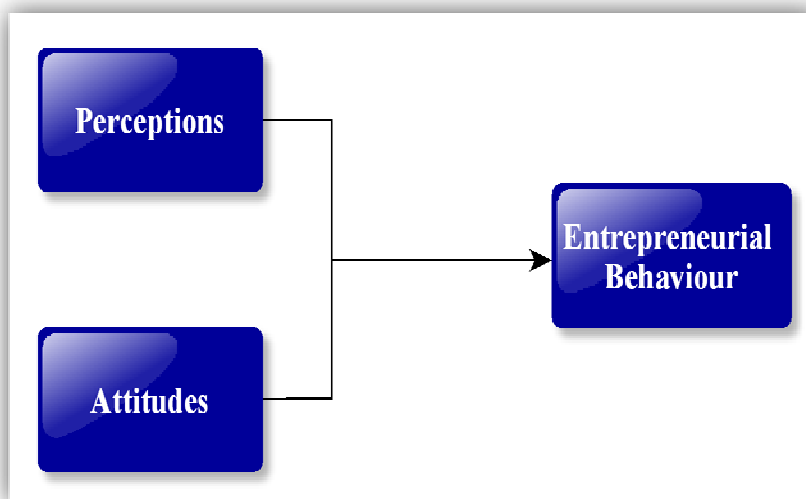


Figure 2.2: Entrepreneurial behaviour influenced by both Perceptions and Attitudes

do Paco *et al* (2011) include intentions as an additional step linking attitudes to behaviour. They state that attitudes affect intentions, which subsequently influence behaviour. This is in keeping with the theory of planned behaviour (TPB), which argues that intention is an antecedent of behaviour (Ajzen, 1991).

Many authors have investigated the relationship between attitude and entrepreneurship. Fini *et al.* (2009), for instance, found that attitudes were direct predictors of entrepreneurial intention. Similarly, Moriano, Gorgievski, Laguna, Stephan and Zarafshani (2012) found that attitude towards entrepreneurship was the strongest predictor of entrepreneurial

intentions. do Paço *et al* (2011) confirmed this in an earlier study, in which they concluded that personal attitudes were very important in explaining entrepreneurial intention.

2.5.2 Entrepreneurial Intention (EI)

“Intentions are assumed to capture the motivational factors that influence a behaviour” (Ajzen, 1991, p181). Similarly, Krueger and Brazeal (1994) mention that intentions serve as focal points for decision makers to channel their attention towards a target behaviour and normally prove to be the best single predictor of that behaviour. It has also been claimed that there exists a direct relationship between the intention to pursue entrepreneurship and the actualisation of entrepreneurship (Zhao *et al.*, 2009). Many theories explore entrepreneurial intention (EI) and the degree of commitment to realising entrepreneurship. Theories that are of particular import to this study include the Theory of Planned Behaviour (Ajzen, 1991) and Self-efficacy theory (Bandura, 1997). These are discussed below.

2.5.2.1 The Theory of Planned Behaviour (TPB)

Ajzen’s Theory of planned behaviour (TPB) consists of three components as depicted in Figure 2.3 below. These are attitude towards behaviour; subjective norms; and perceived behavioural control. The TPB holds that only specific attitudes towards a particular behaviour can be expected to predict that behaviour. In addition, subjective norms need also be taken into consideration. Subjective norms refer to an individual’s belief about how people they care about will view their behaviour. Hence, to predict a person’s intentions, an awareness of these beliefs (subjective norms) can be as important as knowing the person’s attitude. Finally, perceived behavioural control, or a person’s perception of their ability to perform a particular behaviour, is also thought to influence behaviour.

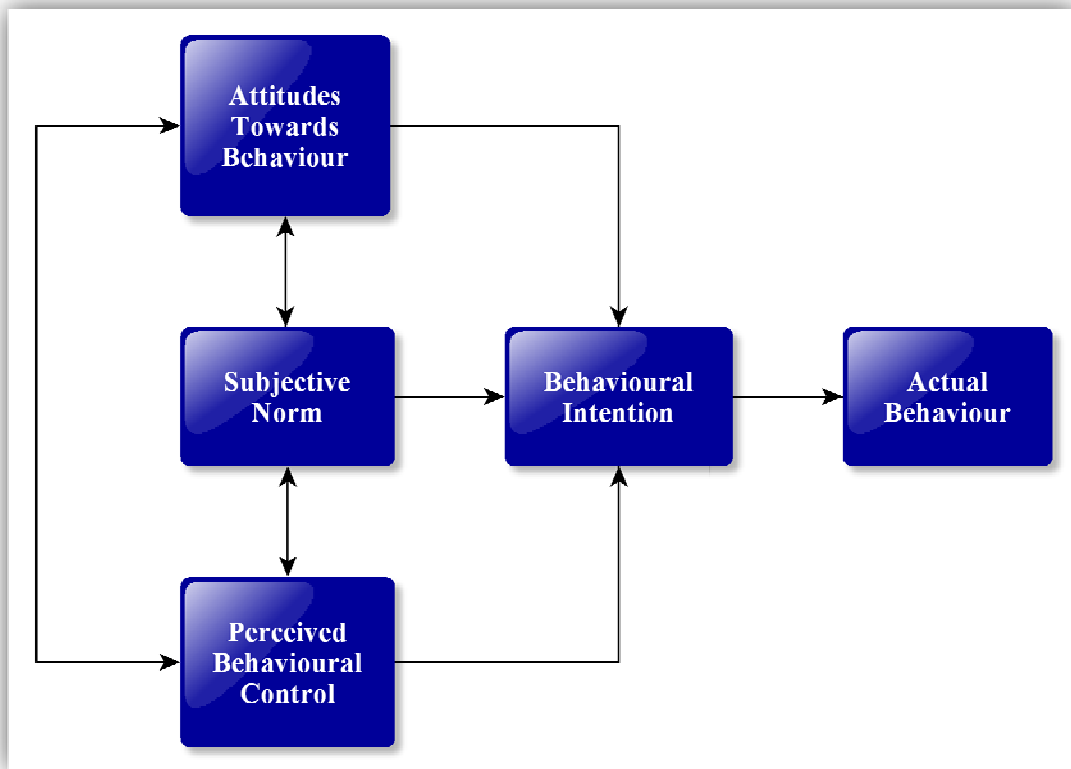


Figure 2.3: Ajzen's theory of planned behaviour

Adapted from Ajzen, I., 1991. The theory of planned behaviour. *Organisational behaviour and Human Decision Processes* 50 (2), pp. 179-211)

According to Ajzen (1991) perceived behavioural control is synonymous to Bandura's concept of perceived self-efficacy, which concerns itself with judgements of how well an individual is able to [or believes they are able to] execute courses of action to handle prospective situations. This in essence is an individual's belief in themselves or the confidence which that individual has in their abilities. Behaviour is thought to be strongly influenced by the confidence that an individual has in their ability to perform it.

Intentions, on the other hand, are thought to be indications of how hard individuals are prepared to try and the level of effort they are prepared to exert in order to perform a behaviour or action. In general, the strength of intention to engage in a particular behaviour is directly proportional to the likelihood of its performance (Ajzen, 1991). The TPB, therefore, emphasizes the predictive potential of perceived behavioural control (or self-efficacy) and intention in determining the likelihood of executing an action or behaviour.

2.5.2.2 Self-efficacy

The concept of self-efficacy is derived from Bandura's (1977) social learning theory and describes an individual's belief in their capability to perform a given task (Boyd and Vozikis, 1994). Bandura (1997) claimed that self-efficacy is a crucial determinant of intention. This suggests that the likelihood of an action being executed is dependent on an individual's belief in themselves to perform such an action (Pruett *et al.*, 2009).

Self-efficacy is also useful in explaining behaviour (Chen, Gully and Eden, 2004). Self-efficacy, therefore, is an important antecedent of intention and consequently, behaviour. This also implies that high levels of self-efficacy are good indicators of whether a behaviour is likely to be actualised once the intention to pursue such a behaviour exists. The concept of self-efficacy, when applied to entrepreneurship, can also be viewed as an important antecedent of the intention to pursue entrepreneurial activities (Zhao, Seibert and Hills, 2005). According to Hmieleski and Corbett (2008) high levels of self-efficacy leads to entrepreneurs setting and persevering in the attainment of challenging goals.

2.6 Development of the conceptual framework

A consolidation of the above theories and empirical studies from a review of the literature review gives rise to the formation of the conceptual framework for entrepreneurial actualisation as depicted in Figure 2.4.

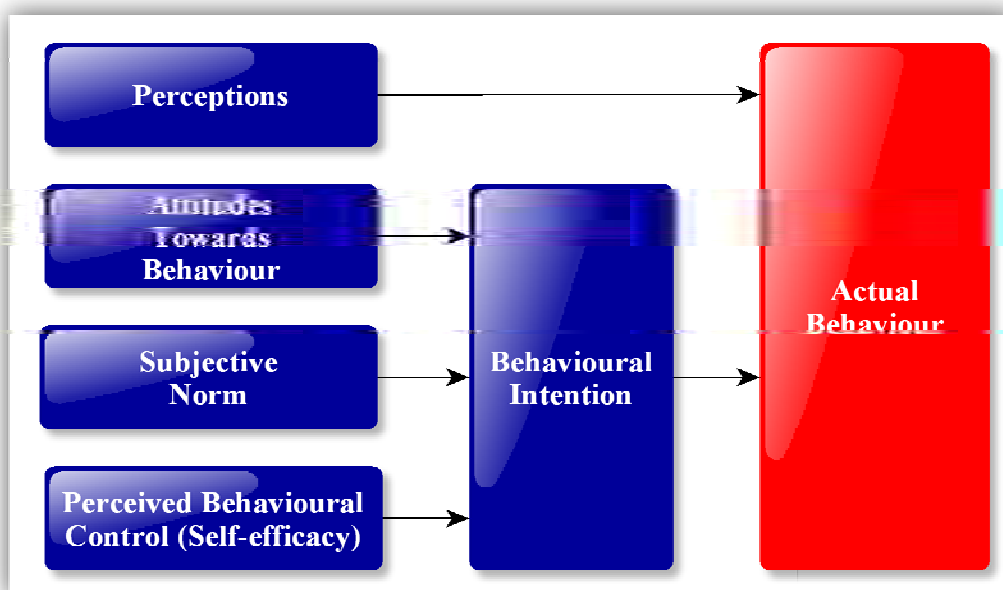


Figure 2.4: Conceptual framework for this study

Based on the conceptual framework, entrepreneurial actualisation is directly influenced by perceptions and behavioural intention. Intention is in turn influenced by attitudes, subjective norms and perceived behavioural control (self-efficacy).

The research is intentionally broad and has as its overarching goal to gain a holistic view of entrepreneurship at Further Education and Training Colleges in the Durban area, from the students' perspective. The study, therefore, seeks to answer the following questions:

- i. Do students regard entrepreneurship as important to them?
- ii. Are students aware of efforts made by their institutions to equip them for entrepreneurship?
- iii. Do students consider entrepreneurship as a viable career option for them?
- iv. Do students have any intentions towards becoming entrepreneurs?

In answering the above questions, the study addresses the following objectives:

- i. students' general knowledge of entrepreneurship
- ii. students' attitudes towards entrepreneurship
- iii. students' awareness of entrepreneurial efforts at their institution
- iv. students' belief in their abilities to execute desired outcomes

2.7 Student perceptions and attitudes towards entrepreneurship

In the following section a brief review of the literature, specific to students and entrepreneurship, is given. This section is divided into two parts. The first part focuses on international research and covers student attitudes, intentions, self-efficacy and education as they relate to entrepreneurship. The second part focuses solely on South African research.

2.7.1 Global Research

This section reviews literature on student perceptions and attitudes from international studies. It is divided into themes spanning attitudes, intention, self-efficacy and education.

2.7.1.1 Attitudes

Many authors have investigated the relationship between attitude and entrepreneurship. Moriano, Gorgievski, Laguna, Stephan and Zarafshani (2012) found that attitude towards

entrepreneurship was the strongest predictor of entrepreneurial intentions. Similarly, Fini *et al.* (2009) found that attitudes were direct predictors of entrepreneurial intention. do Paço *et al.* (2011) confirmed this in their study of the intentions of secondary students towards starting up their own businesses. They concluded that personal attitudes were very important in explaining entrepreneurial intention.

Veciana *et al.* (2005) assessed and compared the attitudes of university students towards entrepreneurship and enterprise formation in Catalonia and Puerto Rico. Their findings revealed a positive image towards entrepreneurship. Both samples had a favourable perception of new venture creation, although the perception of feasibility (behavioural control in the TPB as per Krueger and Brazeal (1994)) was not so positive.

2.7.1.2 Intention

Franco *et al.* (2010) investigated the entrepreneurial intentions of university students in East Germany, West Germany and Portugal. They attempted to determine what factors contributed the most towards entrepreneurial intentions and the potential differences between these regions. They found that a small fraction of students were inclined towards self-employment, while the vast majority had not yet made up their minds about the prospect of self-employment. An earlier study by Veciana *et al.* (2005) also observed that only a small percentage of students had a firm intention to create a new company. An additional finding by Franco *et al.* (2010) revealed that business administration students showed a significantly higher preference for self-employment when compared to their counterparts in other disciplines. Franco *et al.*'s study also did not detect any influence of gender and age on entrepreneurial intention.

A study on Malaysian students was also conducted by Zain *et al.* (2010) in which they examined the intentions of business students towards entrepreneurship. In this study, the authors also examined whether personality traits and environmental factors had any influence on students' intentions. They found that more than half the respondents intended to become entrepreneurs. The main influences on their decisions came from their family members, academics and attending entrepreneurship courses. In contrast, Shook and Bratianu (2010) found a negative relationship between the support that students received from people who were important to them (which the authors termed as referents) and their

intentions towards starting a business. This they attributed to a desire for students in this transitional economy to defy the anti-entrepreneurship wishes and advise of their referents.

2.7.1.3 Self-efficacy

Authors have also investigated the relationship between self-efficacy and intention. Akoojee and McGrath (2008) found that students' entrepreneurial self-efficacy had a significant, positive effect on their intention to become entrepreneurs. In support of this, a study conducted by Pruett *et al.* (2009), on university students from the United States of America, China and Spain, to test a model of predicting entrepreneurial intentions, found that across cultures self-efficacy was an important predictor of entrepreneurial intent.

Shook and Bratianu (2010) conducted a study on Romanian students and found that self-efficacy and the desirabilities associated with venture creation were positively related to entrepreneurial intent. Desirabilities can be thought to comprise both the "attitudes towards behaviour" and "subjective norms" aspects of the TPB (Krueger and Brazeal, 1994).

Zellweger *et al.* (2011) investigated how intentional founders, successors, and employees differed in terms of locus of control and entrepreneurial self-efficacy as well as independence and innovation motives. They found that there was a transitive likelihood of career intent depending on the degree of entrepreneurial self-efficacy and the independence motive. In addition, the authors observed that high levels of internal locus of control lead to a preference for employment. This, according to the authors, challenges traditional entrepreneurship research and suggests that the feasibility (behavioural control) of an entrepreneurial career path does not automatically make it desirable.

Kickul *et al.* (2008) examined the reasons for the gender gaps observed in entrepreneurial interest among adolescents in middle and high schools from four geographic regions in the United States. Specifically, the authors aimed to test and analyse direct and indirect relationships between work and leadership experience, presence of a parental role model, self-efficacy, and interest by teenagers in becoming entrepreneurs through the use of various models. They found that although both boys and girls held jobs outside of school in comparable numbers, the work experience gained was much more powerful in generating self-efficacy among boys. Additionally, Kickul *et al.*'s (2008) findings indicated that self-

efficacy seemed to have a stronger effect on entrepreneurial interest for girls than for boys, and that having an entrepreneurial mother or father had a significant and positive effect on girls' (but not boys') levels of the entrepreneurial interest.

2.7.1.4 Education

Cheng *et al.* (2009) did a study to trace the development of entrepreneurship education in Malaysia and to evaluate its effectiveness and limitations. The focus of their study was to evaluate student's perceptions towards the effectiveness of entrepreneurship education at their respective institutions. They found that entrepreneurship education was unable to successfully match students' skill expectations with skills acquisition. In addition, they also found that the level of students' understanding and knowledge about entrepreneurship was very low.

2.7.1.5 Global Research Roundup

The global research reveals that across cultures there appears to be a general positive attitude towards, and perception of, entrepreneurship. Attitudes were also seen as good predictors of entrepreneurial intentions of students.

Overall, self-efficacy was seen as an important predictor of entrepreneurial intent. It was also found that feasibility of an entrepreneurial path did not necessarily make it desirable. It was also observed that individuals that demonstrated high levels of internal locus of control sometimes opted more for employment as opposed to starting their own businesses. Finally, the level of student knowledge and understanding about entrepreneurship was observed to be very low.

The literature, however, seemed divided when it came to intention towards entrepreneurship. In some instances it was found that a few students had any intention towards starting their own businesses, yet in other instances intentions were observed to be high. Literature also seemed divided on the influence that subjective norms had on students' intentions towards entrepreneurship. The type of economy that the students came from was thought to explain why this might be the case. Transitional economies, for instance, had a negative association between people that students considered important to them and students' intention towards entrepreneurship. There also seemed to be no

consensus in the literature on the influence that gender differences had on entrepreneurial intent.

2.7.2 South African Research

Steenekamp *et al.* (2011) did an exploratory study on the status of entrepreneurship education in selected South African secondary schools. They aimed to determine the impact of entrepreneurship education on grade 10 learners' attitudes and intentions towards entrepreneurship. They found that South African youth generally had a positive attitude towards entrepreneurship. This favourable attitude extended to the existence of opportunities for new venture creation. However, the authors found that grade 10 learners seemed to have inflated expectations about their future academic qualifications, with less interest on starting their own businesses. Additionally, it was found that entrepreneurship education was largely irregular and void of depth or focus. In contrast with other findings of the influence of entrepreneurial background on student intention, the authors found no positive relationship. The authors also found no positive relationship between entrepreneurial offerings at schools and student intentions towards starting their own business.

Brijlal (2011) investigated the perceptions and knowledge of final year university students towards entrepreneurship from six different faculties at a major tertiary institution in the Western Cape. In it the author investigated whether significant differences in perceptions and knowledge about entrepreneurship existed among different races, gender and faculties within this institution. The six faculties were Community and Health Science; Economics and Management Sciences; Arts and Education; Dentistry, Law and Natural Science. Brijlal (2011) found that students across all faculties believed that entrepreneurship education was important. He also observed no significant difference of students' perceptions towards entrepreneurship. However, there was a significant difference between the male and female students on the knowledge of entrepreneurship, with males being more knowledgeable than their female counterparts.

Viviers, Solomon and Venter (2011) investigated the South African arm of the Global University Entrepreneurial Spirit Students' Survey (GUESSS), comparing South African student findings with the average findings of the 93 265 international students. The

primary objective of this survey was to investigate the intentions and behaviour of students worldwide in their decision to start entrepreneurial ventures. A total of 93 962 students participated globally, 697 of which were from 15 South African higher education institutions. They found that South African students exhibited a keen interest in entrepreneurship as a career choice. However, due to the impact that economic uncertainty had on the survival rate and profitability of small business, a consequence of the global financial crisis, South African students were more critical of employment options, including starting their own ventures. Compared to findings of the GUESS survey for the 2008/2009 period, fewer South African students intended embarking on new venture creation within five years of graduating.

As in the 2008/9 GUESS survey, access to capital was perceived as a major stumbling block in establishing a business. Despite several South African students being exposed to the dynamics of a family business, only a small fraction were enthusiastic about taking over the family business, claiming that it placed limitations on their career choices. Despite many students intending to establish their own businesses, very few actually took concrete actions in turning their intentions into reality.

