

**ASSESSMENT OF THE INFLUENCE OF ENTREPRENEURSHIP EDUCATION ON
CAREER INTENTIONS OF UNIVERSITY STUDENTS: THE CASE OF THE FACULTY
OF ENGINEERING AT THE POLYTECHNIC.**

MASTER'S IN BUSINESS ADMINISTRATION THESIS

ESNATH CHIRAMBO GONDWE

UNIVERSITY OF MALAWI

THE POLYTECHNIC

January 2018

**ASSESSMENT OF THE INFLUENCE OF ENTREPRENEURSHIP EDUCATION ON
CAREER INTENTIONS OF UNIVERSITY STUDENTS: THE CASE OF THE FACULTY
OF ENGINEERING AT THE POLYTECHNIC.**

Master's in business Administration Thesis

By

ESNATH CHIRAMBO GONDWE

Bachelor of Education Science-University of Malawi

**Submitted to the department of management studies, faculty of commerce, in partial
fulfilment of the requirements for the Masters of business administration**

University of Malawi

The Polytechnic

January 2018

Declaration

I declare that this dissertation is my own unaided work. It is being submitted for partial fulfilment of the requirements of a master's degree in business administration and has not been submitted before for any degree or examination in any other college or university.

Candidates name:

Signature:

Date:

Certificate of approval

We declare that this dissertation is from the candidate's own work and effort, where she has used other sources of information, it has been acknowledged. This dissertation is submitted with our approval.

First supervisor:

Signature:

Date:

Second supervisor:

Signature:

Date:

Head of department:

Signature:

Date:

Dean of postgraduate:

Signature:

Date:

Dedication

My late parents Mr. Medicine Chitali Chirambo and Mrs. Marley Martha Nyachihana Chirambo, my source of inspiration, thank you for believing in me even when I had doubt in myself.

Acknowledgements

This work has been possible with the support of many people to whom I am very grateful. These include students and lectures from the Faculty of Engineering. The Polytechnic. University of Malawi.

I express my heartfelt gratitude to my husband, Mr. Lusungu Vulula Gondwe whose financial support I heavily depended on. I am very grateful to my son Dumisani Ndagha Gondwe for enduring my absence while I was doing this work. A big thank you to my only sister Mrs. Taonga Chitali Mwenifumbo whose encouragement and financial support brought me this far. Above all I give thanks to the almighty God for helping me and guiding me through this course.

Abstract

High unemployment rates coupled with limited economic growth have triggered policy makers into giving greater importance to entrepreneurship and self-employment to reduce unemployment, public universities in Malawi have initiated entrepreneurship education. And the faculty of engineering at the Polytechnic recently introduced entrepreneurship education to equip students with relevant knowledge in entrepreneurship and business management. However no study has been conducted to assess the impact of entrepreneurship education in the faculty.

The aim of the study was to establish the effectiveness of entrepreneurship education in developing entrepreneurial intentions among university engineering students at the Malawi Polytechnic. The specific objectives were: to find out students perception towards entrepreneurship education programmes; assess the relevance of course content in entrepreneurship education in Malawi; to examine the relationship between entrepreneurship education and students career choices in Malawi; and to find out the relationship between the methods of delivery and students career choices. The research intends to answer the following questions: how much do engineering students know about entrepreneurship education, does the content taught to engineering students address most areas of entrepreneurship and business management, does entrepreneurship education influence engineering students career aspirations and which teaching methods are mostly used at the University. The research method employed was quantitative, closed questionnaires were administered to total of 193 engineering students from fifth and second year student, the latter being the control group. The findings of the study indicate that entrepreneurship education has a positive influence on the student's career intentions of becoming entrepreneurs.

Key words: entrepreneurship, entrepreneurship education, and career intentions.