2.8 Conclusion

In this review, the unemployment and entrepreneurial state of South Africa was discussed. Unemployment still remained high over the fourth quarter of 2012 and the first quarter of 2013. The high youth unemployment rate meant that young people were not gaining the abilities or experience needed to propel the economy forward. Despite the resources and policies that the South African government had instituted, the country was still found lagging behind many of the GEM countries. This highlighted the need for South Africa to be more creative in mobilising the youth toward entrepreneurship.

South African youth were seen to have little or no culture of entrepreneurship owing to the apartheid legacy. Consequently, they did not identify with being entrepreneurs, but instead sort traditional employment. The education system itself did very little to alter this mindset as it traditionally acted as a resource pool for established organisations.

Investigations revealed a positive relationship between students' attitudes and perceptions towards entrepreneurship. The literature strongly supported the idea that attitudes, perception and self-efficacy were strong predictors of entrepreneurial intention. It was also argued that a high level of internal locus of control (or self-efficacy) did not necessary translate to positive entrepreneurial intent.

Culture was also identified as having an impact on student entrepreneurial intention. This, however, was country specific and dependent on the country's economy type. Subjective norms had little or no effect on students' attitudes towards entrepreneurship. Several authors argued that family background had a significant impact on students' entrepreneurial intention. However, the literature seemed divided on this.

Investigations into the relevance of education to entrepreneurship had largely revolved around entrepreneurship as part of curricula. The emphasis, therefore, had been on evaluating the adequacy of institutions of higher learning, in terms of course structure and content, in meeting skills shortages. It was, however, uncertain whether improvements would translate to creating entrepreneurs.

Although a significant body of work has been done of entrepreneurship and students in South Africa, this research has for the most part concentrated on university students. Very little research has been done on entrepreneurship at Further Education and Training Colleges in South Africa. Much of the work that has been done focused on educators, policy implementation and resources at these colleges. Even less is known about students' perceptions and attitudes towards entrepreneurship at these colleges.

CHAPTER THREE

Research Methodology

3.1 Introduction

Mouton (2011), in describing research methodology, stated that it focuses on the research process and the kinds of tools and procedures to be used. This chapter, therefore, describes the methods and procedures employed to conduct the present research. It begins by stating the aims and objectives that guided the research process. Thereafter, the location where the research was to be conducted is described. The study participants are also identified. This is followed by a discussion of the research approach used, how the data was collected; and the design and methods used in conducting the research. The design and methods section also describes a six stage process that was involved in the planning and execution of the study.

Elaboration is also given on the recruitment of study participants, over and above that described in the six stage design process just mentioned. This includes gaining permission to conduct the research, survey distribution and student participation. Thereafter, a discussion regarding the reliability of the research measuring tool (i.e. questionnaire) is entered into. The final section of this chapter details data analysis. In this section the tests and analyses used in the research are discussed. This section also details how the study objectives were analysed.

3.2 Aims and Objectives

The aim of this study was to assess the attitudes and perceptions of Further Education and Training (FET) College students towards entrepreneurship. During the process, the study also sought to evaluate students' awareness of entrepreneurial offerings at their respective colleges. The specific objectives and questions addressing these aims are tabulated in Table 3.1.

Table 3.1: Study objectives and specific questions to be addressed

Objectives		Specific Questions
i	Evaluate students' general perception of entrepreneurship	
ii	Gauge students' attitudes towards entrepreneurship	- Do students regard entrepreneurship as important to them?
		- Do students consider entrepreneurship as a viable career option for them?
iii	Assess students' belief in their abilities to execute desired outcomes	Do students have any intentions towards becoming entrepreneurs?
iv	Evaluate students' awareness of entrepreneurial efforts at their institution	- Are students aware of efforts made by their institutions to equip them for entrepreneurship?

As tabulated above, the study had 4 main objectives. These will each be discussed in greater detail in the section 3.9.4.

3.3 Respondents and Study Location

FET College students were chosen as participants in this study as the aim was to assess entrepreneurship at these colleges from their perspective. The FET landscape in the broader Durban area consists of 3 FET Colleges namely, Coastal FET College (8 campuses), Elangeni FET College (8 campuses) and Thekwini FET College (6 campuses). According to the Department of Higher Education and Training (2013), these three colleges have a combined total of 29 200 students.

The study was administered to students at the various campuses of the three FET Colleges in the broader Durban area. Students were randomly selected from different study disciplines, as the goal was to gain a representative understanding of student perceptions and attitudes towards entrepreneurship. In addition, the state of awareness of entrepreneurial offerings at these colleges was thought to be best captured through the inclusion of students that had no previous business exposure.

3.4 Research Approach

This study is a descriptive study making use of a quantitative research approach. The data was collected by means of a structured questionnaire, the responses of which were coded for statistical analysis. The results of this study are intended to be generalizable over the entire FET student population in the broader Durban area. As such, probability random sampling was used. In probability random sampling, each subject within a population of interest, has a known or an equally likely chance of being selected as part of the sample (Sekaran and Bougie, 2010).

Two levels of stratification were used in the sample selection process. The three FET Colleges served as the first level of stratification. Thereafter, stratification was at the campus level. In other words, sample selection was based at the campus level, but within the three FET College strata. Initially proportionate random sampling was intended because it offered better representation of the student population due to the differing student enrollment numbers at these colleges. However, this was not feasible as student enrollment numbers were not yet finalized at the various campuses at the time of conducting the study.

To overcome this challenge simple random sampling, without replacement, was employed instead. This meant that each student was eligible to participate in the study only once. The advantage of this sampling technique was that it allowed for a high degree of generalizability of results (Sekaran and Bougie, 2010). Since comparing results across colleges was not an objective of the present study, proportionate representation was not essential.

3.5 Data Collection

Based on Sekaran and Bougie (p296, 2010) and Raosoft Incorporated's online sample size calculator, a sample size of 380 valid responses is considered representative of a population size of 29 200 at the 95 % confidence level. A total of 670 students participated in the study, spread across 15 FET College campuses. Data for the study was collected using a structured questionnaire. The questionnaire consisted of 6 broad sections, outlined in Table 3.2.

Table 3.2: Overview of sections in questionnaire

Section	Description
A	Demographics
B	Educational background
C	Entrepreneurial background
D	Entrepreneurship understanding and sentiment
E	Entrepreneurial activity and offerings at FET Colleges
F	General view of entrepreneurship at FET Colleges

A variety of scales and measures were used to extract data from the above sections. These included the use of nominal scales, ordinal scales, Likert scales, and free text boxes for students to express themselves. The scales will be discussed in section 3.6.1 under the heading “Stage 1: Design”.

3.6 Research design and methods

The questionnaire was designed from questions and statements obtained from the review of the literature. The questions, however, were adjusted to cater for the FET College students for whom the research was targeted. Caution was taken to prevent questions being too technical or confusing for the students. In addition, the present study was conducted in KwaZulu-Natal; consideration was also taken to accommodate the possibility that many students might not speak English as their mother-tongue. It was, therefore, necessary that the questionnaire take all these factors into account. The questionnaire was designed using Adobe FrameMaker software. As depicted in Figure 3.1, the survey process involved 6 stages.

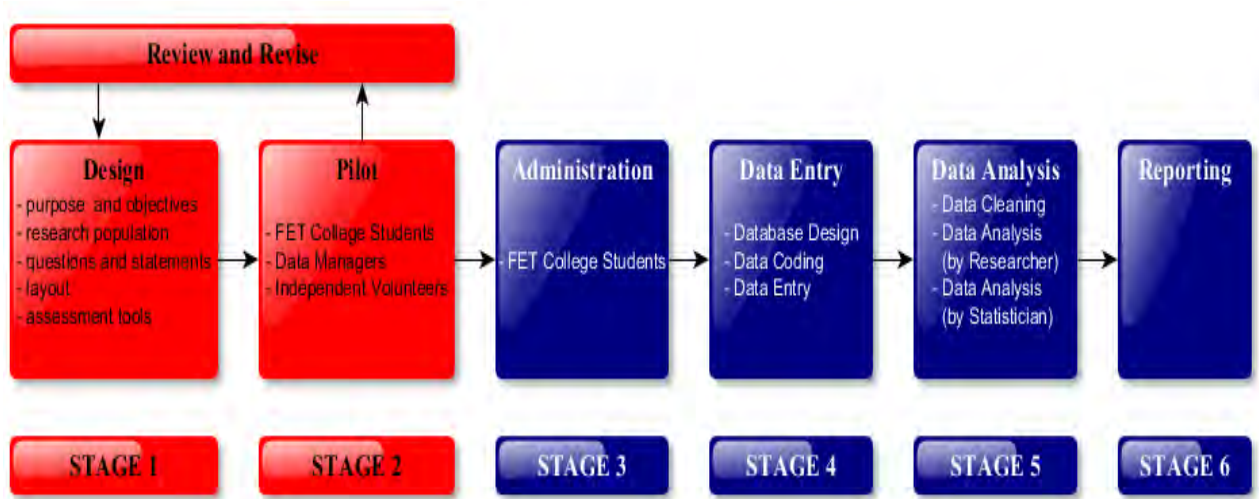


Figure 3.1: The survey process

3.6.1 Stage 1: Design

The first stage involved obtaining questions and statements from the review of literature that aligned with the purpose and objectives of the present study. This stage involved continuous consultation between the researcher and statisticians, and resulted in several design revisions. Areas of focus included layout, questionnaire construction, choice of assessment tools and data coding.

The questionnaire was designed to have a layout that made it easy for the students to respond. It began by gathering demographic data about the students. By gathering this data first, the researcher intended on fulfilling at least two practical functions. Firstly, it served to allow for meaningful descriptive statistics. Secondly, it potentially aided in easing the students into the questionnaire. The motivation behind this approach was to make students believe that the research was more than responses but, more importantly, about them. The subsequent sections of the questionnaire then tended to increase in the degree of complexity and thought time required for student responses.

During the design stage, several scaling techniques were used to capture student responses. A scale is a tool or mechanism used in research to distinguish individuals, groups, objects or events on variables of interest in some meaningful way (Sekaran and Bougie, 2010). There are generally four types of scaling used in research. These are nominal, ordinal, interval and ratio. The level and extent of analysis that can be performed on the data obtained using the different types of scales increases from nominal through to ratio

(Sekaran and Bougie, 2010). Descriptions of the scaling used in relevant sections of the questionnaire are described in the following paragraphs.

3.6.1.1 Nominal Scales

This type of scaling was used quite extensively in the beginning of the research tool to collect nominal data i.e. data that was categorical in nature. This data was collected for descriptive statistics purposes and included student demographics, educational background (except section B7 of Appendix 1) and entrepreneurship background sections of the questionnaire (refer to section A to C of Appendix 1). Other sections that used this type of scaling include sections D21-D22, E23-E24 and F26.

3.6.1.2 Ordinal Scales

Sekaran and Bougie (2010) describe ordinal scales as having an additional dimension over nominal scales, namely, categories are rank-ordered in some meaningful way. Students' level of study, for instance, made use of this scale (section B7 of Appendix 1). The Likert-Scale, in particular, was the main form of scale used in this study to measure student attitudes and perceptions. It was used to cover sections D12-20 and D25 of Appendix 1. Owing to its extensive use in the present study, this scale will be discussed in greater detail in the following section.

3.6.1.3 Likert Scales

The Likert scale is used to examine how strongly subjects (or research participants) agree or disagree with statements (Sekaran and Bougie, 2010). The 5-point Likert scale was used in the questionnaire to assess students' opinions, thoughts (or perceptions), attitudes and levels of satisfaction. The scale ranged from "strongly agree" to "strongly disagree". In some instances, the scale ranged from "very satisfied" to "very dissatisfied".

Apart from negatively scored statements, all statements were stated in the positive (as opposed to the negative). Scoring also decreased from left to right. In other words, "strongly agree" was scored with a "5", while "strongly disagree" was scored with a "1". Similarly, for the satisfaction scale. This approach is supported by Hartley (2013); Hartley and Betts (2010, 2013) who found that respondents were more receptive to positively labelled statements and scored higher when the scoring started with the highest value (i.e.

5) on the left. This differs from the traditional scoring system in Likert scales, where the increase was from left to right (Hartley and Betts; 2010, 2013).

Data analysis of a Likert scale can be achieved through two approaches. Individual scale items can either be analysed separately or be summed with other related items to create a score for a group of statements. For this reason Likert scales are sometimes referred to as summative scales (Bertram, 2007; Sekaran and Bougie, 2010). Table 3.3 tabulates the strengths and weaknesses of using the Likert scale.

Table 3.3: Likert Scale Strengths and Weaknesses

<u>Strengths:</u>
• simple to construct
• likely to produce a highly reliable scale
• easy to read and complete for participants
<u>Weaknesses:</u>
• central tendency bias
- participants may avoid extreme response categories
• acquiescence bias
- participants may agree with statements as presented in order to “please” the researcher
• social desirability bias
- portray themselves in a more socially favourable light rather than being honest
• lack of reproducibility
• validity may be difficult to demonstrate
- are you measuring what you set out to measure?

According to Edwards and Edmondson (2011) the Likert scale is ordinal in nature. They mention that it is often assumed to be an interval scale so that statistical properties, such as the means and standard deviations, can be justifiably used. This, they argue, is the incorrect use of these scales. The appropriate measures of the central tendency for ordinal scales therefore, are the median or mode (Edwards and Edmondson, 2011). Measures of dispersion appropriate for this type of data include percentiles or inter quartile ranges,

while tests for significance include rank-order correlations (Sekaran and Bougie, 2010; Edwards and Edmondson, 2011).

Boone and Boone (2012), on the other hand, argue that Likert scale data can be treated as interval data. In forwarding their argument, they draw a distinction between Likert-type items and Likert scale data. Likert-type items refer to a single test item within the Likert scale that does not necessarily form part of a composite. Likert scale data on the other hand, comprise of a series of questions or statements that form part of a composite. They therefore, recommend that descriptive statistics for interval scale items include the mean for central tendency and the standard deviations to measure variability. Additional data analysis measures suitable for interval scale items also include the Pearson's *r*, *t*-test, Analysis of Variance (ANOVA) and regression procedures.

In this study medians were predominantly used to measure central tendency. Significance was assessed using the Wilcoxon Rank Sum *W* test, the Kruskal-Wallis test and the ANOVA (for Likert scale data).

3.6.2 Stage 2: Pre-testing

In the second stage of the survey process, the first version of the questionnaire was tested on three different groups of individuals. The questionnaire was first piloted to 5 FET College students who volunteered to assist the researcher. This exercise involved the researcher sitting with the students while they completed the questionnaire and observing their expressions during the process. Based on their expressions the researcher was able to probe deeper on particular sections and get feedback from students. The researcher also availed himself to the students to ask questions while they were completing the questionnaire. The comments received and pursuant discussions enabled the researcher to further refine the questionnaire to be FET College student specific.

The second version of the questionnaire was then administered to 5 Research Data Managers. They reviewed the questionnaire for ease of reading, ease of completing, for any ambiguities, general presentation; and ease of database design. They also offered suggestions on coding responses for data capturing. Input received was then incorporated to form the third version of the questionnaire. This version was then tested on 2 people, known to the researcher, to detect errors that might have been overlooked during the

research tool design process. Further adjustments resulted in the final version of the questionnaire, which was then administered to FET College Students.

3.6.3 Stage 3: Administration

During the third stage of the survey process, the questionnaire was administered to students at 15 of the 22 campuses that constitute the FET College landscape in the Durban area. Questionnaire distribution was conducted by the researcher and a student colleague (who was also a FET College educator). Further elaboration on administration will be discussed under section 3.7 “Recruitment of Study Participants”.

3.6.4 Stage 4: Data Entry

This stage involved all the processes related to data entry. In the first part, the raw data obtained from questionnaires was captured into a Microsoft Access database. Each questionnaire that was returned was given a unique identifier on the questionnaire and in the database. This enabled the researcher to locate particular questionnaires in the event of data inconsistencies and for data verification purposes. To maintain student confidentiality, student identifiers were not included in the questionnaire design. Each response on the questionnaire was then data coded for ease of analysis (see Appendix 1 for codes).

The data was then captured in a two-round process. The first round of capturing was performed by the researcher, while the second by a Data Manager. The captured data was then compared for any inconsistencies. This method of double-data entry served as a tool of ensuring that captured data was both valid and reliable. Discrepancies were detected using Microsoft Access queries. The queried data was then adjusted as per the relevant questionnaire. Further discussion on analysis is entered into in the following section.

3.6.5 Stage 5: Data Analysis

Once all the raw data had been entered, a data cleaning process was undertaken by the researcher. This marked the beginning of the data analysis process. The cleaning process typically involved:

- verifying age from date of birth
- observing whether skip patterns were adhered to (as these were not programmed in the database design)

- confirming that students selected the correct FET College and campus that they attended in each batch of questionnaires collected

Once the process was done, data was then analysed by the researcher using Statistical Packages for the Social Sciences (SPSS) software. Raw data was also sent to a Statistician for professional analysis and for comparison purposes. The statistician used Statistical Analysis Software (SAS) to perform analysis on the research data. Variables to be analysed were predetermined by the researcher in alignment with the aim and objectives of the present research. Discrepancies were discussed and resolved through consultations between the Statistician and the researcher. The data analysis process is described in greater detail in section 3.9.

3.6.6 Stage 6: Reporting

Summarised data was presented in the form of frequency distribution tables, pie charts and bar graphs. The final report was then prepared once all the data was analysed and interpreted.

3.7 Recruitment of Study Participants

The recruitment of students involved several stages and forms part of stage 3 in Figure 3.1. These stages included ethical clearance, permission to conduct the study at the colleges, distribution of the questionnaire; and the eventual participation of the students. Each of these is discussed in more detail within the following paragraphs.

3.7.1 Permission

Ethical permission was obtained from the Rectors of all three FET Colleges in the Durban area. Thereafter, ethical clearance was granted by the University of KwaZulu-Natal's Humanities and Social Science Research Ethics Committee (UKZN HSREC). Upon receiving ethical approval from the UKZN HSREC, appointments were made with the managers of each of the campuses to discuss the proposed research and to ask for their permission and support in conducting the research at their respective campuses. At these meetings, dates and times for questionnaire administration were scheduled. Typical scheduling revolved around mornings when staff meetings were to be held. The researcher and his assistant would attend these staff meetings and be introduced to the staff by the

campus managers. The researcher would then give an introductory overview of the proposed research. This allowed for staff buy-in and allowed for accommodating any disruptions to their normal lecturing schedules.

3.7.2 Survey Distribution

Students were selected at random based on their availability and as per the guidance of the campus managers. Due to the researcher being given a specific time within which to conduct the survey, the challenge lied with working out logistics to get as many students together in a single sitting. Often logistics were discussed with campus managers and a relevant educator identified to assist.

Four different forms of group-gathering formations were employed to facilitate questionnaire distribution. In the first instance, students were gathered together in a large lecture theatre and administered the questionnaire. This method proved to be the most efficient of the four methods from the logistical stand point. It made it easier to administer the questionnaire, allowed for group control and also made the researcher more accessible to the students for questions and to clarify any confusing statements or terms.

The second formation involved having two sessions at a campus. In the first session, the researcher would distribute surveys to students pooled together from two or more smaller classes and administer the questionnaire. Once students had completed the questionnaires, this procedure was then repeated for the second session, using a different group of students. This method worked best in campuses that had a relatively small student population and were not pressured by time constraints. It also worked well when the researcher was conducting the research without the aid of an assistant.

The third approach was used in cases where students were writing examinations on the scheduled day. Students were advised before commencing their examinations about the research. They were then asked to make their way to a designated room, once they had completed writing their examinations, if they wished to participate. This meant that the researcher had no control over the rate at which the students would trickle in. The researcher would then stand outside of the research venue, giving consent forms and questionnaires to students before they entered the research venue. This also presented opportunities for the researcher to give brief descriptions about the research to students as

they arrived. This was much easier when groups of students would arrive to the research venue at the same time. Once completed, students would submit their questionnaires and leave the venue. Due to time constraints, the researcher was unable to facilitate the participation of students who arrived late (or finished writing their examinations late).

The final approach involved identifying a few classes that had sufficient numbers of students in each with which to administer the questionnaire to. The researcher and his assistant would then divide among the two of them which group of students (i.e. which classes) they would oversee. This meant that they would supervise two or three classes simultaneously within the specified time frame allowed by the campus managers. This method proved to be the most challenging of all the methods employed.

3.7.3 Student Participation

Before distributing the questionnaire, students were given an introductory talk about the proposed research and the role that they would be playing in participating. Effort was given not to mislead or coax the students to participate. It was also emphasised that participation was voluntary and that non-participation would not lead to them getting into trouble with their educators and campus managers. The researcher also made it clear that the questionnaire did not have any personal identifiers to link responses to participants. In other words, the questionnaire was designed to preserve anonymity.

Students that were interested to participate in the research were then asked to complete an informed consent form. The researcher encouraged students to ask questions if they did not understand what was being said in the consent form. They were also asked not to sign the consent form until they totally understood it and agreed with what it contained. Any questions raised were used as opportunities for the researcher to address the entire group of participants at a particular sitting.

After consenting, students were guided on how to complete the questionnaire. They were also advised to read carefully and to follow the necessary prompts and skip instructions that served to guide them through questionnaire. A total of 670 students participated in the study. Depending on their command of the English language, questionnaire completion ranged from 10 minutes to 40 minutes. The collected questionnaires were then batched by

FET College campus attended and by the date completed. Each questionnaire was then assigned a unique identifier for data capturing and for future data reference purposes.

3.8 Reliability and Validity

Tavakol and Dennick (2011) state that validity and reliability are two essential features in evaluating a measuring instrument. Reliability tests the consistency of a measuring instrument's ability to measure a particular concept of interest. Validity, on the other hand, is how well that instrument is able to measure what it is intended to measure (Sekaran and Bougie, 2010; Tavakol and Dennick, 2011). In the construction of the measuring tool for the present research, Cronbach's Alpha was used to test for reliability. Cronbach's Alpha is thought to be one of the most objective tools for testing the reliability of a measuring instrument (Coakes and Ong, 2011; Tavakol and Dennick, 2011).

3.8.1 Cronbach's Alpha

Developed by Lee Cronbach in 1951, alpha was intended to provide a measure of the internal consistency of a test or scale. It is expressed as a number between 0 and 1, with numbers closer to 1 indicating higher degrees of reliability. In general, alpha readings below 0.6 are considered poor, between 0.6 but less than 0.8 are considered acceptable, whilst readings that are 0.8 and greater are considered good (Sekaran and Bougie, 2010). According to Tavakol and Dennick (2011), internal consistency should be established prior the use of a measuring tool for research purposes in order to ensure validity. Table 3.4 below contains the Cronbach alpha's of 4 composite concepts that were measured in the research.

Table 3.4: Cronbach's Alphas for composite measures

Sections	Description	Cronbach's Alpha
D12 - D17	Perception of entrepreneurship	0.370
D18a - D18g	Personal attitudes towards entrepreneurship	0.744
D19a - D19f	Specific desirabilities	0.801
D20a - D20r	Self-efficacy	0.890

Based on the Cronbach alphas in the above table, the internal consistency of the measures used to test for “personal attitudes towards entrepreneurship”, “specific desirabilities” and “self-efficacy” are at the least acceptable (>0.6). This indicated that the reliabilities of the composite measures used to test these concepts were at an acceptable level.

“Perception of entrepreneurship”, on the other hand, produced a very poor alpha. This implied that there was basically no inter-relatedness of the statements comprising this concept. However, the construct itself pertained to statements that attempted to describe entrepreneurship. As the review of the literature indicated, there has yet to be a unified definition of entrepreneurship (Carree and Thurik, 2002; Shane and Venkataraman, 2000; Ahmad and Hoffman, 2007; Fatoki and Chindoga, 2011). In addition, some of the statements used in testing the concept were intentionally unrelated and broad. This served to gain a deeper understanding of what students thought of the different elements comprising the concept. For these reasons, a poor alpha was viewed by the researcher as having no substantive bearing on the research tool as no inter-relatedness was expected.

3.9 Data Analysis

This section discusses the tests used to analyse the collected data. It begins by discussing descriptive statistics, which mainly pertained to the demographic profiles of the students and aimed to give an overview of the data. This is followed by tests for significance in the form of the Wilcoxon ranks sum W test, the Kruskal-Wallis test and the ANOVA test. Finally, a more detailed discussion of the data analysis, focusing on the specific study objectives, is entered into.

3.9.1 Descriptive Statistics

Data was summarised using frequency distributions and means to calculate central tendency. Much of the analysis was performed using Microsoft Excel software. Summarised data was presented in the form of tables and graphs.

3.9.2 Wilcoxon rank sum W test

The Wilcoxon rank sum W test, also known as the Mann-Whitney U Test or Mann-Whitney-Wilcoxon test, is a nonparametric test (i.e. the underlying population cannot be assumed to be normally distributed) used to examine significant differences between two

related samples or repeated measurements on a single sample (Sekaran and Bougie, 2010). It is used as an alternative to the paired t-test when the underlying population cannot be assumed to be normally distributed i.e. non-parametric. It is also recommended for analysing ordinal data. It is for this reason that this test was used for Likert Scale data in this study. According to McDonald (2009) the p-values obtained for this test are mathematically identical to the Kruskal -Wallis test (described 3.9.3).

According to Coakes and Ong (2011) this test is used to test the hypothesis that two independent samples come from populations having the same distributions. In the present study, this test was used for detecting any significant differences in the median responses of male and female students with respect to their understanding of individual statements of entrepreneurship (i.e. in relation to D12-17 in Appendix 1).

The proposed hypothesis for this test therefore reads,

H₀: The distribution of responses to entrepreneurship statements is the same across genders

H₁: The distribution of responses to entrepreneurship statements is not the same across genders

The null hypothesis (H_0) will be rejected if the p -value is less than 0.05 (i.e. $p < 0.05$) resulting in the alternative hypothesis (H_1) being accepted.

3.9.3 Kruskal - Wallis test

This test, like the Wilcoxon signed-rank test, is also a non-parametric test. In terms of commonly used tests for parametric data, it is the non-parametric analogue of the one-way between-groups analysis of variance i.e. ANOVA (McDonald, 2009; Coakes and Ong, 2011). This means that this test allows for the examining of any possible differences that might exist between two or more groups (Coakes and Ong, 2011).

Unlike the one-way ANOVA, the Kruskal-Wallis test does not test the difference in means. It also does not test the difference between medians. Literature is very confusing and lacks a clear or concise explanation of the proper use of the Kruskal-Wallis test, nor is there any real clarity of how it is to be interpreted. McDonald (2009) argues that the test is sometimes erroneously used to test the null hypothesis that the populations have equal medians. He explains that the Kruskal-Wallis test should instead be used to test whether

the samples come from populations such that there is a 50% likelihood of a random observation from one group being greater than a random observation from another group. Perhaps a much clearer explanation of its use is given by Chan and Walmsley who say that the test is used “...to determine whether three or more independent groups are the same or different on some variable of interest when an ordinal level of data ... is available”. Chan and Walmsley (1997, p1755)

For the purposes of this research, the independent groups or categories that the researcher wished to determine similarities or differences for were the age groups of the students, with their median responses (with respect to individual statements on entrepreneurship) serving as the variables of interest (i.e. in relation to D12-17 in Appendix 1). In other words, responses across age categories were compared to assess for similarities (or differences) between the age groups, using their median responses as the point of comparison. The use of medians in some respects links back to McDonald’s caution of what the test should not be used for. Nonetheless, it is the response groups that are really being tested.

The proposed hypothesis therefore reads,

H₀: The responses for the statements on entrepreneurship among age groups is similar

H₁: There is a difference in at least one of the age groups’ responses to the statements on entrepreneurship

Chan and Walmsley (1997) mention that the Kruskal-Wallis H-statistic has been shown to be distributed approximately as a chi-squared distribution (with degrees of freedom = number of categories to be compared - 1) for sample sizes greater than five per group (or category). As such, critical values for the H statistic are obtained from the chi-squared distribution’s table. The null hypothesis will be rejected if the *p*-value is less than 0.05 (i.e. $p < 0.05$) resulting in the alternative hypothesis being accepted. In the event that the null hypothesis is rejected, further tests need to be conducted to identify which groups actually differed.

3.9.4 Analysis of Variance (ANOVA)

The ANOVA test was used to assess for significant differences between Likert scale composite scores using gender and age as variables.

3.9.5 Analysis Focus

The sections that follow detail the data analysis that was performed on the data to meet the study objectives as tabulated earlier in Table 3.1. The first section of the questionnaire concentrated on gathering student demographic details as well as their educational background. Student demographic details were aimed at gaining understanding of the age distribution of students, their gender profiles, ethnic backgrounds; and home languages. Educational background, on the other hand, aimed to get a clearer picture of the distribution of learners among the various colleges in the broader Durban area, the campuses they attended and their level of study. It also aimed to establish what department or study course the participating students most frequently came from. These data were then analysed, using MS Excel, and the results presented in frequency distribution tables or pie graphs.

The remainder of the analysis concentrated on analysing the objectives of the study as laid out in Table 3.1. These will each be discussed in greater detail in the following subsections.

3.9.5.1 Students' General Perception of Entrepreneurship

This section aimed to gain a general census of what students thought or felt entrepreneurship was (see section D12 - 17 of Appendix 1). The statements can be divided into two broad groups. The first group consisted of the first three statements that contain some of the elements that describe entrepreneurship. These are:

- it is a process of discovering new ways of combining resources to deliver added value
- potential for economic growth
- involved risk taking.

The second group also contained three statements, but these described what entrepreneurship was not. Included in this group were:

- share trading
- entrepreneurship being for rich people only
- entrepreneurship being synonymous to politics

A Likert scale was used to assign values to responses to these statements. This scale was chosen because it assessed students' opinions of what they thought entrepreneurship was. The scale ranged from 5 to 1 for responses "strongly agree" to "strongly disagree" respectively. In the instance of the first 3 statements, the scoring followed the sequence mentioned above. The following 3 statements were reverse scored as they described what entrepreneurship was not. This meant that a "strongly agree" response to any of these 3 statements would receive a score of "1" instead of the normal "5".

The reasons for the reverse scoring are two-fold. Firstly, it aimed to eliminate students guessing what entrepreneurship was. Secondly, it tried to ensure that students read the statements. This attempted to safeguard against students merely selecting a response and using it for all subsequent statements. In this way scores would be averaged out for each student, with a positive overall response counting as having an understanding of what entrepreneurship was (or was not). Negative averages would then be interpreted as students not having a clear view of entrepreneurship.

3.9.5.2 Students' Attitudes Towards Entrepreneurship

This section aimed to gain a better understanding of students' attitudes towards entrepreneurship, their specific desirabilities and to find out about their entrepreneurial background. This section, therefore, consisted of personal attitudes and specific desirabilities. These are discussed below.

A. Personal Attitudes

Personal attitudes were assessed to gain insight of how students felt about entrepreneurship. Seven statements, designed to draw students' personal attitudes towards entrepreneurship, were used (see section D18a – 18g in Appendix 1). The first 6 questions were positively scored on the 5 point Likert Scale, with "5" for "strongly agree" and "1" for "strongly disagree". The seventh statement was stated in the negative and aimed to find out whether students considered entrepreneurship to be important to them or not. Hence, this statement was negatively scored. The negative scoring was mainly used as a tool to see if students read the statements carefully.

This section also answered the specific question that the research aimed to investigate of whether students regarded entrepreneurship as important to them. Statement D18e, for instance, answered the following question: Do students consider entrepreneurship as a viable career option for them?

B. Specific Desirabilities

Specific desirabilities were assessed by asking students what owning their own business would mean to them. This section consisted of six feelings or moods that the students had to rate according to the 5 point Likert Scale (see section D19a – 19f in Appendix 1). The 5 point Likert Scale, used had “5” for “strongly agree” and “1” for “strongly disagree”.

3.9.5.3 Students’ Beliefs in their Ability to Execute Desired Outcomes

This was measured by means of the self-efficacy scale. The scale tested four different areas, namely students’ entrepreneurial intention (D20a-20h of Appendix 1), risk aversion (D20i – 20k of Appendix 1), innovativeness (D20l – 20o of Appendix 1); and proactivity (D20p -20r of Appendix 1). Each of the statements used a 5 score Likert Scale with “strongly agree” scoring “5” and “strongly disagree” scoring “1”.

As entrepreneurial intention was a critical antecedent of entrepreneurial behaviour, two additional approaches were used to measure it. The first approach involved asking students if they had ever thought about starting their own business in the future (D21 of Appendix 1) and whether they thought that they would start a business in the future (D22 of Appendix 1). This would give a direct indication of student sentiments and intentions towards entrepreneurship. Students were asked to either respond “yes”, “no” or “unsure” to these questions.

The research also sought to investigate whether family entrepreneurial background had any impact on students’ entrepreneurial intention. Of particular interest was the impact, if any, parents’ entrepreneurial background had on students’ intentions. Students who had indicated that their parents had their own businesses (C9a of Appendix 1) were asked 3 statements relating to their intentions of being entrepreneurial (C11 of Appendix 1).

3.9.5.4 Students' Awareness of Entrepreneurial Offerings at FET Colleges

To measure this, students were presented with a series of courses, workshops and resources that were potentially offered by FET Colleges (see E23 of Appendix 1). They then had to indicate whether they were aware of such offerings at their institution by selecting either “yes”, “no” or “unsure”. Section E24 then asked students if they had made use of any of the offerings mentioned in section E23. Those that answered “yes” were then asked to indicate their level of satisfaction with the offerings they used by means of a 5 point Likert Scale. The scale ranged from “very satisfied” to “very dissatisfied” scored from “5” through to “1”.

3.10 Summary

This chapter provided an overview of the quantitative research methodology used in this study. It began by outlining the aims and objectives of the study. Procedures used in conducting the study were also detailed. These ranged from the research approach used, the data collection techniques employed and the research design process. Tests used to analyse the data were also discussed. The data collected using the methods mentioned in this chapter, together with the analysis tools mentioned, will be presented and discussed in the next chapter.

CHAPTER FOUR

Results and Discussion

4.1 Introduction

This chapter analyses the research data in relation to addressing the aim and objectives of this study. It begins by describing the distribution of study participants. This is followed by a summation of participants' demographic data. Thereafter, the data are presented in themes relevant to the four objectives that the study aimed to address. These objectives include evaluating students' general perception of entrepreneurship, their attitudes towards it, their belief in their abilities to execute desired outcomes; and finally their awareness of entrepreneurial offerings at their institutions. In the process, comparisons are also drawn with respect to gender and age where appropriate. The chapter ends with a summary of all the results that were discussed.

4.2 Location of Respondents

This section describes the distribution of participants among the three colleges. According to the Department of Higher Education and Training (2013), the combined student enrolment numbers for the FET Colleges in the Durban area is 29 200. Enrolled students were spread across 22 campuses, namely Coastal and Elangeni FET Colleges (with 8 campuses each) and Thekwini FET College (with 6 campuses). A total of 670 questionnaires were distributed and collected. This gave a 100% response rate.

Also described are the aggregated totals for each level of study as well as the departments in which the participants were enrolled. To gain an overall sense of the enrolment numbers at each college, collected questionnaires were grouped together by college. The distribution of the 670 respondents is depicted in Figure 4.1.

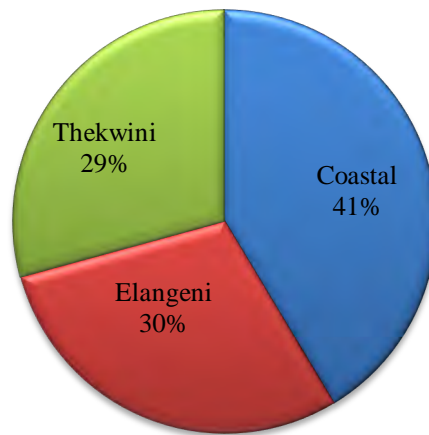


Figure 4.1: Breakdown of student participation from the three FET Colleges in the broader Durban area

As can be seen in the above figure, the majority of the participants came from Coastal FET College (277 students). Thekwini and Elangeni FET Colleges had approximately the same number of respondents (196 and 197 students respectively). A further breakdown of the above by campus attended at each college is given in Figure 4.2.

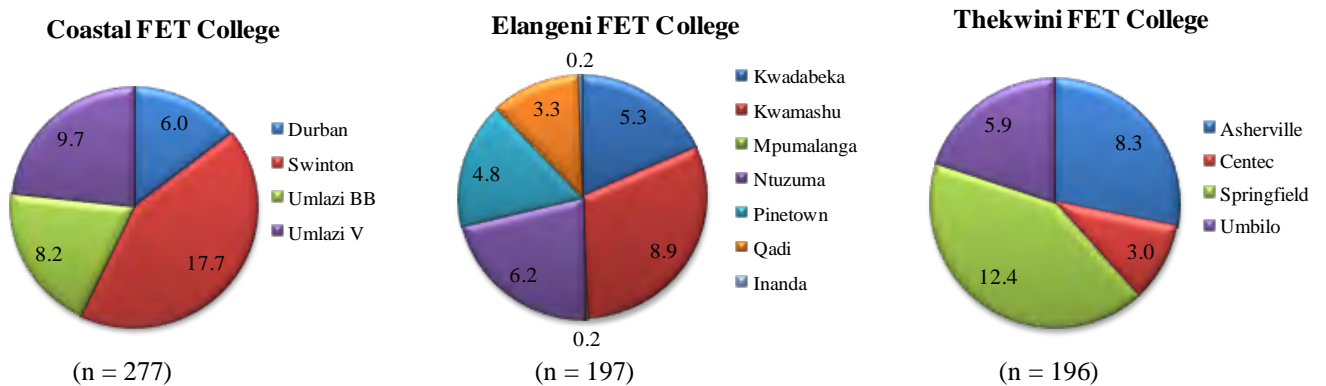


Figure 4.2: Percentage breakdown of FET College campuses attended by students

In total, responses were gathered from 15 of the 22 FET campuses comprising these three colleges. Swinton campus, with 17.7 % of the total 670 student participants, had the highest percentage of student respondents of the 15 participating campuses. They were followed by Springfield campus (12.4 %), Umlazi V campus (9.7 %), Kwamashu campus (8.9 %), Asherville campus (8.3 %) and Umlazi BB campus (8.2 %). Mpumalanga and Inanda campuses had the least responses, each with 0.2 %.

4.3 Demographics

To gain an overall impression of the research participants' background, demographic data for each of the participants was gathered. This data included participants' age profiles, genders, racial classifications, home languages and educational backgrounds. These will each be discussed in the sections that follow.

4.3.1 Age

The age profiles of participating students were divided into 3 ranges as presented by the pie chart in Figure 4.3.

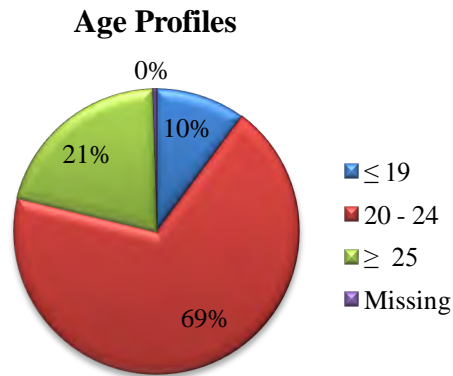


Figure 4.3: Age distribution of FET College students

Of the 670 respondents, it was not possible to obtain the age of three participants. As seen in Figure 4.3, the majority of students fell within the 20 to 24 year age range (inclusive). This was followed by students aged 25 years and older. Slightly over 10% of the participants were teenagers (i.e. younger than 20 years). The average age of participating students was 22.8 years with a standard deviation of 3.5 years. The youngest respondent was aged 16 with the eldest aged 42 years.