Table of Contents

| | |
|--|----|
| CHAPTER ONE | 1 |
| INTRODUCTION..... | 1 |
| 1.1 Back Ground to the study..... | 1 |
| 1.1.1 Importance of entrepreneurship education at university level..... | 2 |
| 1.1.2 Career intentions amongst university students..... | 2 |
| 1.1.3 Entrepreneurship in Malawi | 3 |
| 1.2 Entrepreneurship at the University of Malawi | 3 |
| 1.3 Problem statement..... | 4 |
| 1.4 Research objective..... | 4 |
| 1.4.1 Main objective..... | 4 |
| 1.4.2 Specific objectives..... | 4 |
| 1.4.3 Research questions | 5 |
| 1.5 Significance of the study | 5 |
| 1.6 Chapter Summary..... | 5 |
| CHAPTER TWO..... | 7 |
| LITERATURE REVIEW..... | 7 |
| 2.1 Introduction | 7 |
| 2.2 Definitions..... | 7 |
| 2.2.1 Entrepreneur and Entrepreneurship..... | 7 |
| 2.2.2 Entrepreneurship education..... | 8 |
| 2.2.3 Career Intentions | 9 |
| 2.3 Theoretical framework | 9 |
| 2.4 Conceptual framework | 11 |
| 2.5 Impact of Entrepreneurship education on career intentions..... | 12 |
| 2.6 Impact of education on entrepreneurship | 14 |
| 2.7 Entrepreneurship education at global level. | 14 |
| 2.8 The role of entrepreneurship education in entrepreneurship..... | 15 |
| 2.8.1 The importance of business management skills in running a business | 15 |
| 2.9 Content and structure of entrepreneurship course outline..... | 17 |
| 2.9.1 Entrepreneurship education for non-business students | 18 |
| 2.9.2 Entrepreneurship as an add on subject | 19 |
| 2.10 Chapter summary | 19 |
| CHAPTER THREE..... | 20 |
| RESEARCH METHODOLOGY | 20 |

| | |
|--|----|
| 3.1 Introduction | 20 |
| 3.2 Research design..... | 20 |
| 3.3 Sampling | 20 |
| 3.3.1 Sampling frame | 20 |
| 3.3.2 Sampling Technique..... | 21 |
| 3.3.3 Sample size..... | 22 |
| 3.4 Study Type | 22 |
| 3.5 Study Location | 22 |
| 3.6 Reliability and Validity | 23 |
| 3.7 Data collection..... | 23 |
| 3.8 Data analysis | 23 |
| 3.9 Study assumptions..... | 23 |
| 3.10 Study limitations | 24 |
| 3.11 Research and ethical considerations..... | 24 |
| 3.12 Chapter summary | 25 |
| CHAPTER FOUR..... | 26 |
| RESULTS AND DISCUSSIONS | 26 |
| 4.1 Introduction..... | 26 |
| 4.2 Profile of the Respondents | 26 |
| 4.2.1 Response Rate | 28 |
| 4.2.2 Data Cleaning and Screening | 29 |
| 4.3 Analysing data using Research objectives | 29 |
| 4.3.1 Discussion of Analysis of Objectives..... | 30 |
| 4.3.1.1 Objective 1: Establish the perception of university students towards entrepreneurship in general..... | 30 |
| 4.3.1.2 Objective 2: Assess the relevance of course content in entrepreneurship education in Malawi to university students..... | 32 |
| 4.2.1.4 Objective four: examine the relationship between delivery methods and students career intentions in Malawi..... | 36 |
| 4.4 Chapter summary | 38 |
| CHAPTER FIVE..... | 39 |
| CONCLUSION AND RECOMMENDATIONS | 39 |
| 5.1 Introduction..... | 39 |
| 5.2 Conclusion..... | 39 |
| 5.2.1 The perception of university students towards entrepreneurship | 39 |

| | |
|--|----|
| 5.2.2 The relevance of course content in entrepreneurship education..... | 39 |
| 5.2.3 The relationship between entrepreneurship education and students career choices..... | 40 |
| 5.2.4 The relationship between delivery methods and students career choices. | 40 |
| 5.3 Recommendations..... | 40 |
| 5.4 Area for Further Research..... | 41 |
| 5.5 Chapter Summary..... | 42 |
| Appendix One: Questionnaire for all students | 50 |
| Appendix Two: Collected Data..... | 55 |

List of Tables

| | |
|---|----|
| Table 3.1: Sampling frame | 21 |
| Table 4.2: Profile of Respondents | 27 |
| Table 4.3: Programme of Study..... | 28 |
| Table 4.4: Triggers of entrepreneurship. | 31 |
| Table 4.5: Depth of knowledge | 33 |
| Table 4.6: Skills and depth of knowledge in descending order..... | 34 |
| Table 4.7: Mode of assessment in the faculty | 37 |