4.3.2 Gender

Gender profiles of the participants were collected for two main reasons. Firstly, this was to gain an overall impression of the gender distribution of the research participants. Secondly, this would enable gender to be used as a point of comparison between the two groups where necessary. The gender distribution of the students is summarised in Table 4.1.

Table 4.1: Gender distribution of FET College students

Gender	Count	Percent
Female	386	57.7
Male	283	42.3
Missing	1	-
Total	670	100.00

As tabulated in Table 4.1, the majority of the students were female (57.7%), with male students representing 42.3% of the sample. This is in keeping with the national FET College gender enrolment numbers of 57.35% and 42.65% for female and male students respectively (Higher Education and Training, 2013).

4.3.3 Ethnic Group

Race group background information was also collected to gain an idea of representation of each ethnic group at each campus (and college) as per the research sample. These profiles are tabulated in Table 4.2 below.

Table 4.2: Frequency distribution of FET College students based on Race

Race	Count	Percent
Black	635	95.6
White	8	1.2
Indian	14	2.1
Coloured	7	1.1
Missing	6	-
Total	670	100.0

As seen in Table 4.2, approximately 95 % of the 664 students that indicated their race group were Black. This was followed by Indians (2.1%), Whites (1.2%) and Coloureds (1.1%). This may be reflective of the student enrolment at these colleges (and may also reflect the racial demographics of the Durban Area or the general FET population). This says that it is predominately Black students that enrol at FET Colleges in the greater Durban area.

4.3.4 Home Language

Table 4.3 profiles the mother tongues spoken by the study participants. Having a sense of the languages that students spoke at home has at least two potentially important study implications. Firstly, it brings to question whether the research tool was fully comprehensible. This may imply that future research be conducted with students' mother tongues in mind. Secondly, it could potentially raise questions of the appropriateness of the medium of instruction at FET Colleges, especially if higher failure rates are associated with students that were not English-speaking.

Table 4.3: Frequency distribution of FET College students by home language

Language	Count	Percent
Afrikaans	1	0.2
Xhosa	63	9.6
isiZulu	524	80.1
English	53	8.1
Ndebele	2	0.3
Sepedi	1	0.2
Setswana	1	0.2
S. Sesotho	6	0.9
Swati	3	0.5
Total	654	100.0

Based on Table 4.3, approximately 80.1 % of the 654 valid responses received were from students who spoke isiZulu at home. This was followed by Xhosa-speaking (9.6%) and English-speaking (8.1%) students. Afrikaans, Sepedi and Setswana were the least spoken home languages, with each language being spoken by at most 1 student. Ndebele, Southern Sotho and Swati also featured among the least spoken languages, with 2, 6 and 3 students speaking each language respectively. Of the 11 South African official languages, Tsonga and Venda were the only two languages that none of the students spoke at home.

Table 4.3 also highlights that nearly ten times as many students speak isiZulu as a mother tongue, when compared to students who speak English. FET Colleges are English medium institutions and this should raise concerns of student comprehension of educational

material at these colleges. This, unfortunately, is an inherited problem and highlights the need for English to be taught at the primary, if not the pre-primary, school level. In addition, parent support and involvement in assisting their children to learn English would strengthen learners' command over the language. A possible proposal would be to teach parents how to speak English so that an environment can be created for learners to practice speaking and writing English.

4.3.5 Education

In order to determine the study levels of the students, as well as to get insight of academic spread, each was asked to indicate their level of study at the time of completing the questionnaire. The results of which are tabulated below.

Table 4.4: Study level of FET College students

Study Level	Frequency	Percent
NCV Level 2	194	29.1
NCV Level 3	226	33.9
NCV Level 4	146	21.9
N1	1	0.1
N2	30	4.5
N3	50	7.5
N4	15	2.2
N5	5	0.7
Total	667	100.0

Of the 667 valid responses received, the majority of the students were doing their NCV levels. The NCV is a qualification offered by FET Colleges to students who had successfully completed their Grade 9 in the General Education system. It is a vocational alternative to an academic Grade 10 to 12. These qualifications are designed to offer industry-focused training on the NQF Levels 2 to 4 for grades 10 to 12 respectively. They also seek to provide training at both the theoretical and practical levels. This provides students with the opportunity to gain work experience while studying. Its popularity may also be in its provision of an alternative route for students to pursue further study at

Universities or Universities of Technology (dependent on appropriate subject combinations and in meeting the required admission requirements for these institutions).

As seen in Table 4.4, NCV level 3 represented 33.9 % of participating students. This was followed by NCV levels 2 and 4 with 29.1 % and 21.9 % respectively. Taken jointly, 84.9 % of the students were doing their NCV levels. The remaining 15.1 % were doing their N levels. Of these, the majority were at the N3 level (7.5 %). The above response rates, however, are not reflective of the FET student population in the Durban area. Rather, estimated programme enrolment numbers for the population are 56.38% for N level programmes and 36.21% for NCV levels (Higher Education and Training, 2013).

To gain a more holistic picture of student educational background, student participants were asked to indicate which department they were presently enrolled in. This served to give insight of the academic streams (or study disciplines) that they were pursuing. The frequency distribution of the summated data is presented in Figure 4.4.

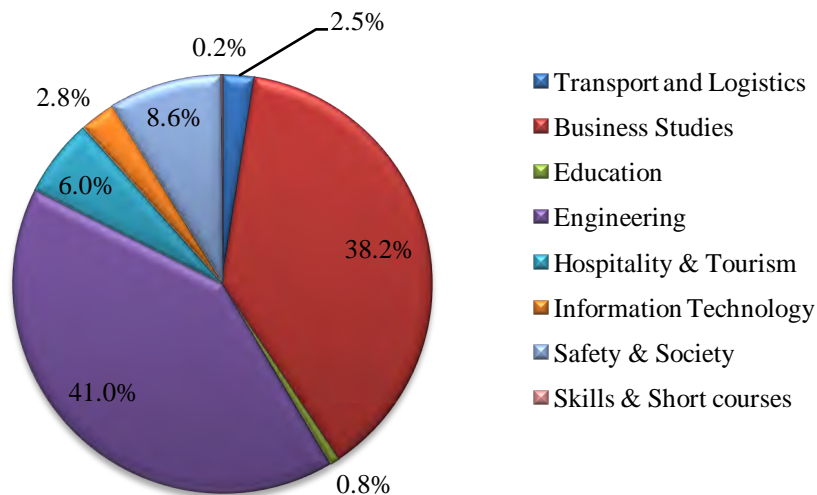


Figure 4.4: Student distribution by FET College departments

Figure 4.4 depicts the departments (or study disciplines) that the participants were enrolled in. Of the 649 valid responses, the majority of the students were from Engineering (41%). Business Studies had the second highest percentage of participating students with 38.2 %. Only one respondent was doing Skills and Short courses, with 5 students coming from the Education department.

4.4 Findings of Specific Objectives

This next section describes the findings related to the specific objectives that this research sought to achieve (see Table 3.1 of the previous chapter). Each of the objectives is presented with a heading and may, in some instances, contain subsections that aid to fulfil them. Since Likert scales were used predominantly in this section, modes and medians were used to measure central tendency. Where relevant, objectives begin with a table outlining the Likert scoring system used (as scores were reversed in some instances).

4.4.1 Students' General Perception of Entrepreneurship

The theoretical framework identifies perception as one of the antecedents of behaviour. Therefore, a positive perception of entrepreneurship increases the likelihood of its realisation due to its influence on behaviour. Consequently, this section aimed to gain a general census of what students perceived entrepreneurship to be (refer to D12 – D17 of Appendix 1).

This construct consisted of six statements on entrepreneurship. Statements were divided into two groups. The first group consisted of the first three statements and described what entrepreneurship “ought to be”. The second group also contained three statements, but these described what entrepreneurship “ought not to be”. Hence, favourable responses for the first group were “strongly agree” and “agree”, while the converse held true for the second group of statements. Table 4.6 represents a summary of student thoughts of what entrepreneurship entailed. Each of these statements is discussed in greater detail in the figures that follow. Additionally, a discussion around response differences of gender and age to these statements is also presented. The Likert scores for entrepreneurship statements D12 – D17 are presented in Table 4.5.

Table 4.5: Likert scoring for entrepreneurship statements

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
12. Entrepreneurship is the process of discovering new ways of combining resources to deliver added value	5	4	3	2	1
13. Entrepreneurship can be used to help grow the economy	5	4	3	2	1
14. Entrepreneurship involves taking risks	5	4	3	2	1
15. Entrepreneurship is the process of trading shares on the JSE	1	2	3	4	5
16. Entrepreneurship is for rich people only	1	2	3	4	5
17. Entrepreneurship is another name for politics	1	2	3	4	5

Table 4.6: Summary of student perceptions of what entrepreneurship entails

Statement	N	Missing	Median Response	Mode
12. Entrepreneurship is the process of discovering new ways of combining resources to deliver added value	565	105	4	4
13. Entrepreneurship can be used to help grow the economy	625	45	5	5
14. Entrepreneurship involves taking risks	585	85	4	4
15. Entrepreneurship is the process of trading shares on the JSE	563	107	3	3
16. Entrepreneurship is for rich people only	590	80	4	5
17. Entrepreneurship is another name for politics	594	76	4	5

“Entrepreneurship can be used to help grow the economy” was the most frequently answered question, with only 45 students not responding to it. The least responded to

statements were “Entrepreneurship is the process of trading shares on the JSE” and “Entrepreneurship is the process of discovering new ways of combining resources to deliver added value”, with 107 and 105 omissions respectively. Responses to each of the above statements are discussed in greater detail in the figures that follow.

Since a Likert scale was used to gauge responses, literature dictates that the data be treated as ordinal. This necessarily means that “medians” and “modes” are used as measures of central tendency. The median refers to the positioning of the middle-most response(s) after all the responses have been ranked in increasing order. The median, therefore, is that point where 50% of the responses either fell above or below the middle-most response. The mode, on the other hand, refers to the most frequently occurring response(s). These are easily visualised in the upcoming bar charts.

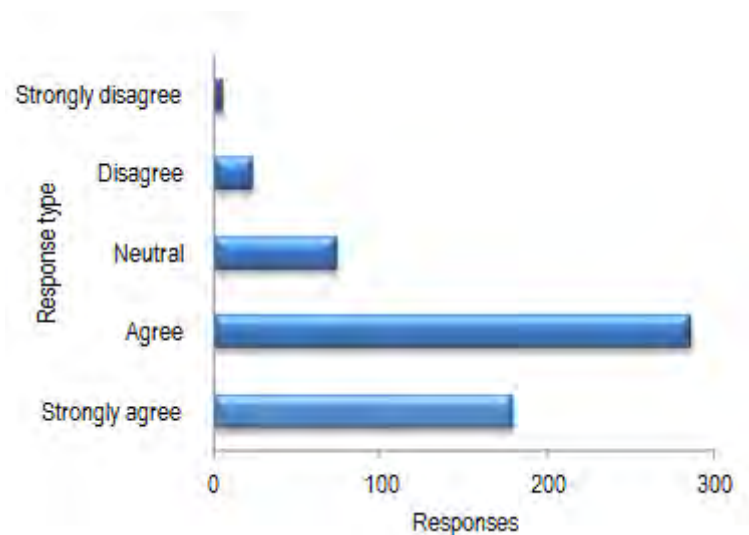


Figure 4.5: Responses to the statement “Entrepreneurship is the process of discovering new ways of combining resources to deliver added value”

With the median response being “agree” for this statement, the implication is that 50% and above of the 565 students that responded either agreed or strongly agreed with it. As shown in the above figure, slightly over 50% of the students agreed and almost 32% strongly agreed with this statement. Taken jointly, this represents 82.1 % of students responding positively to this statement. Slightly less than 13% chose to stay neutral while the remaining 5% responded negatively.

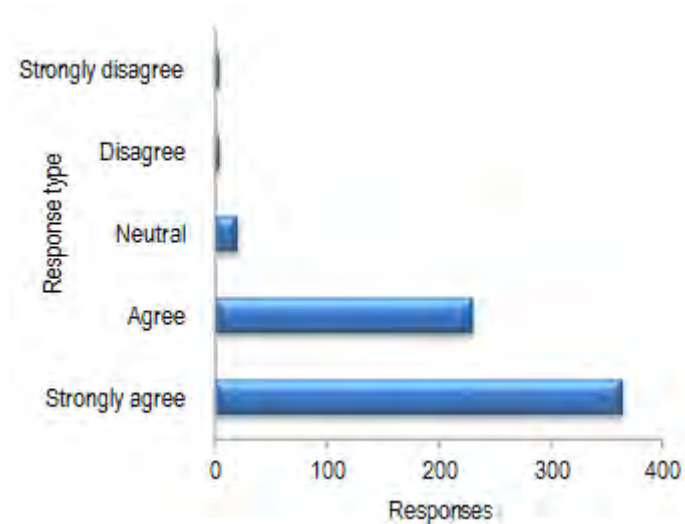


Figure 4.6: Responses to the statement “Entrepreneurship can be used to grow the economy”

As seen in Figure 4.6, more than 95% of the students agreed with this statement. Almost 59% of the respondents strongly agreed that entrepreneurship could be used to grow the economy. Of the statements in its group, this statement was both the most responded to (625 valid responses) and the most strongly agreed to statement. The remaining 4.4% were either neutral (3.2%), disagreed (0.6 %) or strongly disagreed (0.6%).

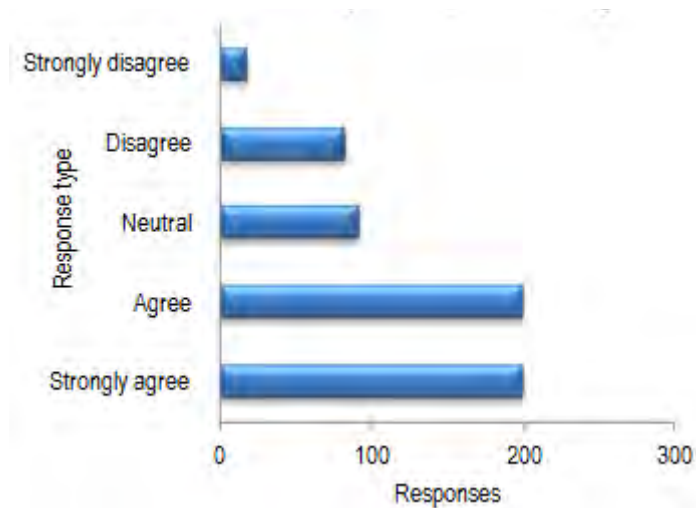


Figure 4.7: Responses to the statement “Entrepreneurship involves taking risks”

As depicted by Figure 4.7, the most frequently selected response to this statement was split equally between “strongly agree” and “agree”. Each of these had 33.9% of the respondents selecting it, making a combined total of 67.8% agreeing that entrepreneurship involved

risk-taking. Slightly less than 17% of the student respondents felt that entrepreneurship did not involve taking risk. The remaining 15.6% opted to remain neutral.

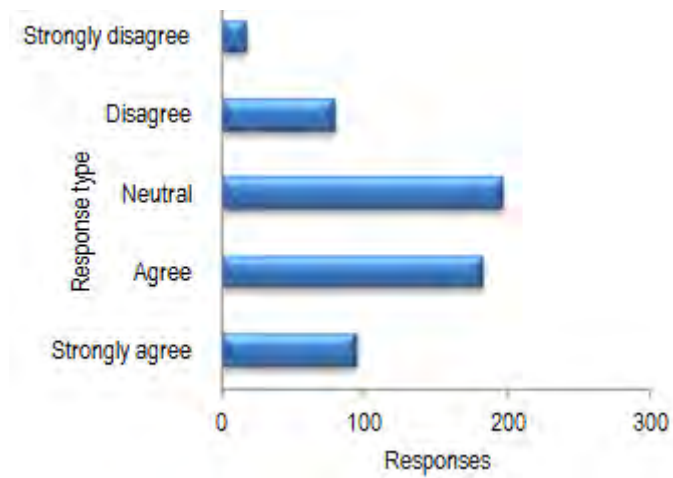


Figure 4.8: Responses to the statement “Entrepreneurship is the process of trading shares on the JSE”

Of the six statements used in this composite this statement was the most poorly responded to, with 107 students opting not to commit themselves (Figure 4.8). In addition, “neutral” was the most frequently selected response. Approximately 16 % of the students responded positively to this statement, either disagreeing or strongly disagreeing to it, while 48.7% agreed with this statement. Consequently, this was the only statement to receive an overall negative response. This suggests that students generally thought that share trading was part of entrepreneurship. Possibly the most honest answer came from students who opted to remain neutral. This indicates that the highest percentage of students (34.6%) honestly had no idea of whether share trading was entrepreneurial or not. The low response rate, when compared to response rate of other statements, might also suggest that students did not know what the JSE was.

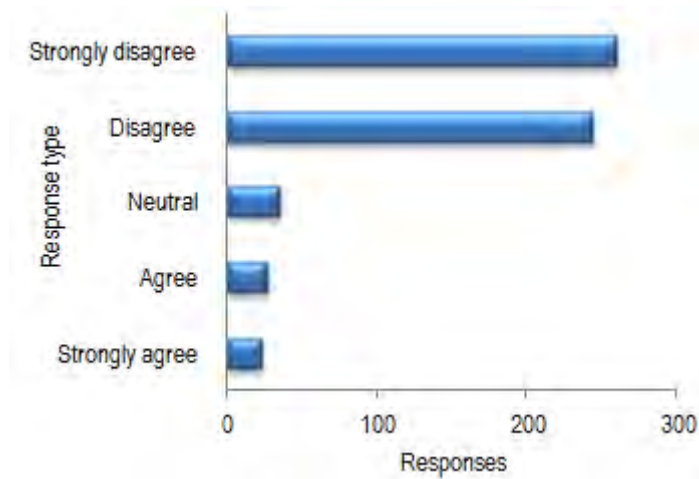


Figure 4.9: Responses to the statement “Entrepreneurship is for rich people only”

Based on Figure 4.9, 504 (85.5%) students that responded to this statement disagreed with it. A little over 44% strongly disagreed and 41.4% disagreed that entrepreneurship was for rich people only. This makes this statement the second most favourably responded to statement.

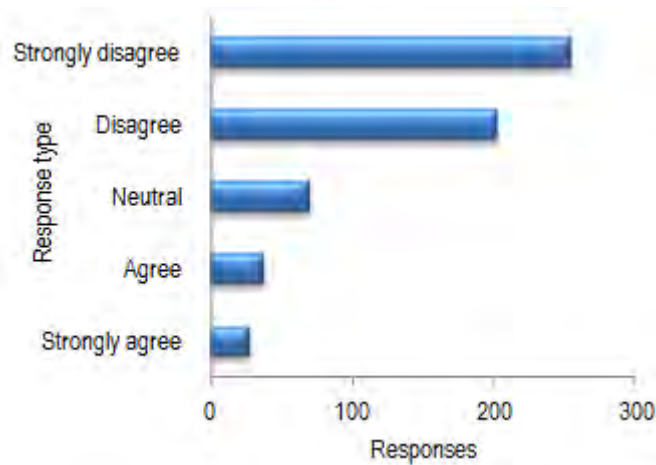


Figure 4.10: Responses to the statement “Entrepreneurship is another name for politics”

As evidenced by Figure 4.10, this statement was also answered favourably. The majority of the students (77.1%) disagreed that entrepreneurship was synonymous to politics. Of these 55.6% strongly disagreed with this statement. Slightly more than 11% thought that entrepreneurship and politics were the same. Only 11.8% of participating students chose to remain neutral.