List of Figures

| | |
|---|----|
| Figure 2.1: Conceptual framework | 12 |
| Figure 4.2: Response rate | 29 |
| Figure 4.3: Percentage of participants in an entrepreneurship program and non-participants who intend to found own business right after their studies. | 35 |
| Figure 4.4: Teaching methods employed at the faculty..... | 37 |

List of acronyms and abbreviations

| | |
|-------|---|
| BAT | Bachelor of Science in Automobile Engineering |
| BEE | Bachelor of Science in Electrical Engineering |
| BETE | Bachelor of Science in Telecommunications Engineering |
| BIE | Bachelor of Science in Industrial engineering |
| BME | Bachelor of Science in Mechanical Engineering |
| EEP | Entrepreneurship Education Programme |
| ILO | International Labour Organisation |
| IMF | International Monetary Fund |
| NSO | National Statistics Office |
| TPB | Theory of Planned Behaviour |
| UNIMA | University of Malawi |
| USA | United States of America |

CHAPTER ONE

INTRODUCTION

1.1 Back Ground to the study

The soaring unemployment rate in Malawi has resulted in the burgeoning of both self-employment and small enterprise initiatives in the hope that the small enterprises will provide alternative channels of employment (Ministry of industry and trade, 2012). Yearly, over a thousand university graduates join the labour market in search of gainful employment. The challenge is thus one of not only tackling the already sizeable unemployed graduates, but also of absorbing the new entrants into the labour market. Underlying this situation is the fact that the training which tertiary students receive has not been fully successful in equipping them with desirable skills and competences required for job creation and self-employment (Dubbey, Chipofya, Mkandawire, Kasomekera, and Kathamalo, 2007). According to Kamphanje (2012), high unemployment rates coupled with limited economic growth have triggered policy makers into giving greater importance to entrepreneurship and self-employment as ways to foster economic progress and reduce unemployment.

According to Auriol (2013), there is a dynamic relationship between self-employment and unemployment rates. On one hand, unemployment rates may stimulate start-up activities of self-employment while on the other hand, higher rates of self-employment may indicate increased entrepreneurial activities, reducing unemployment in subsequent periods. Burns (2001), argues that there are two conflicting forces causing changes in the level of entrepreneurship and that of unemployment. The forces are the 'schumpeter' effect of entrepreneurship which results in reducing unemployment and a 'refugee' or 'shopkeeper' effect of unemployment which results in stimulating entrepreneurship. Entrepreneurship education provides students with the knowledge and skills of starting up a business. The link between entrepreneurship education and self-employment has been found in developed nations, and this is why most universities in America have introduced entrepreneurship programmes (Krueger & Brazeal, 1994). However, a similar study to assess the influence entrepreneurship education on career intentions of university students has not been done with engineering students in Malawi hence the need for this research.

1.1.1 Importance of entrepreneurship education at university level

Entrepreneurship education involves transforming an idea into reality and then actually try to do it (Peterman & Kennedy, 2003). It is more of a practical task that requires students to do it by themselves. According to Solomon (2007), research has found that many professional and technical entrepreneurs started working on their ventures without enrolling in management courses or pursuing business degrees; they learned by doing. While they eventually learned by trial and error, many false starts could have been avoided with more complete instruction and mentoring, (Fayolle & Gailly, 2015). Unfortunately, the curriculum they needed did not exist; a combination of technology or engineering and business was not available in a college classroom. Entrepreneurship is an elusive term, it is commonly linked to small business management because it involves the process of recognising opportunities and the development of new ventures (Fayolle, 2007) but entrepreneurs operate in a range of context including large operations and the public sector not just small business (Conry, 2013).

Entrepreneurship is one of the many factors to improve economic wellbeing in a country as it is there for wealth creation for the entrepreneur. According to Fayolle (2007), the creation of new business ventures by entrepreneurs generates job opportunities and help stimulates the economy and drive new industries of a country. Entrepreneurship education therefore, prepares graduate to be successful in their career when they set up their own businesses or venture into small business management. According to Nian, Bakar, Islam (2014) innovation is one of the most important elements to acquire when students learn about entrepreneurship. Innovation helps one to stand out with unique ideas and set up business successfully.

1.1.2 Career intentions amongst university students.

Entrepreneurship is a way of thinking, that emphasise opportunities over risk. Opportunity identification is an intentional process and therefore, entrepreneurial intentions merit our attention (Kruger, 2000).

Many Scholars believe entrepreneurship is not a reflex action, according to Kruger (2000), we may respond to the condition around us such as an intriguing market niche, by starting a new venture. Yet we think about it first, we process the cues from the environment around us and set about constructing the perceived opportunity into a viable business proposition.

Reimeikene, Starteine, and Daiva (2013) reveal that individuals' entrepreneurial intentions are mainly influenced by such personality traits: self-efficacy, risk taking and need for achievement. The impact of these personality traits can be reinforced by entrepreneurship education.

One of the external factors that influence intentions is the education support, structural support and relational support: type of the education structural system, private sector, public and nongovernmental organisations, loans from banks, state of law, family background and friends support. (Turker And Selcuk 2009). A type of education system that incorporates entrepreneurship education creates a conducive environment for entrepreneurial intention as it represents.

1.1.3 Entrepreneurship in Malawi

The "ILO school-to-work transition survey" conducted in Malawi in 2014, indicates that 54.2% of the sampled youth had not even attained primary level education and only 15.7% of them had completed secondary level education (Ministry of industry and trade, 2012). Moreover, 65.5% of interviewed young males and 51.8% of young females dropped out of school (Ministry of industry and trade, 2012). The survey also revealed that the educated youth in Malawi are engaged in wage employment more than in self-employment. Less than one percent of the surveyed youth who were self-employed had attained university or other tertiary level education. Those entrepreneurs with university or tertiary education earned three times more than those youth who were self-employed and had no education (Herrington and Kelley, 2013). Therefore enterprises are more rewarding when one is educated than when one is not educated. This could be the case because with education one has a better network, management skills and is technologically advanced (Kamphanje, 2012).

1.2 Entrepreneurship at the University of Malawi

The University of Malawi has four constituent colleges namely, Kamuzu College of Nursing, College of Medicine, Chancellor College and The Polytechnic. The Polytechnic was established in 1973 under the University Of Malawi Act Of Parliament. Entrepreneurship as a course was introduced at the Polytechnic in the 2004, under the Faculty of Commerce. It was later extended to other programmes including the Faculty of Engineering. The Faculty of Engineering offers entrepreneurship and business management as a course in the final year, in the following programmes: Bachelor of Science in Mechanical Engineering(BME), Bachelor of Science in Electrical Engineering (BEE), Bachelor of Industrial Engineering (BIE), Bachelor of Science in Automobile Engineering (BAT) and Bachelors of Science in Telecommunications Engineering (BETE).The Faculty of Engineering introduced entrepreneurship in 2014/2015 academic year to

assist students in understanding how to operate business entities. The main objective of The Polytechnic in offering entrepreneurship education is to create and foster an entrepreneurial spirit in graduating students to become job creators and not job seekers so as to assist Malawi achieve socio-economic development. However, the question is “has The Polytechnic succeeded in imparting entrepreneurial knowledge and skills to the students?”

1.3 Problem statement

Research has shown that the type of education offered by most public universities in Malawi produces graduates for whom there is no market demand (Castel, Phiri, & Stampini, 2010). In terms of employability, Law programmes fare best followed by Commerce-related programmes. Public universities produce graduates for wage employment in the formal sector. However, the increasing unemployment rate of graduates from Malawi’s tertiary institutions is slowly becoming a national problem. The period between graduation and employment dates has continued to lengthen and this has become a source of frustration for graduates. Currently, public universities in Malawi are initiating entrepreneurship education hoping that it will equip university graduates with skills necessary to start their own businesses, to be job creators and not job seekers. Since the introduction of entrepreneurship in the Faculty of Engineering of The Polytechnic, no study has been done to evaluate the entrepreneurship education program. This study therefore explores the relationship between entrepreneurship education and students attitude towards business start-ups in the faculty of engineering.

1.4 Research objective

This research intends to achieve the following objectives:

1.4.1 Main objective

To establish the influence of entrepreneurship education on engineering students career intentions.

1.4.2 Specific objectives

The specific objectives of this research are to:

- i. Find out engineering students perception towards entrepreneurship education.
- ii. Assess the relevance of course content in entrepreneurship models to engineering university students.

- iii. Examine the relationship between entrepreneurship education and engineering students' career choices.
- iv. Examine the strength and relevance of the mode of delivery of entrepreneurship modules.