4.4.1.1 Composite Scores of Students' Perception of Entrepreneurship

In order to gain an overall impression of individual student perceptions of what entrepreneurship entailed, the Likert scores were re-adjusted to give the frequency distribution tabulated in Table 4.7. This was achieved by assigning a new numbering system to the existing Likert scale scores shown in Table 4.5. In other words, the 1 to 5 scoring system that was used in the Likert scale to represent response types were adjusted from -2 to 2 respectively. For example, if a student originally scored 5 for a statement, this was adjusted to a score of 2. Similarly, if the student scored 1 initially, it was adjusted to -2. The logic for the adjustment was to facilitate summing up and ranking of scores around zero. This made it easier to divide responses into “positive” (i.e. greater than zero) and “negative” (i.e. less than zero) perception of entrepreneurship.

The adjusted scores for all six statements were then summed per student. Thereafter, these scores were ranked and divided into three categories using frequency distributions. These indicated overall negative, neutral and positive responses respectively. These results are presented in the following table.

Table 4.7: Frequency distribution of sum of individual student thoughts about entrepreneurship

Category	Count	%
Overall Negative	22	3.3
Overall Neutral	55	8.2
Overall Positive	593	88.5
Sum	670	100

As seen in the above table, 88.5% of participating students had a positive perception of entrepreneurship overall. Only 3.3% were limited in their understanding of it, while the scores of the remaining 55 (8.2%) students summed up to zero. These findings indicate that FET College students had a generally positive perception of entrepreneurship. However, having a positive perception of entrepreneurship did not necessarily imply that students' attitudes towards it would be positive. As outlined in the theoretical framework (section 2.5.1), both perceptions and attitudes affect behaviour. Nonetheless, a positive perception of entrepreneurship is a step closer towards positive behaviour.

4.4.1.2 Gender Comparison on Perception of Entrepreneurship

In Table 4.8 below, a comparison was made to assess whether gender had any influence on students' perceptions of entrepreneurship. To test for significant differences between male and female student responses, at the 5% level of significance, the Wilcoxon rank-sum W test and ANOVA tests were used. The table below therefore, contains both the median and the p-values of responses.

Table 4.8: Comparison of male and female responses on perceptions of entrepreneurship

Statement	Median response		
	Male	Female	p-value†
12. Entrepreneurship is the process of discovering new ways of combining resources to deliver added value (N=565):	4	4	0.70
13. Entrepreneurship can be used to help grow the economy (N=625):	5	5	0.53
14. Entrepreneurship involves taking risks (N=585):	4	4	0.002
15. Entrepreneurship is the process of trading shares on the JSE (N=563):	3	2	0.37
16. Entrepreneurship is for rich people only (N=590):	4	4	0.74
17. Entrepreneurship is another name for politics (N=594):	4	4	0.18

† Wilcoxon rank-sum W test (2 tailed). Significant if $p \leq 0.05$ [$\alpha = 0.05$]

Based on median responses, no differences are immediately distinguishable between the two genders for 5 of the 6 statements. It is only in statement 15 that a difference is visible. Here 50% or more females agreed that entrepreneurship was about share trading on the JSE. Male students, on the other hand, opted to remain neutral. This finding could suggest that female students were more daring (or less risk-averse) than their male counterparts when it came to committing themselves to uncertainty. In other words, female students were more confident in themselves in the face of uncertainty. It is also plausible to deduce

that male students were more self-aware of what they did not know, when compared to female students.

The Wilcoxon rank-sum W test was then used to test for significance between responses. In this test the null hypothesis is rejected if the p -value is less than 0.05 (i.e. $p < 0.05$) resulting in the alternative hypothesis being accepted. The hypothesis test for each of the above statements (represented by “X” below) is:

H₀: The distribution of responses to the statement “X” is the same across genders

H₁: The distribution of responses to the statement “X” is not the same across genders

As tabulated in Table 4.8, no statistically significant differences were observed between male and female students’ responses for 5 of the 6 statements at the 5% level of significance. The only statement that showed a significant difference in median responses between the two genders was statement 14, entrepreneurship involving risk taking ($p = 0.002$). Hence, for statements 12, 13, 15, 16 and 17 we cannot reject the null hypotheses at the 5% level of significance and conclude that there was no gender-specific statistically significant difference observed.

However, for statement 14, we reject the null hypothesis at the 5% level of significance and conclude that there is a statistically significant difference between male and female responses to the statement that “entrepreneurship involves taking risk”. It can therefore be concluded that entrepreneurship involves “taking risk” is the only statement in which median responses varied across genders at the 5% level of significance.

A further analysis was also performed to test whether there were any differences in perceptions between genders when the entrepreneurship statements were divided into their two groups, namely positively scored and negatively scored groups. This was achieved by finding the mean difference between male and female responses and performing an ANOVA on these. The results are shown in Table 4.9.

Table 4.9: ANOVA for mean differences of perceptions of entrepreneurship by gender

Statement Grouping	Effect	Estimate	Standard Error	t Value	Pr > t
Positively Scored Statements (D12 - D14)	Female	-0.86	0.2512	-3.42	0.0007
	Male	0	.	.	.
Negatively Scored Statements (D15 - D17)	Female	0.09145	0.2337	0.39	0.6957
	Male	0	.	.	.

In Table 4.9, “estimate” refers to the difference between male and female students’ mean scores on perceptions of entrepreneurship. The “0” for male estimate indicates that male mean scores were used as the reference group for the analysis. Interpretation of the above shows that female students had a lower general perception (or understanding) of statements that described entrepreneurship than male students (-0.86). Statistically, this difference is highly significant ($p = 0.0007$). This implies that male students had a much more positive perception (or greater understanding) of entrepreneurship than females. This contrasts with Brijlal’s study (2011) in which he found no significant difference between male and female students’ perceptions of entrepreneurship. The ANOVA, however, did not detect any statistically important difference in gender responses on statements that described what entrepreneurship was not.

4.4.1.3 Age Comparison on Perceptions of Entrepreneurship

In this section, a similar exercise was performed on the data as above. However, age was used to test for differences among responses to the entrepreneurship statements. In addition, the Kruskal – Wallis test, instead of the Wilcoxon rank-sum W test, was used to test for significance. This is because the former test caters for detecting differences between 2 or more groups, whereas the latter does not (Coakes and Ong, 2011). Since age has been separated into 3 groups (see Table 4.10), this makes the Kruskal-Wallis test the appropriate one to use. Much like the Wilcoxon rank-sum W test, the null hypothesis is rejected at p -values < 0.05 . The results for median responses and p -values are presented in Table 4.10.

Table 4.10: Comparison of student perceptions of entrepreneurship based on age

Statement	Median response			
	≤19	20-24	≥25	p-value
12. Entrepreneurship is the process of discovering new ways of combining resources to deliver added value (N=565):	4	4	4	0.56
13. Entrepreneurship can be used to help grow the economy (N=625):	5	5	5	0.68
14. Entrepreneurship involves taking risks (N=585):	4	4	4	0.25
15. Entrepreneurship is the process of trading shares on the JSE (N=563):	3	3	2	0.35
16. Entrepreneurship is for rich people only (N=590):	5	4	4	0.10
17. Entrepreneurship is another name for politics (N=594):	4	4	4	0.48

Similar to Table 4.8, no differences were immediately distinguishable between the age categories for 5 of the 6 statements. Once again, a difference is detected in statement 15. Here students that were 25 years or older agreed that entrepreneurship was about trading shares on the JSE. Students that were 19 years and younger felt more strongly than the other age categories that entrepreneurship was not solely for rich people.

The Kruskal-Wallis test was then used to test for significance between the responses of the three age categories. In this test the null hypothesis is rejected if the p -value is less than 0.05 (i.e. $p < 0.05$) resulting in the alternative hypothesis being accepted. The hypothesis test for each of the above statements (represented by “X” below) is:

H_0 : The responses to the statement “X” are similar among the age groups

H_1 : There is a difference in at least 1 of the age groups’ responses to the statement “X”

As seen in Table 4.10, no statistically significant differences were observed between the 3 age categories depicted above. We therefore cannot reject the null hypotheses at the 5% level of significance and conclude that, statistically, responses did not vary significantly

across age categories with regards to their perception of entrepreneurship at the 5% significance level. The ANOVA of the means of students' perceptions of entrepreneurship also did not detect any significant difference between the three age groups (results not shown)

4.4.2 Students' Attitudes Towards Entrepreneurship

As illustrated in Figure 2.2 of the theoretical framework, attitudes form one of the building blocks that lead to behaviour (Gibson *et al.*, 2011). Attitudes have also been found to be direct predictors of entrepreneurial intention (doPaço *et al.*, 2011, Fini *et al.*, 2009, Moriano *et al.*, 2012). This section aimed to gain a better understanding of students' attitudes towards entrepreneurship and their specific desirabilities. Each of these will be discussed in what follows. The Likert scores for statements D18a – D18g are presented in Table 4.11.

Table 4.11: Likert scoring of statements on students attitudes towards entrepreneurship

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
18a. Being an entrepreneur would have more advantages than disadvantages to me.	5	4	3	2	1
18b. A career as an entrepreneur is appealing to me.	5	4	3	2	1
18c. I would start my own business if I had the opportunity and money.	5	4	3	2	1
18d. I think that I would be very happy as an entrepreneur.	5	4	3	2	1
18e. I would ideally choose to be an entrepreneur over any other career option.	5	4	3	2	1
18f. I think that entrepreneurship is important.	1	2	3	4	5

4.4.2.1 Personal Attitudes

To begin with, students’ personal attitudes towards entrepreneurship were assessed. Table 4.12 summarises student responses to seven statements that were used to draw some of this information.

Table 4.12: Personal attitudes of FET College students towards entrepreneurship

Statement	N	Missing	Median response	Mode
18a. Being an entrepreneur would have more advantages than disadvantages to me.	636	34	4	4
18b. A career as an entrepreneur is appealing to me.	612	58	4	4
18c. I would start my own business if I had the opportunity and money.	646	24	5	5
18d. I think that I would be very happy as an entrepreneur.	631	39	4	4
18e. I would ideally choose to be an entrepreneur over any other career option.	618	52	4	4
18f. I think that entrepreneurship is important.	620	50	4	4
18g. Entrepreneurship is not important to me.	613	57	4	4

As seen in Table 4.12, the overall valid responses to this group of statements were quite favourable. Based on the median responses for statements 18a, 18b, 18d-18f, it emerges that at least 50% of the students either “agreed” or “strongly agreed” to these statements. As per the mode as a measure of frequencies, students most often agreed with these statements. Of particular interest is students’ opinion of whether they considered entrepreneurship to be a viable career. Based on 18e, it can be deduced that at least 50% of the respondents considered it to be a viable career choice. This supports findings by Viviers *et al.* (2011) where students demonstrated a keen interest in entrepreneurship as a career choice.

Statement 18c had at least 50% of the students strongly agreeing to it. The responses to this statement differ from the previously mentioned ones in that it is with certainty that 50% or

more respondents felt very strongly about it. This says that given the opportunity and resources, an overwhelming number of students would try to start their own businesses. The implication, therefore, is that finance and resources are significant barriers to students becoming entrepreneurial. This supports the findings of Viviers *et al.* (2011) who observed that South African university students perceived access to capital as a major stumbling block in establishing a business.

Statement 18g was the only reverse scored statement in this group. In this instance, at least 50% of the students responded favourably (i.e. either “disagreed” or “strongly disagreed”) with it. In the following paragraphs a more detailed account of each statement is given.

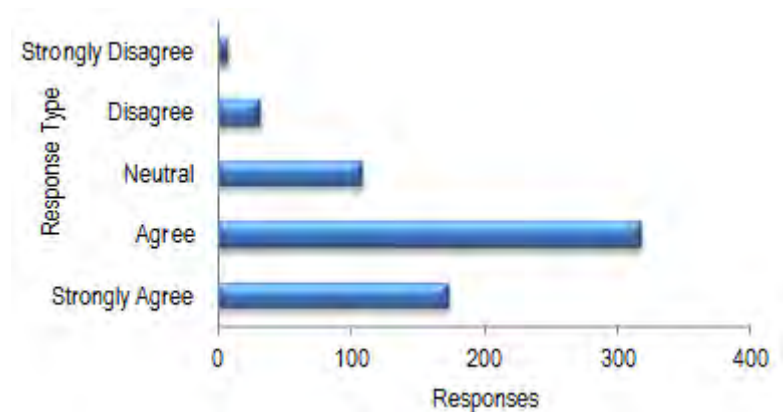


Figure 4.11: Responses to the statement “Being an entrepreneur would have more advantages than disadvantages to me.”

Of the 636 students that responded to this statement, 27.2% “strongly agreed” and 49.8% “agreed”, as illustrated by Figure 4.11. This indicates that 77% of them felt that being an entrepreneur would be more advantageous to them as opposed to being disadvantageous. The most frequently selected response was “agree” with almost 50% of the respondents choosing this option. Seventeen percent of the students chose to remain neutral, with the remaining 6% indicating that being an entrepreneur would not have a net advantage for them.

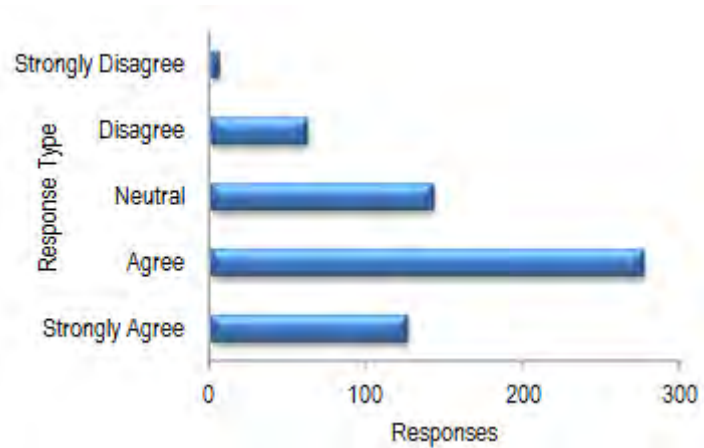


Figure 4.12: Responses to the statement “A career as an entrepreneur is appealing to me.”

As illustrated in Figure 4.12, approximately 66% of the 612 students that responded to this statement did so favourably. Slightly more than 20% of students strongly agreed that a career as an entrepreneur appealed to them, while 45.3% agreed with this statement. In contrast, 67 students responded negatively with this statement implying that they did not consider a career as an entrepreneur appealing to them. The remaining 23.2% of respondents opted to remain neutral.

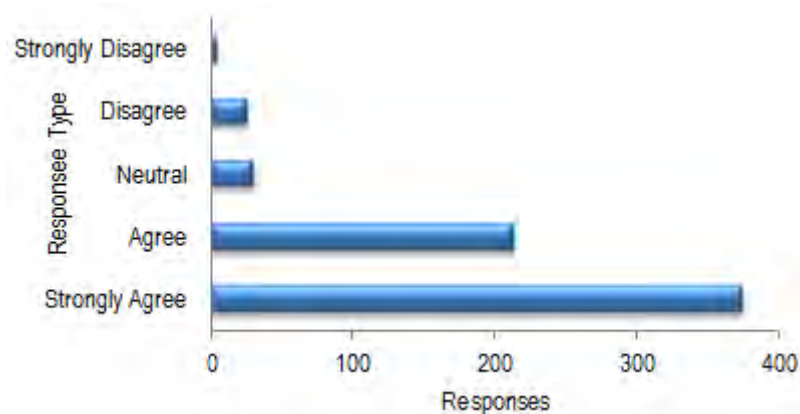


Figure 4.13: Responses to the statement “I would start my own business if I had the opportunity and money.”

This statement received the most responses of all the statements in this group, with only 24 of the 670 respondents not responding at all. In addition, this statement had the least quantity of students opting to remain neutral (4.6%) as seen in Figure 4.13. Slightly over 90% of students responded favourably to this statement with 57.9% strongly agreeing and 33% agreeing that they would start their own business if they had the opportunity and the

money. The remaining 4.5% of students either disagreed (3.9%) or strongly disagreed (0.6%) with this statement. This suggests that of the respondents, 4.5% had no interest in entrepreneurship, despite the availability of both resources and the opportunity.

These findings give a clear indication that students are passionate about being entrepreneurial. The main hindrances to them pursuing this are capital and opportunities. Viviers *et al* (2011) also found that youth perceived capital to be a limiting factor in realising their entrepreneurial aspirations. This perhaps highlights the need for government to take active steps towards raising awareness among young people of the resources made available to them to pursue their entrepreneurial goals. Assuming that government had taken active measures to raise awareness among young people, a further challenge would be to educate young people on how to access these funds. It is therefore imperative that young people are given the opportunity to learn more about, and be exposed to, entrepreneurship. Entrepreneurship education can thus prove to be a powerful vehicle through which young people can be empowered to pursue venture creation.

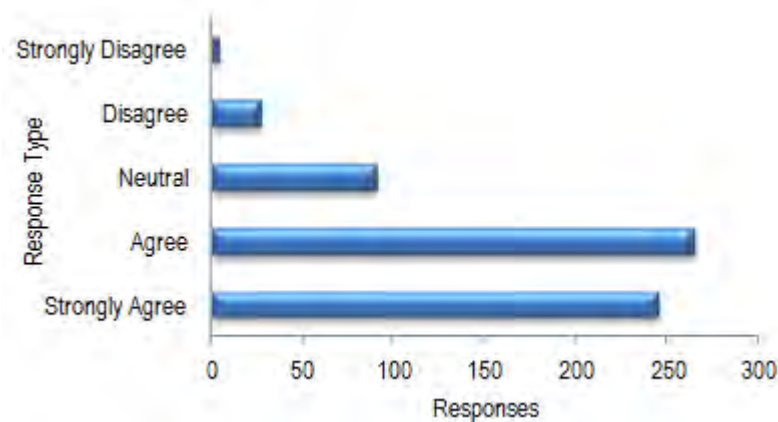


Figure 4.14: Responses to the statement “I think that I would be very happy as an entrepreneur.”

Of the 631 valid responses, approximately 80.8% either strongly agreed or agreed that they would be very happy being entrepreneurs (see Figure 4.14). Slightly less than 5% either disagreed or strongly disagreed with this statement. The remaining 14.3% of students remained neutral on the subject.

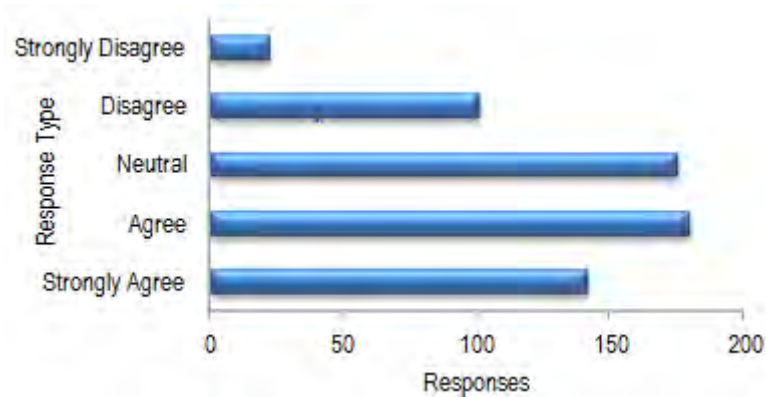


Figure 4.15: Responses to the statement “I would ideally choose to be an entrepreneur over any other career option.”

Based on Figure 4.15, this statement appears to have been the most challenging for the students. Approximately 52% of students responded positively to this statement. “Agree” and “neutral” responses were the most frequently selected, with the the two differing by only 4 responses. This may suggest that many students had either never seriously considered entrepreneurship as a career option, or that this was the first time that they had to really give the subject some thought.

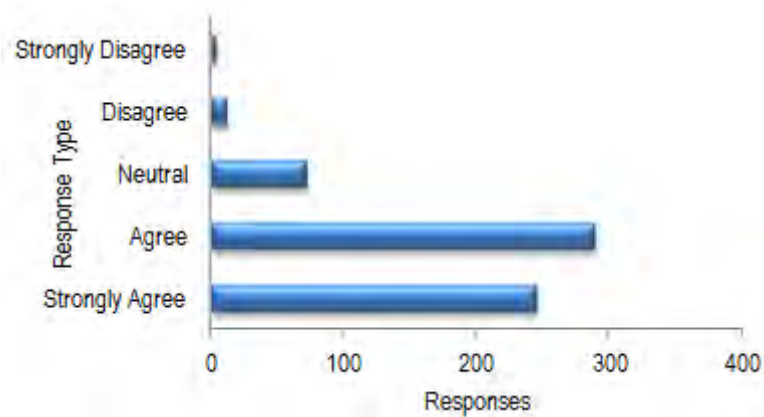


Figure 4.16: Responses to the statement “I think that entrepreneurship is important.”

As seen in Figure 4.16, 86% of the students either agreed (46.6%) or strongly agreed (39.4%) that entrepreneurship was important to them. A little less than 2.5% either disagreed or strongly disagreed with this statement.

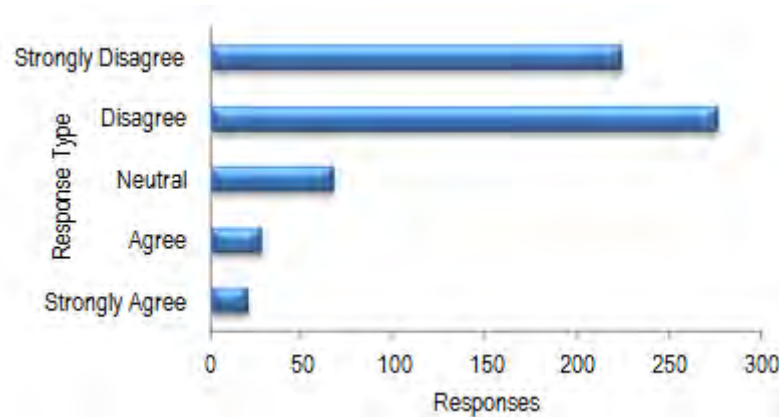


Figure 4.17: Responses to the statement “Entrepreneurship is not important to me”

As evidenced by Figure 4.17, nearly 8% of the students indicated that entrepreneurship was not important to them at all. In contrast, 81.5% indicated that entrepreneurship was important to them. When compared to the previous statement, slightly less responded favourably here. This may indicate that although many students thought that entrepreneurship was important, not all of them weighted it the same when it became a personal choice. The remaining 10.8% of the students opted to remain neutral.

4.4.2.2 Composite Scores for Student Attitudes Towards Entrepreneurship

In order to gain an overall impression of individual student attitudes towards entrepreneurship, the Likert scores were re-adjusted to give the frequency distribution illustrated in Figure 4.18. This was achieved by assigning a new numbering system to the existing Likert scale scores shown in Table 4.11. Basically, the same procedure was followed as described for composite scores for student perceptions of entrepreneurship discussed earlier (see Section 4.4.1.1).

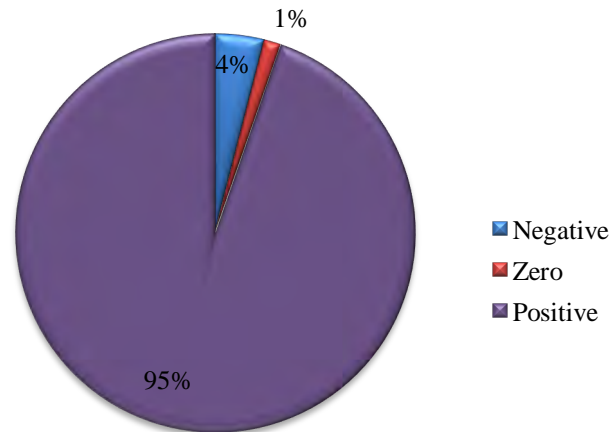


Figure 4.18: Composite scores of FET students' attitudes towards entrepreneurship

As evidenced by Figure 4.18, 95% of the students had a positive attitude towards entrepreneurship, with only 4% of the 660 respondents showing no interest at all. As discussed in the theoretical framework, attitudes form one of the antecedents for entrepreneurial intention (and consequently, behaviour). The above finding therefore indicates that, based on their personal attitudes, the majority of the students are primed for exhibiting entrepreneurial behaviour. Their attitudes indicate a strong desire to start their own businesses someday.

4.4.2.3 Specific Desirabilities

Specific desirabilities were assessed by asking students what owning their own business would mean to them. Desirability can be thought of as the degree to which an individual finds entrepreneurship attractive (Shapero and Sokol, 1982). This consisted of 6 moods or feelings that the students had to rate. These responses are tabulated Table 4.14. The Likert scores for statements D19a – D19f are presented in Table 4.13.

Table 4.13: Likert scoring of statements on students attitudes towards entrepreneurship

Meaning of having own business	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
19a.Freedom	5	4	3	2	1
19b.Personal satisfaction	5	4	3	2	1
19c.Financial rewards	5	4	3	2	1
19d.Improved quality of life	5	4	3	2	1
19e.Status	5	4	3	2	1
19f.Power	5	4	3	2	1

Table 4.14: FET College students’ responses on the meaning of owning their own business

Desirability	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Median response
19a.Freedom (N=625):	245 (39.2%)	219 (35.0%)	93 (14.9%)	57 (9.1%)	11 (1.8%)	4
19b.Personal satisfaction (N=614):	222 (36.2%)	280 (45.6%)	74 (12.1%)	30 (4.9%)	8 (1.3%)	4
19c.Financial rewards (N=612):	236 (38.6%)	263 (43.0%)	93 (15.2%)	17 (2.8%)	3 (0.5%)	4
19d.Improved quality of life (N=628):	354 (56.4%)	227 (36.1%)	38 (6.1%)	7 (1.1%)	2 (0.3%)	5
19e.Status (N=620):	185 (29.8%)	214 (34.5%)	147 (23.7%)	63 (10.2%)	11 (1.8%)	4
19f.Power (N=626)	232 (37.1%)	215 (34.3%)	114 (18.2%)	44 (7.0%)	21 (3.4%)	4

Based on student responses, the overall trend was to either “agree” or to “strongly agree” with the statements in Table 4.14. “Improved quality of life” meant the most to students with 92.5% of the respondents either agreeing or strongly agreeing with this statement. “Personal satisfaction” and “Financial rewards” ranked second (81.8%) and third (81.6%) respectively. “Status” had the least significant meaning to students (with 64.3% either agreeing or strongly agreeing). “Freedom” and “Power” ranked fourth and fifth respectively, in their meaning to students.

4.4.3 Students' Belief in Their Abilities to Execute Desired Outcomes

This section focuses on students' beliefs in their abilities to carry out actions leading to fulfilling goals, as measured by self-efficacy. According to the Theory of Planned Behaviour, self-efficacy (or perceived behavioural control) is one of the antecedents of intention (Ajzen, 1991). Based on the theoretical framework, self-efficacy forms the final building block preceding intention. The self-efficacy scale tests four different areas, namely students' entrepreneurial intention (D20a-20h of Appendix 1), risk aversion (D20i – 20k of Appendix 1), innovativeness (D20l – 20o of Appendix 1); and proactivity (D20p - 20r of Appendix 1). Risk aversion, innovativeness and proactivity when grouped together form a widely accepted construct termed “entrepreneurial orientation” (Lumpkin and Dess, 1996; Rauch, Wiklund, Lumpkin & Frese 2009). Entrepreneurial orientation (OE) encompasses resilience, tackling difficult tasks, belief in achieving difficult outcomes, succeeding, overcoming challenges and confidence. Each of risk aversion, innovativeness and proactivity will be discussed in sections 4.4.3.1 through to 4.4.3.3 respectively. Entrepreneurial intention will be discussed in section 4.4.3.4 as it forms the final step in the theoretical framework leading to entrepreneurial behaviour. It is also discussed in greater depth than the EO elements.

4.4.3.1 Risk Aversion

Risk aversion measures students' propensity to take chances. This construct was measured by asking students to rate three statements concerning themselves (see Table 4.15).

Table 4.15: Self-efficacy as a measure of student risk taking propensity

Risk propensity Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Med. Score
20i. I like to take bold action, including venturing into the unknown	101 (16.3%)	253 (40.7%)	205 (33.0%)	56 (9.0%)	6 (1.0%)	4
20j. I am prepared to invest a lot of time and / or money on something that might yield a high return	267 (42.3%)	255 (40.4%)	85 (13.5%)	24 (3.8%)	0	4
20k. I tend to act boldly in situations that involve risk	100 (16.0%)	250 (40.0%)	177 (28.3%)	85 (13.6%)	13 (2.1%)	4

Table 4.15 shows that students are relatively risk averse. This means that students generally did not like taking bold action in situations that involved risk taking or in situations that required venturing into the unknown. However, over 80% were prepared to invest time and / or money on something that might yield a high return. Students were also more receptive to risk once the concept was rephrased, as in statement 20j. This might suggest that students are prepared to take risk, but are afraid of words like “risk” and “the unknown”.

4.4.3.2 Innovativeness

This section assesses students’ beliefs in their ability to problem solve. This construct consists of 4 statements as shown in Table 4.16.

Table 4.16: Self-efficacy as a measure of student innovativeness

Innovativeness Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Med. Score
20l. I often like to try new activities that are different to the norm	132 (21.1%)	296 (47.4%)	146 (23.4%)	46 (7.4%)	5 (0.8%)	4
20m. In general, I prefer to be involved in “projects” that are unique	195 (30.8%)	299 (47.2%)	108 (17.0%)	27 (4.3%)	5 (0.8%)	4
20n. I prefer my own unique approach when learning something new	236 (37.1%)	287 (45.1%)	79 (12.4%)	28 (4.4%)	6 (0.9%)	4
20o. I prefer experimenting and trying new approaches to problem solving	202 (31.7%)	305 (47.9%)	106 (16.6%)	22 (3.5%)	2 (0.3%)	4

As evidenced in Table 4.16, students generally believed that they were innovative. Apart from trying new activities that deviate from the norm, 78% to 82% of students either “strongly agreed” or “agreed” to the remaining statements. On average, more than 75% of the students responded positively to these statements, that is, either “strongly agreed” or “agreed” to them.

4.4.3.3 Proactivity

Proactivity refers to students' beliefs in their abilities to act in anticipation of future events. In this respect it relates to present action with planned future manifestation. Table 4.17 shows the results of students' beliefs in their proactivity.

Table 4.17: Self-efficacy as a measure of proactivity

Proactivity Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Med. Score
20p. I usually act in response to what I expect (or predict)	154 (24.4%)	340 (53.8%)	118 (18.7%)	18 (2.8%)	2 (0.3%)	4
20q. I tend to plan ahead on projects	199 (31.3%)	310 (48.8%)	104 (16.4%)	18 (2.8%)	4 (0.6%)	4
20r. I prefer to take responsibility and get projects started	298 (46.3%)	262 (40.7%)	57 (8.9%)	17 (2.6%)	10 (1.6%)	4

Students responded very positively to this group of statements. Responses ranged from 78.2% to 87% with students either "strongly agreeing" or 'agreeing" to these statements. This indicates that students' believe that they are forward looking as opposed to accepting the dictates of their environment / circumstance.

4.4.3.4 Entrepreneurial Intention

According to Zhao *et al.* (2009) there exist a direct relationship between entrepreneurial intention (IE) and entrepreneurial behaviour. The theoretical framework (based on the theory of planned behaviour) advocates that intentions are influenced by perceptions, attitudes and self-efficacy. Entrepreneurial intentions, in turn, directly affect entrepreneurial behaviour. This makes entrepreneurial intention a crucial (and final) step influencing entrepreneurship actualisation. The table below reflects aspects of the self-efficacy scale that pertain to entrepreneurial intention.

Table 4.18: Self-efficacy as a measure of student entrepreneurial intention

Entrepreneurial Intention Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Med. Score
20a. I will be able to achieve most of the goals that I have set for myself	342 (52.7%)	271 (41.8%)	28 (4.3%)	7 (1.1%)	1 (0.2%)	5
20b. I am confident that I will be successful in facing difficult tasks	285 (44.3%)	308 (47.8%)	42 (6.5%)	8 (1.2%)	1 (0.2%)	4
20c. In general, I think that I can achieve end results that are important to me	265 (41.3%)	325 (50.7%)	42 (6.6%)	8 (1.2%)	1 (0.2%)	4
20d. I believe that I can succeed at any exercise to which I set my mind	298 (46.1%)	296 (45.8%)	45 (7.0%)	6 (0.9%)	1 (0.2%)	4
20e. I will be able to successfully overcome many challenges	259 (40.7%)	318 (50.0%)	52 (8.2%)	7 (1.1%)	0	4
20f. I am confident that I can perform effectively on many different tasks	240 (38.0%)	281 (44.5%)	92 (14.6%)	15 (2.4%)	3 (0.5%)	4
20g. I can do most tasks very well compared to other people	198 (31.0%)	263 (41.2%)	145 (22.7%)	30 (4.7%)	3 (0.5%)	4
20h. I can perform quite well even during tough situations	186 (29.2%)	298 (46.7%)	128 (20.1%)	25 (3.9%)	1 (0.2%)	4

A tabulation of the median scores in Table 4.18 reveals that 50% or more of the students either “agreed” or “strongly agreed” to all of the statements from 20b – 20h. Students’ beliefs in their ability to achieve most of the goals that they set for themselves (20a) had 50% or more students strongly agreeing with this statement.

A closer look at Table 4.18 shows that well over 90% of respondents either “strongly agreed” or “agreed” with the first 5 statements (20a – 20e). Students’ belief in their ability to achieve most of the goals that they set for themselves (20a) received the most positive response of all 18 statements that comprise this self-efficacy assessment tool. Slightly

more than 80% of students either “strongly agreed” or “agreed” that they were confident that they could perform effectively on many different tasks (20f.)

Students’ beliefs in their ability to perform better than others in most tasks (20g) and beliefs in their ability to perform well under pressure (20h) were the least positively responded to statements, with 72.2% and 75.9% of the respondents either “strongly agreeing” or “agreeing” to these statements respectively.

4.4.3.5 Composite Scores for Entrepreneurial Intention based on Self-efficacy Scale

In order to gain an overall impression of individual student entrepreneurial intention based on self-efficacy scale, the Likert scores were re-adjusted to range between -2 and 2. This gave rise to the frequency distribution tabulated below.

Table 4.19: Frequency distribution of the sum of individual student self-efficacy scores for EI

Response	N	%
Overall Negative	5	0.8
Overall Neutral	6	0.9
Overall Positive	647	98.3
Sum	658	100

Based on Table 4.19, it may be deduced that more than 98% of the respondents had a positive self-efficacy relevant to entrepreneurial intention. However, this section of the self-efficacy scale was not necessarily pitched as a direct measure of self-efficacy. Rather it formed part of students’ beliefs in their abilities to execute desired action. As such, it may be inferred that if students had intentions towards entrepreneurship, 98% of them believed that their actions would lead to its actualisation.

4.4.3.6 Other measures of Entrepreneurial Intention

Due to entrepreneurial intention being such a crucial antecedent of entrepreneurial behaviour, the construct was tested using two additional approaches. The first approach asked students directly about their thoughts of starting a business. The second approach

looked at family entrepreneurial background and the influence that it had on students' entrepreneurial intentions. These approaches are discussed in sections A and B below.

A. Direct Approach

Questions D21 and D22 of Appendix 1 asked students to indicate whether they had given any thought to being entrepreneurial and whether they had given any thought to act on this in the future. Their responses are presented in Table 4.20 and Table 4.21 below.

Table 4.20: Student thoughts on starting their own businesses

	Yes	No	Unsure
21. Have you ever thought about starting your own business in the future? (N=606)	512 (84.4%)	57 (9.4%)	37 (6.1%)

As can be seen in Table 4.20 the majority of students (84.4%) indicated that they had given thought to starting their own businesses. Fifty seven students indicated that they had never given the topic any thought before. Approximately 6% were not sure whether they had thought about starting their own businesses before.

Having assessed whether students had given thought to starting a business, the next question aimed to gauge whether any of these students believed that they would start a business in the future. The results to this question are shown in Table 4.21.

Table 4.21: Student intentions towards starting a business in the future

	Yes	No	Unsure
22. Do you think that you will start your own business at some point in your life? (N=601)	481 (80.0%)	27 (4.5%)	93 (15.5%)

As evidenced in the above table, 80% of the students indicated that they thought that they would start a business in the future. Four and a half percent responded that they had no intentions of doing so, while the remaining 15.5% were uncertain. This

supports findings by Viviers, Solomon and Venter (2011) in which high levels of entrepreneurial intent among youth were detected.

In the table below students' entrepreneurial intentions were categorised by gender to see if female students had higher intentions to start a business than male students.

Table 4.22: Entrepreneurial intention of FET College students based on Gender

Response	Male	Female
Yes	202 (80.8%)	278 (79.4%)
No	14 (5.6%)	13 (3.7%)
Unsure	34 (13.6%)	59 (16.9%)
Sum	250 (100%)	350 (100%)

It appears from the above table shows that male students are slightly more inclined to start businesses in the future than their female counterparts. These findings are in keeping with the GEM's 2012 findings in which South African male youth were slightly more entrepreneurially inclined than females (Turton and Herrington, 2012). However, the difference is so slight (1.4%) that no meaningful conclusion can be drawn regarding which gender was more intent on becoming entrepreneurial. This supports the findings of Franco *et al* (2010) in which they observed that gender had no influence on students' intentions of becoming entrepreneurs.

B. Entrepreneurial Background Approach

The third approach involved investigating whether students' entrepreneurial background had any impact on their entrepreneurial intention(s). Of particular interest was parent entrepreneurial background. These are discussed in the following paragraphs.

The first step in getting this information was to distinguish which students had self-employed parents. This was achieved by asking questions about their entrepreneurial background (see C9a – C9e of Appendix 1). Question 9a asked specifically whether students' parents were self-employed. The responses to this question are shown in

Table 4.24. The discussion that follows focuses on students who indicated that they were aware that their parents were self-employed.

Table 4.23: Responses to whether parents were self-employed

Response	N (%)
Yes	217 (35.3%)
No	385 (62.7%)
Unsure	12 (1.95%)
Total	614 (100)

As can be seen in Table 4.23, a total of 614 students responded to this question. Of these, 35.3% indicated that they were aware that their parents were self-employed. In comparison, approximately 2% of the respondents were unaware of their parents' entrepreneurial background.

Students whose parents were self-employed were then asked whether their parents' entrepreneurial background had any bearing on their future (or career) aspirations or intentions. Their responses are tabulated below.

Table 4.24: Entrepreneurial intentions of students whose parents were self-employed

	Yes	No
11a. Want to start your own business [N=193]	172 (89.1%)	21 (10.9%)
11b. Take over family business [N=178]	77 (43.3%)	101 (56.7%)
11c. Do something else not business related [N=180]	95 (52.8%)	85 (47.2%)

Of the 193 responses from students whose parents were self-employed, almost 90% indicated that they would like to start their own business (see Table 4.24). Students also steered away from taking over the family business, with 56.7% of the 178 respondents indicating their preference for not taking over the family business. These findings support those of Viviers *et al.* (2011) in which only a small fraction of students were keen to take over family businesses.

The findings of the present research may suggest that students are generally inclined to be entrepreneurial. However, the majority of them preferred starting their own ventures that were either in an industry different to their parents' industry or did not belong to their parents (if in the same industry as parents).

The decision to do something else with their lives, not business related, was not very clear. Almost 53% of the 180 respondents indicated that they would prefer doing something else with their lives that was not business related. These results could imply that some students preferred pursuing other careers. However, since the majority of the respondents indicated earlier in Table 4.24 (question 11a) that they desired to start their own businesses, this could be interpreted as students wanting to pursue business ventures that would be in line with their chosen career paths.

To investigate whether having self-employed parents had any effect on male and female students' intentions of starting their own businesses, responses to statement 11a were grouped by gender as illustrated in Figure 4.19. A "yes" response indicated that having self-employed parents had a positive effect on students wanting to start their own business.

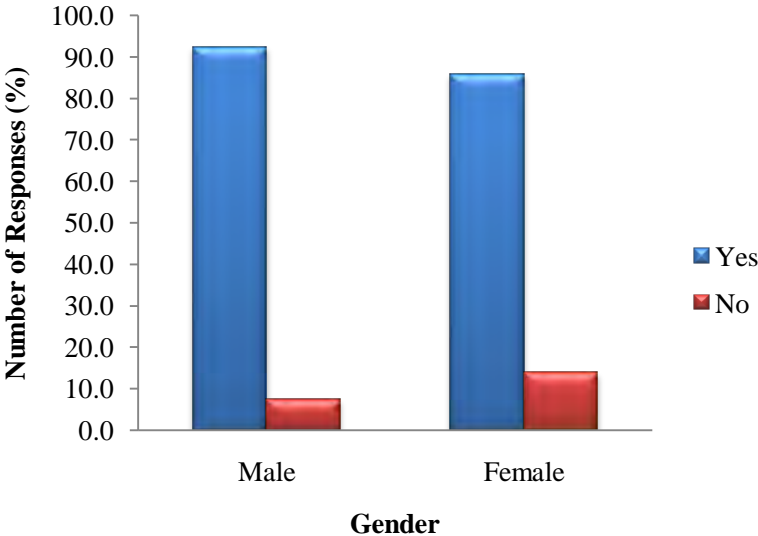


Figure 4.19: Gender comparison of students' entrepreneurial intent based on parent entrepreneurial background

Based on the above figure, parent entrepreneurial background had a more positive effect on male students (92.5%) than female students (86%). The difference, however, is so slight that it is no meaningful conclusion can be drawn from it.

Entrepreneurial Background and thoughts of starting a business in the future

In this section cross-tabulation of students’ entrepreneurial backgrounds (C9a-C9b) and students’ intentions of starting a business in the future (C22) were investigated. The first investigation focuses on parent background. This is followed by family entrepreneurial background.

Table 4.25: Cross tabulation of students whose parents were business owners and the thoughts that these students had on starting a business in the future

Are any of the people that you know (listed below) self-employed?		22. Do you think that you will start your own business at some point in the future			
		Yes	No	Unsure	p-value
9a. Your parents (includes your guardian or any person that legally looks after you)*	Yes [N=197]	161 (81.7%)	12 (6.1%)	24 (12.2%)	0.2238
	No [N=349]	275 (78.8%)	13 (3.7%)	61 (17.5%)	
	Unsure [N=8]	5 (62.5%)	1 (12.5%)	2 (25%)	

*Percentages based on responses from 9a as the base

Of the 197 students whose parents were self-employed, almost 82% indicated that they thought that they would start their own business in the future. Six percent indicated that they had no intention to start a business in the future, while the remaining 12% were unsure whether they would start a business in the future.

Seventy nine percent of the 349 students who did not have self-employed parents indicated that they thought that they would start a business in the future. This percentage is slightly less than that of students with self-employed parents. This suggests that parent entrepreneurial background did not have much bearing on students’ intentions of starting businesses. This supports the findings of Steenekamp *et*

al. (2011) and Viviers *et al.* (2011) in which they observed the same trend among grade 10 learners and university students respectively.

Table 4.26: Cross tabulation of students whose family members were business owners and these students' thoughts on starting a business in the future

Are any of the people that you know (listed below) self-employed?		22. Do you think that you will start your own business at some point in your life?			
		Yes	No	Unsure	p-value
9b. Other family members*	Yes [N=188]	153 (81.4%)	6 (3.2%)	29 (15.4%)	0.4896
	No [N=294]	228 (77.6%)	18 (6.1%)	48 (16.3%)	
	Unsure [N=45]	35 (77.8%)	1 (2.2%)	9 (20%)	

*Percentages based on responses from 9b as the base

Table 4.26 shows that 81% of the students who had at least one self-employed family member, other than their parents, indicated that they thought that they would start their own businesses in the future. It should be noted that this total might include students whose parents were self-employed. Hence no comparison can be drawn between these results and those in Table 4.26. Slightly more than 3% said that they did not think that they would and the remaining 15.4% were unsure.

Of the 294 students that indicated that they had no self-employed family members, 77.6% indicated that they thought that they would start a business in the future and 6.1% indicated that they did not think that they would. The remaining 16.3% were unsure.

More than 77% of the students who were unsure whether any of their family members were self-employed indicated that they thought that they would start a business in the future. One student indicated that they would not start one and the remaining 20% indicated that they were unsure whether they would.

No significant differences were detected between the responses of all three categories with respect to entrepreneurial intention ($p>0.05$). Hence, it can be concluded that, based on these findings, family entrepreneurial background did not show any significant influence on students' entrepreneurial intentions.

4.4.4 Objectives in Relation to Theoretical Framework

The above sections (4.4.1 to 4.4.3) have built on the theoretical framework outlined in Chapter 2 and depicted in Figures 2.2 through to 2.4. These indicated that perceptions, attitudes and self-efficacy (perceived behavioural control) were antecedents of entrepreneurial intention. Entrepreneurial intention, on the other hand, was found to be the direct link leading to (or predicting) actual (or entrepreneurial) behaviour (Ajzen, 1991; Bandura, 1997, Zhao *et al.*, 2005). The present study found that FET College students had positive perceptions of entrepreneurship, positive attitudes towards it and demonstrated high levels of self-efficacy. This, based on the theoretical framework, laid a strong foundation for predicting entrepreneurial intention. Testing for entrepreneurial intention resulted in positive outcomes as evidenced by the high levels of entrepreneurial intention among the students. These findings support the idea that the just mentioned antecedents (i.e. perceptions, attitudes and perceived behavioural control) have a positive influence on intentions. FET College students therefore, demonstrated that they possessed all the necessary building blocks needed for positive entrepreneurial behaviour (i.e. entrepreneurial actualisation).

4.4.5 Students' Awareness of Entrepreneurial Initiatives at Their Institutions

In this section students' awareness of the entrepreneurial initiatives and resources offered (or available) at their college was assessed. Student responses are tabulated in Appendix 2 and discussed below.

As shown in Appendix 2, the median scores show that less than 50% of the students were aware of any entrepreneurial initiatives or programmes offered at their colleges. Fifty percent or more of students indicated that they were either unaware or were unsure of whether the above initiatives were offered at their college. Grouping the above responses into two broad categories, namely the "affirmative" and the "non-affirmative" (with the affirmative containing all "yes" responses and the non-affirmative containing "no" and

“unsure” responses) reveals that of all the initiatives possibly offered by their colleges, less than 50% of the students were aware of any of these.

Students, however, were most aware of New Venture Creation (45.1%) and Entrepreneurship and Business Management (44.5%) as offerings by their colleges. In addition, access to the internet (43.9%) and library resources (41.2%) on entrepreneurship were also cited by students as resources that they were more aware of. It is quite likely that increased awareness of these 4 entrepreneurship-related offerings is a direct consequence of students being exposed to these initiatives by virtue of their academic studies. This contrasts with the findings of a study by Viviers, Solomon and Venter (2011) in which they compared South African university students’ intentions and behaviour towards entrepreneurship with 93 265 international students. Comparing the specific offerings that both this study and theirs had in common, they found that university students were most aware of library and internet resources provided by their institutions (92.7%). This was followed by lectures and other topics relating to entrepreneurship in general (80.8%), business planning (79.5%) and creativity and innovation (66.4%). In comparison to Viviers *et al’s* findings (2011), the respondents in this study were less aware of the entrepreneurship offerings at their institution. In addition, the highest percentage of awareness among FET College students was 45.1%, whereas university students (in the international study) demonstrated more than double this (92.7%).

In response to whether the students had used any of the entrepreneurial offerings at their colleges, 26.2% of the 561 students that responded indicated that they had made use of at least one these offerings (see Table 4.27). The remaining 73.8% indicated that they had not.

Table 4.27: Student responses to whether they had used any of the offerings at their college

Response Category	Frequency	Valid Percent	Cumulative Percent
Yes	147	26.2	26.2
No	414	73.8	100.0
Total	561	100.0	

Of the students that had made use of the entrepreneurial offerings at their institution, 50% and above indicated that they were either “very satisfied” or “satisfied” with all but 3 entrepreneurial offerings (see Appendix 3). These offerings were “meeting experienced entrepreneurs”, “mentoring and coaching programmes for prospective entrepreneurs” and “business related competitions”. This highlights the need for these offerings to be made available to students at their colleges.

As part of assessing student awareness of entrepreneurship at the colleges, students were also asked to give feedback on their general thoughts of the state of entrepreneurship at their colleges. These statements were directed more towards getting student input on measures that their colleges could employ to raise entrepreneurial awareness and to extend its reach. Responses to these statements are tabulated below.

Table 4.28: General student thoughts concerning entrepreneurship at their colleges

Statement	Agree	Disagree
26a. I would like to know more about entrepreneurship	607 (98.4%)	10 (1.6%)
26b. I am interested to learn more about entrepreneurship	591 (95.6%)	27 (4.4%)
26c. More should be done by my college to raise entrepreneurial awareness	556 (91.0%)	55 (9.0%)
26d. I would like entrepreneurship to be included as part of my coursework	536 (88.6%)	69 (11.4%)
26e. I think that my college should encourage students to become entrepreneurial	564 (92.9%)	43 (7.1%)
26f. If my college were to organise business competitions for students, I would participate	555 (91.4%)	52 (8.6%)

As can be seen in the above table, 98.4% of the 617 students that responded to the statement “I would like to know more about entrepreneurship” agreed with it. This was followed by 95.6% of 618 students agreeing to the statement “I am interested to learn more about entrepreneurship”. This is significant because it indicates that students are very interested to know more and learn more about entrepreneurship. Knowing about entrepreneurship is highly dependent on being aware of it. Learning about entrepreneurship

has the connotation of formal education or hands on experience. It is therefore, deducible that students want to be made more aware of entrepreneurship and are keen to be educated about it. There is thus a need to raise entrepreneurial awareness at these colleges (as supported by 91% of 611 students agreeing to statement 26c) and to expand entrepreneurial offerings to reach as many students as possible at FET College level. More than 90% of the respondents to these statements felt that their colleges should encourage them to become entrepreneurial and that they would actively participate in entrepreneurship competitions if they were offered.

4.4.6 Summary

A total of 670 students participated in the study. The majority of them fell within the 20 to 24 year age range (inclusive). The average age of participating students was 22.8 years with a standard deviation of 3.5 years. The youngest respondent was aged 16 with the eldest aged 42 years old. The majority of the students were female. In terms of racial groupings, the most represented ethnic group was Black, with so-called “Coloureds” being the least represented. isiZulu was the most spoken home language. A very small percentage of students spoke English at home. Most respondents were doing their NCV level 3, with a very small percentage doing Nated levels.

Overall, participating students had a very positive perception and / or understanding of entrepreneurship. There did not appear to be any notable differences in the perception of entrepreneurship between male and female students. However, when the composite was divided into two sub-composites (statements that described entrepreneurship versus those that did not describe it), male students were found to have a significantly more positive perception of entrepreneurship than females. There was also no significant difference observed in students’ perception of entrepreneurship based on age.

Student attitudes towards entrepreneurship revealed that almost all the students had a positive attitude towards entrepreneurship. Most students felt that an improved quality of life would be their greatest motivator for becoming entrepreneurs. The status that came with being an entrepreneur meant the least to participating students.

Students also demonstrated high levels of self-efficacy (perceived behavioural control). This indicated that students believed in their abilities to achieve their goals. If this is used

as a tool to measure EI, this could suggest that students believed that they were capable and able to start businesses if they desired to. Students also believed themselves to be innovative and proactive. They also demonstrated that they were risk averse, except when this concept was phrased differently. This was evidenced in the majority of them indicating that they were risk tolerant when words like “the unknown” or “risk” were not used when describing the concept.

Entrepreneurial intention (EI) among students was also very positive. The vast majority of students indicated that they had thought of starting businesses in the future. Almost all the students who had entrepreneurial thoughts indicated that they had intentions to actualise these in the future. No conclusive evidence was found to suggest that any differences in entrepreneurial intention existed between male and female students.

The majority of students who had self-employed parents indicated that in light of this they would like to start their own businesses. However, the majority did not want to take over family-owned businesses. In addition, slightly more students preferred to do something else, not business-related, as a source of income. Male students appeared to be slightly more influenced by parent entrepreneurial background than females, although the difference was not very pronounced.

When comparing students’ entrepreneurial backgrounds with their intentions to start businesses in the future, parent entrepreneurial background did not seem to have much impact on students’ intentions of starting businesses in the future. Family entrepreneurial background (other than parents) also did not appear to have an influence on students’ entrepreneurial intentions.

Students demonstrated very low levels of entrepreneurial awareness when it came to initiatives at their institutions. Of the students that were aware of some sort of entrepreneurial offering at their college, a very small percentage indicated that they had made use of at least one of these offerings. Students also demonstrated a keen interest to know and learn more about entrepreneurship. They also felt that their colleges should do more to raise the state of entrepreneurial awareness at their colleges. In addition, the majority of students felt that entrepreneurship should be included as part of their coursework in their various study disciplines.

CHAPTER FIVE

Recommendations and Conclusion

5.1 Introduction

This chapter summarises study findings. It also draws conclusions of these findings in alignment with the study aim and objectives. The benefits of the study are also discussed as well as the limitations and recommendations for future research.

5.2 Study Outcomes

This study has evaluated entrepreneurship at Further Education and Training Colleges in the broader Durban area. Hence, this study had as its objectives to investigate students' perception of entrepreneurship, to gauge their attitudes towards it, to assess their beliefs in their abilities to execute desired outcomes; and to assess their awareness of entrepreneurship initiatives at their institutions. The specific questions that the research attempted to answer, therefore, were whether students considered entrepreneurship as being important to them; whether they were aware of their colleges' initiatives to equip them for entrepreneurship; whether they considered entrepreneurship as a viable career option; and their intentions towards entrepreneurship.

Students' general perception of entrepreneurship was found to be very positive. No notable differences were observed between gender comparisons on the perception of entrepreneurship. However, when the composite statements were divided into two sub-composites (those that described entrepreneurship versus those that did not describe it), male students were found to have a significantly more positive perception of entrepreneurship than females. Age comparisons on student perceptions of entrepreneurship did not reveal any statistically significant difference.

Almost all the students had a positive attitude towards entrepreneurship. Entrepreneurial intention (EI) among students was also very positive. The three approaches used to assess it (namely self-efficacy, direct approach and entrepreneurial background) all produced similar findings. The majority of students indicated that they had thought of starting

businesses in the future. Almost all of these students indicated that they had intentions to actualise their entrepreneurial thoughts someday. A few students who had not given entrepreneurship any thought before (or were unsure whether they had) also indicated that they had intentions to start businesses. No conclusive evidence was found to suggest that any differences in entrepreneurial intention existed between male and female students. Parent and family entrepreneurial background did not appear to have any influence on students' intentions to become entrepreneurial.

Students also demonstrated high levels of self-efficacy. This indicated that students believed in their abilities to achieve their goals. In addition, it was found that students believed that they were both innovative and proactive. However, the findings also revealed that the majority of them were generally risk averse. Levels of awareness of entrepreneurial initiatives at FET Colleges were observed to be very low. A very small proportion of students, who were aware of entrepreneurial offerings at their college, had made use of at least one of these. This highlights the need to raise entrepreneurial awareness at these colleges.

5.3 Benefits of Study

This study bridges the gap in the understanding of FET College students' attitudes towards entrepreneurship in the broader Durban area. It revealed that students had a keen interest in entrepreneurship and had intentions of becoming entrepreneurial. Equipped with this knowledge, policy makers will be in a better position to make informed decisions when allocating resources in youth empowerment initiatives, especially in the FET Colleges' sector. Used efficiently, application of the findings of this study has the potential of contributing towards alleviating the country's unemployment burden.

Application of study findings can also be useful to FET Colleges in catering for students' demands for entrepreneurial offerings. This presents a gap in current offerings at these colleges. Opportunities emerge in raising the awareness of current entrepreneurial offerings; and in allowing students from other study disciplines to access these offerings. The study also identified the potential of introducing new entrepreneurship offerings at FET Colleges.

Students benefitted by becoming more aware of the concept of entrepreneurship. It also allowed for them to become more self-aware. They were also presented with the opportunity for introspection and to reflect on their beliefs in their abilities. Consequently, they were placed in a position to consider themselves in the greater scheme of their futures.

5.4 Recommendations to Solve Research Problem

This study set out to find out whether FET College students had any ambitions or intentions towards entrepreneurship. It aimed to discover whether government resources towards empowering young people were being correctly channelled in the vehicle of the FET Colleges. As such, it was necessary to discover whether FET College students knew about entrepreneurship, whether they were interested in it; and whether they had any aspirations towards becoming entrepreneurial.

The study found that students had a positive perception of entrepreneurship and a strong sense of what it was. They also had a very positive attitude towards it and demonstrated intentions of becoming entrepreneurs someday. Students also believed that they would achieve their goals. However, students were not aware of entrepreneurial offerings at their colleges. This highlights the need to raise entrepreneurship awareness at these colleges. The following recommendations are proposed to bridge the awareness gap and to strengthen the state of entrepreneurship at FET Colleges:

- a. Embark on an entrepreneurship awareness campaign targeted at all FET College students. This will plant the seeds of entrepreneurship in the minds of students. Such a campaign should highlight the importance of entrepreneurship.
- b. Students should be made aware of the realities of the country's unemployment burden and the impact that it has on them. As such, an unemployment awareness drive should be initiated to expose them of the realities of the world outside of the protection of their institutions. This will serve to give students realistic expectations and inspire them to think beyond solely seeking employment.
- c. FET Colleges should expand their current entrepreneurship offerings so that students can be better empowered for self-employment.

- d. Access should be granted to non-commercial students to pursue entrepreneurship courses. This is evidenced by non-commercial students showing a keen interest in starting their own businesses.
- e. Strategies should be put in place to include entrepreneurship offerings as integral parts of all study disciplines. Coursework should include practical elements of entrepreneurship. This will stimulate creativity and innovation among students.

Therefore, in order to improve the state of entrepreneurship at FET Colleges, it is important that holistic strategies be implemented to bridge the gap between the government's vision for empowering young people and young peoples' desire to be empowered. FET Colleges are thus ideally positioned to bridge this gap by raising entrepreneurship awareness and meeting students' desire to be entrepreneurial.

5.5 Recommendations for Future Studies

In conducting this study a few limitations were identified. In what follows, these limitations are mentioned and accompanied with recommendations for future research.

Therefore, the following recommendations are proposed:

- a. Access to students and campuses

It was not possible to conduct the study all 22 campuses for four main reasons. The most prominent reason was that the timing of the distribution of the questionnaire conflicted with student examinations. The second reason was that at the time of the study, students were striking at some of the campuses. This made it impossible to gain access to these campuses. The third reason was due to campus management either refusing the researcher access to their campus or campus managers not availing themselves to meet with the researcher. Consequently, it was not possible to gain access to students, despite permission being granted to conduct the study at their campus. The final reason was the time constraints under which the researcher was to complete the study. Resultantly, the researcher was unable to travel to outlying campuses.

To overcome this, proper communication channels need to be in place prior commencing with research at the FET College campuses. As far as it is practical, a liaison should be delegated the task of ensuring that campus management is aware of the research to be conducted. This person should also play a pivotal role in scheduling convenient times for the research to be conducted at the various campuses.

b. Questionnaire Design

The questionnaire was intentionally broad as it aimed to gain a holistic view of what students thought and felt around entrepreneurship. As such, it was very long. It is likely that this challenged some students and in efforts to complete the questionnaire, either omitted sections or did not answer as truthfully as they would have if it was shorter. It is therefore suggested that future research tools be shortened, but not so much as to lose the substance of its intended purpose.

Although several efforts were made to ensure that the questionnaire was as comprehensible as possible, some students still had difficulties in understanding what was being asked. This could be attributed to students not reading the questions, statements or instructions carefully. In addition, the majority of students did not speak English as a home language. Therefore; it is probable that a degree of comprehension difficulties were experienced. Thus, it is suggested that the questionnaire be translated into the predominant language spoken in the region (in this case isiZulu). This gives respondents the opportunity to select their preferred language.

c. Research sample

Although the research participants were randomly selected, it was not possible to get representation from all study disciplines. This was due to at least three reasons. In the first instance, students were writing examinations simultaneously with study administration at their campus. Secondly, students did not come to campus because they were not being assessed on the day when study was being administered. Finally, students had finished their term assessments and were therefore, on vacation. This again is a scheduling challenge. Proper planning and the awareness

of the FET College assessment period will prove invaluable in overcoming this challenge.

5.6 Summary

The study evaluated students' attitudes and perceptions towards entrepreneurship at FET Colleges in the broader Durban area. FET College students were found to have a good understanding and / or perception of entrepreneurship, a positive attitude towards it; and demonstrated a strong desire to becoming entrepreneurial. However, students had limited awareness of entrepreneurship offerings at FET Colleges. This highlighted the need to invest in efforts to heighten entrepreneurial awareness at FET Colleges. In addition, more should be invested in students as they demonstrated a keen interest towards entrepreneurship. This suggests that they would be receptive towards entrepreneurial efforts directed at them.

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Student Initials Date
*dd MMM yy***FET College Student Questionnaire****A. Demographic Details**1. Date of birth: Age
*dd MMM yy*2. Gender: 1 Male
 2 Female3. Race: 1 Black
 2 White
 3 Indian
 4 Coloured
 5 Other, specify: Text4. Home language: 1 Afrikaans
 2 English
 3 Ndebele
 4 Sepedi
 5 Setswana
 6 Southern Sesotho
 7 Swati
 8 Tsonga
 9 Venda
 10 Xhosa
 11 isiZulu
 12 Other, specify: Text**FOR OFFICE USE ONLY**Version . 9-May-13Date:
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FET College Student Questionnaire

B. Education Background

5. FET College attending: 1 Coastal 2 Elangeni 3 Thekwini
-
6. Campus Name:
- | | | |
|--|--|---|
| <input type="checkbox"/> 1 As-Salaam | <input type="checkbox"/> 9 Inanda | <input type="checkbox"/> 17 Asherville |
| <input type="checkbox"/> 2 Durban | <input type="checkbox"/> 10 Kwadabeka | <input type="checkbox"/> 18 Centec |
| <input type="checkbox"/> 3 Swinton | <input type="checkbox"/> 11 Kwamashu | <input type="checkbox"/> 19 Cato Manor |
| <input type="checkbox"/> 4 Umbumbulu | <input type="checkbox"/> 12 Mpumalanga | <input type="checkbox"/> 20 Melbourne |
| <input type="checkbox"/> 5 Umlazi BB | <input type="checkbox"/> 13 Ndwedwe | <input type="checkbox"/> 21 Springfield |
| <input type="checkbox"/> 6 Umlazi V | <input type="checkbox"/> 14 Ntuzuma | <input type="checkbox"/> 22 Umbilo |
| <input type="checkbox"/> 7 UBuhle Bogu | <input type="checkbox"/> 15 Pinetown | |
| <input type="checkbox"/> 8 Appelsbosch | <input type="checkbox"/> 16 Qadi | |
-
7. Level of study:
- | | | |
|--|---------------------------------------|---|
| <input type="checkbox"/> 1 NCV level 2 | <input type="checkbox"/> 2 NCV leve 3 | <input type="checkbox"/> 3 NCV level 4 |
| <input type="checkbox"/> 4 N1 | <input type="checkbox"/> 5 N2 | <input type="checkbox"/> 6 N3 <input type="checkbox"/> 7 N4 <input type="checkbox"/> 8 N5 <input type="checkbox"/> 9 N6 |
| <input type="checkbox"/> 10 Other, please specify: <u>Text</u> | | |
-
8. Department:
- | | |
|--|---|
| <input type="checkbox"/> 1 Agriculture | <input type="checkbox"/> 6 Information Technology |
| <input type="checkbox"/> 2 Business Studies | <input type="checkbox"/> 7 Learnerships |
| <input type="checkbox"/> 3 Education | <input type="checkbox"/> 8 Safety and Society |
| <input type="checkbox"/> 4 Engineering | <input type="checkbox"/> 9 Skills and Short courses |
| <input type="checkbox"/> 5 Hospitality and Tourism | <input type="checkbox"/> 10 Other, specify below: |
| <u>Text</u> | |
| _____ | |

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FET College Student Questionnaire

C. Background

9. Are any of the people that you know (listed below) self-employed?

(Please refer to the list below and tick "yes", "no" or "unsure" next to each)

	Yes	No	Unsure
9a. Your parents (includes your guardian or any person that legally looks after you)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9b. Other family members	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9c. Your friends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9d. Other people that you are familiar with	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9e. Yourself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. If you selected "Yes" to question 9a (your parents are self-employed), please answer questions 10 and 11. If you did not, please skip to question 12.

	Yes	No	Unsure
10a. Are they employed somewhere else while they run their business?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10b. Is their business a registered, formal business?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10c. Did they start their business from scratch (i.e. they did not buy or inherit this business?)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. In light of the above, has this motivated you to:

	Yes	No
11a. want to start your own business	<input type="checkbox"/>	<input type="checkbox"/>
11b. want to take over the family business	<input type="checkbox"/>	<input type="checkbox"/>
11c. do something else with your life that is not business related	<input type="checkbox"/>	<input type="checkbox"/>

D. For the statements below, please indicate what you think entrepreneurship is:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
12. Entrepreneurship is the process of discovering new ways of combining resources to deliver added value:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Entrepreneurship can be used to help grow the economy:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Entrepreneurship involves taking risks:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Entrepreneurship is the process of trading shares on the JSE:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Entrepreneurship is for rich people only:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Entrepreneurship is another name for politics:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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FET College Student Questionnaire

18. Please indicate whether your level of agreement with each of the following sentences:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
18a. Being an entrepreneur would have more advantages than disadvantages to me.	5	4	3	2	1
18b. A career as an entrepreneur is appealing to me.	5	4	3	2	1
18c. I would start my own business if I had the opportunity and money.	5	4	3	2	1
18d. I think that I would be very happy as an entrepreneur.	5	4	3	2	1
18e. I would ideally choose to be an entrepreneur over any other career option.	5	4	3	2	1
18f. I think that entrepreneurship is important.	5	4	3	2	1
18g. Entrepreneurship is not important to me.	1	2	3	4	5

19. Having my own business would mean...

19a. Freedom	5	4	3	2	1
19b. Personal satisfaction	5	4	3	2	1
19c. Financial rewards	5	4	3	2	1
19d. Improved quality of life	5	4	3	2	1
19e. Status	5	4	3	2	1
19f. Power	5	4	3	2	1

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FET College Student Questionnaire

20. Please indicate your level of agreement with the following statements:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
20a. I will be able to achieve most of the goals that I have set for myself	5	4	3	2	1
20b. I am confident that I will be successful in facing difficult tasks	5	4	3	2	1
20c. In general, I think that I can achieve end results that are important to me	5	4	3	2	1
20d. I believe that I can succeed at any exercise to which I set my mind	5	4	3	2	1
20e. I will be able to successfully overcome many challenges	5	4	3	2	1
20f. I am confident that I can perform effectively on many different tasks	5	4	3	2	1
20g. I can do most tasks very well compared to other people	5	4	3	2	1
20h. I can perform quite well even during tough situations	5	4	3	2	1
20i. I like to take bold action, including venturing into the unknown	5	4	3	2	1
20j. I am prepared to invest a lot of time and / or money on something that might yield a high return	5	4	3	2	1
20k. I tend to act boldly in situations that involve risk	5	4	3	2	1
20l. I often like to try new activities that are different to the norm, but are not necessarily risky	5	4	3	2	1
20m. In general, I prefer to be involved in "projects" that are unique and need new approaches, rather than projects that use old approaches that work	5	4	3	2	1
20n. I prefer my own unique approach when learning something new, rather than doing it like everyone else	5	4	3	2	1
20o. I prefer experimenting and trying new approaches to problem solving over methods used by others to solve their problems	5	4	3	2	1
20p. I usually act in response to what I expect (or predict) future problems, needs or changes to be	5	4	3	2	1
20q. I tend to plan ahead on projects	5	4	3	2	1
20r. I prefer to take responsibility and get projects started instead of waiting for someone else to do it.	5	4	3	2	1

	Yes	No	Unsure
21. Have you ever thought about starting your own business in the future?	1	2	3
22. Do you think that you will start your own business at some point in your life?	1	2	3

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FET College Student Questionnaire

E. Entrepreneurial activity or offerings at FET colleges

23. Does your college offer any of the following entrepreneurial activities or resources:

Courses:

	Yes	No	Unsure
23a. Introductory Entrepreneurship	1	2	3
23b. Entrepreneurship	1	2	3
23c. New Venture Creation	1	2	3
23d. Entrepreneurship and Business Management	1	2	3
23e. Creativity and Innovation	1	2	3

Workshops or coaching:

23f. Guest speakers	1	2	3
23g. Meeting experienced entrepreneurs	1	2	3
23h. Mentoring and coaching programmes for prospective entrepreneurs	1	2	3
23i. Business related competitions	1	2	3
23j. Business planning	1	2	3
23k. Starting your own business	1	2	3
23l. Accessing finance and business support resources	1	2	3

Resources:

23m. Access to library resources on entrepreneurship	1	2	3
23n. Access to internet resources on entrepreneurship	1	2	3

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FET College Student Questionnaire

24. Have you ever used any of the offerings mentioned above? Yes No
(If you answered "No", please skip to question 26)

25. If you have used any of the offerings mentioned above, please indicate your level of satisfaction with them below.

Very Satisfied Satisfied Neutral Dissatisfied Very Dissatisfied

Courses:

25a. Introductory Entrepreneurship	<input type="text" value="5"/>	<input type="text" value="4"/>	<input type="text" value="3"/>	<input type="text" value="2"/>	<input type="text" value="1"/>
25b. Entrepreneurship	<input type="text" value="5"/>	<input type="text" value="4"/>	<input type="text" value="3"/>	<input type="text" value="2"/>	<input type="text" value="1"/>
25c. New Venture Creation	<input type="text" value="5"/>	<input type="text" value="4"/>	<input type="text" value="3"/>	<input type="text" value="2"/>	<input type="text" value="1"/>
25d. Entrepreneurship and Business Management	<input type="text" value="5"/>	<input type="text" value="4"/>	<input type="text" value="3"/>	<input type="text" value="2"/>	<input type="text" value="1"/>
25e. Creativity and Innovation	<input type="text" value="5"/>	<input type="text" value="4"/>	<input type="text" value="3"/>	<input type="text" value="2"/>	<input type="text" value="1"/>

Workshops or coaching:

25f. Guest speakers	<input type="text" value="5"/>	<input type="text" value="4"/>	<input type="text" value="3"/>	<input type="text" value="2"/>	<input type="text" value="1"/>
25g. Meeting experienced entrepreneurs	<input type="text" value="5"/>	<input type="text" value="4"/>	<input type="text" value="3"/>	<input type="text" value="2"/>	<input type="text" value="1"/>
25h. Mentoring and coaching programmes for prospective entrepreneurs	<input type="text" value="5"/>	<input type="text" value="4"/>	<input type="text" value="3"/>	<input type="text" value="2"/>	<input type="text" value="1"/>
25i. Business related competitions	<input type="text" value="5"/>	<input type="text" value="4"/>	<input type="text" value="3"/>	<input type="text" value="2"/>	<input type="text" value="1"/>
25j. Business planning	<input type="text" value="5"/>	<input type="text" value="4"/>	<input type="text" value="3"/>	<input type="text" value="2"/>	<input type="text" value="1"/>
25k. Starting your own business	<input type="text" value="5"/>	<input type="text" value="4"/>	<input type="text" value="3"/>	<input type="text" value="2"/>	<input type="text" value="1"/>
25l. Accessing finance and business support resources	<input type="text" value="5"/>	<input type="text" value="4"/>	<input type="text" value="3"/>	<input type="text" value="2"/>	<input type="text" value="1"/>

Resources:

25m. Access to library resources on entrepreneurship	<input type="text" value="5"/>	<input type="text" value="4"/>	<input type="text" value="3"/>	<input type="text" value="2"/>	<input type="text" value="1"/>
25n. Access to internet resources on entrepreneurship	<input type="text" value="5"/>	<input type="text" value="4"/>	<input type="text" value="3"/>	<input type="text" value="2"/>	<input type="text" value="1"/>

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FET College Student Questionnaire

F. General view of entrepreneurship at FET colleges

26. Please indicate whether you “agree” or “disagree” with each of the following statements:

	Agree	Disagree
26a. I would like to know more about entrepreneurship	<input type="text" value="1"/>	<input type="text" value="2"/>
26b. I am interested to learn more about entrepreneurship	<input type="text" value="1"/>	<input type="text" value="2"/>
26c. More should be done by my college to raise entrepreneurial awareness	<input type="text" value="1"/>	<input type="text" value="2"/>
26d. I would like entrepreneurship to be included as part of my coursework	<input type="text" value="1"/>	<input type="text" value="2"/>
26e. I think that my college should encourage students to become entrepreneurial	<input type="text" value="1"/>	<input type="text" value="2"/>
26f. If my college were to organise business competitions for students, I would participate	<input type="text" value="1"/>	<input type="text" value="2"/>
26g. My college should set up an entrepreneurship resource centre for students	<input type="text" value="1"/>	<input type="text" value="2"/>
26h. I think that my lecturers should receive entrepreneurship training	<input type="text" value="1"/>	<input type="text" value="2"/>
26i. I think that my college would support my ideas to improve students' awareness of entrepreneurship	<input type="text" value="1"/>	<input type="text" value="2"/>

27. Can you please offer suggestions on how your college can improve entrepreneurship awareness and create an entrepreneurship culture that will benefit yourself and fellow students? ***(Please write on the lines provided below)***

Text _____

Thank you very much for your time, effort and cooperation in participating in this study.

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APPENDIX 2: Student awareness of entrepreneurial offerings at their institution

Entrepreneurship Offering	Yes	No	Unsure	Median score
23a. Introductory Entrepreneurship	145 (23.9%)	269 (44.4%)	192 (31.7%)	2
23b. Entrepreneurship	188 (31.1%)	256 (42.3%)	161 (26.6%)	2
23c. New Venture Creation	276 (45.1%)	198 (32.4%)	138 (22.5%)	2
23d. Entrepreneurship and Business Management	265 (44.5%)	197 (33.1%)	134 (22.5%)	2
23e. Creativity and Innovation	147 (24.8%)	241 (40.6%)	205 (34.6%)	2
23f. Guest speakers	203 (32.9%)	282 (45.7%)	132 (21.4%)	2
23g. Meeting experienced entrepreneurs	138 (22.6%)	323 (52.9%)	150 (24.5%)	2
23h. Mentoring and coaching programmes for prospective entrepreneurs	128 (21.1%)	312 (51.3%)	168 (27.6%)	2
23i. Business related competitions	161 (26.5%)	298 (49.1%)	148 (24.4%)	2
23j. Business planning	233 (37.9%)	253 (41.1%)	129 (21.0%)	2
23k. Starting your own business	222 (35.9%)	250 (40.5%)	146 (23.6%)	2
23l. Accessing finance and business support resources	167 (27.7%)	266 (44.1%)	170 (28.2%)	2
23m. Access to library resources on entrepreneurship	258 (41.2%)	230 (36.7%)	138 (22.0%)	2
23n. Access to internet resources on entrepreneurship	275 (43.9%)	223 (35.6%)	129 (20.6%)	2

APPENDIX 3: Student satisfaction with entrepreneurial offerings at their institution

Entrepreneurship Offering	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied	Median Score
25a. Introductory Entrepreneurship	27 (22.7%)	34 (28.6%)	36 (30.3%)	16 (13.4%)	6 (5.0%)	4
25b. Entrepreneurship	31 (25.0%)	48 (38.7%)	27 (21.8%)	12 (9.7%)	6 (4.8%)	4
25c. New Venture Creation	45 (34.4%)	43 (32.8%)	28 (21.4%)	11 (8.4%)	4 (3.1%)	4
25d. Entrepreneurship and Business Management	35 (28.7%)	43 (35.2%)	28 (23.0%)	11 (9.0%)	5 (4.1%)	4
25e. Creativity and Innovation	28 (24.1%)	33 (28.4%)	31 (26.7%)	17 (14.7%)	7 (6.0%)	4
25f. Guest speakers	37 (31.4%)	24 (20.3%)	26 (22.0%)	17 (14.4%)	14 (11.9%)	4
25g. Meeting experienced entrepreneurs	27 (22.9%)	31 (26.3%)	29 (24.6%)	20 (16.9%)	11 (9.3%)	3
25h. Mentoring and coaching programmes for prospective entrepreneurs	30 (25.6%)	22 (18.8%)	37 (31.6%)	16 (13.7%)	12 (10.3%)	3
25i. Business related competitions	29 (25.7%)	25 (22.1%)	32 (28.3%)	16 (14.2%)	11 (9.7%)	3
25j. Business planning	39 (33.3%)	37 (31.6%)	25 (21.4%)	8 (6.8%)	8 (6.8%)	4
25k. Starting your own business	45 (37.2%)	30 (24.8%)	28 (23.1%)	9 (7.4%)	9 (7.4%)	4
25l. Accessing finance and business support resources	28 (23.9%)	30 (25.6%)	34 (29.1%)	13 (11.1%)	12 (10.3%)	4
25m. Access to library resources on entrepreneurship	53 (40.8%)	33 (25.4%)	21 (16.2%)	15 (11.5%)	8 (6.2%)	4
25n. Access to internet resources on entrepreneurship	52 (39.4%)	33 (25.0%)	26 (19.7%)	12 (9.1%)	9 (6.8%)	4

28 May 2013

Mr Stanley Carries 953015246
Graduate School of Business and Leadership
Westville Campus

Dear Mr Carries

Protocol reference number: HSS/0348/013M
Project title: Entrepreneurship at Further Education and Training Colleges in Durban: A Demand side perspective

EXPEDITED APPROVAL

I wish to inform you that your application has been granted Full Approval through an expedited review process.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. Please note: Research data should be securely stored in the school/department for a period of 5 years.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully



.....
Dr Shenuka Singh (Deputy Chair)
Humanities & Social Science Research Ethics Committee

/pm

cc Supervisor: Professor Shahida Cassim
cc Academic Leader: Dr E Munapo
cc School Admin.: Mrs Wendy Clarke

Humanities & Social Sciences Research Ethics Committee
Professor Urmilla Bob (Chair) and Dr Shenuka Singh (Deputy Chair)
Westville Campus, Govan Mbeki Building

Postal Address: Private Bag X54001, Durban, 4000, South Africa

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Website: www.ukzn.ac.za

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