1.4.3 Research questions

This research intends to answer the following questions:

- i. How much do engineering students know about entrepreneurship in Malawi?
- ii. Does the content taught to engineering students address most of the areas of entrepreneurship and business management?
- iii. Does entrepreneurship education influence engineering students' career aspirations?
- iv. Are the teaching methods appropriate for entrepreneurship?

1.5 Significance of the study

The study was done in Malawi under the social, political and financial environment of one of the poorest nations in the world. Similar studies have been done in developed nations mainly America and most of the theories of entrepreneurship were done and studied in America. For example, Birds theory and Ajzen theory of planned behaviour in entrepreneurship education were both done in the USA. This study will therefore help scholars compare the outcomes of similar research on perspectives of students conducted in developed and developing nations. The study offers an opportunity to test if the theory of planned behaviour (TPB) can yield the same results if applied in different situations.

The study is important to The Polytechnic as an institution of higher learning as the findings will help them evaluate the entrepreneurship education module. The study will bring out perceptions of stakeholders on the programme and The Polytechnic would benefit from this data. The Polytechnic will be able to identify the gaps in the programme, and areas that need improvement. Findings of such research are important when reviewing the curriculum after specific periods.

1.6 Chapter Summary

In summary, this chapter introduced the main reasons for undertaking the research. Firstly the chapter presented the background of the study; highlighted the areas that helped identify the gap, such as unemployment in Malawi, youth entrepreneurship in Africa and entrepreneurship in Malawi. The chapter further defined the place of study and history of entrepreneurship programmes at the University of Malawi, The Polytechnic. The chapter unfolded the objectives of the study

and the research questions. Lastly the significance of the study was given. The rest of the study is organised as follows: chapter two literature, chapter three research methodology is discussed data analysis in chapter four and research conclusions in chapter five.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents literature review on student's attitude towards entrepreneurship. It looks at the definitions of the key words like entrepreneur, entrepreneurship education career intention. Other areas it covers are: the impact of entrepreneurship education on career intentions, impact of education on entrepreneurship, entrepreneurship at global level, role of entrepreneurship education in entrepreneurship, and the content and structure of entrepreneurship education. Lastly the chapter looks at the theoretical framework based on birds' theory and the conceptual framework of the research.

2.2 Definitions

2.2.1 Entrepreneur and Entrepreneurship

According to Helmchem (2012), an entrepreneur is an individual who unites all means of production and who finds value of a product, the re-establishment of the entire capital he or she employs, and the value of the wages, the interest and the rent which he pays as well as the profit belonging to him. Garbe, Djafar & Mansor (2013) state that entrepreneurs are driven by the belief that any future can be shaped if substantial human action is engaged appropriately.

Freiling and Schelhowe (2014), define entrepreneurship as the development of a business from the ground, coming up with an idea and turning it into a profitable venture. Burns (2001) defines entrepreneurship as the journey of opportunity exploration and risk management to create value for profit and/or social good. Entrepreneurship is the creation and management of a new organization designed to pursue a unique, innovative opportunity and achieve rapid, profitable growth (Campos, Acuna, Nunodela & Valenzual, 2012). Other authors have defined entrepreneurship as "an unrehearsed combination of economic resources instigated by the uncertain prospect of temporary monopoly profit" (Taylor & Thorpe, 2004). Entrepreneurship can be put in the following terms: making or doing things differently, making or providing innovative products or services, or organizing how the products are made or supplied.

The definitions above describe an entrepreneur as a person running a business, taking risks, identifying opportunities and creating new products or services. Lingelbach, Vina and Asel, (2000)

state that McClelland, a Harvard psychologist, discovered that there is a correlation between the need for achievement and entrepreneurial activity. This discovery suggests that achievement-minded people, like students need to be exposed to knowledge and skills that will enhance entrepreneurship. From these definitions an entrepreneur is a risk taker, an opportunity seeker, and creative minded. Not all students however, have these attributes even if they may have all the knowledge about entrepreneurship.

McMullan and Shepherd (2006) list the following as skills an entrepreneur ought to have: negotiation, leadership, new product development, creative thinking and exposure to technological innovation. The study will interrogate whether or not the entrepreneurship education offered by The Polytechnic subscribes to these theoretical prescriptions as listed by (McMullan & Shepherd 2006).

2.2.2 Entrepreneurship education

Entrepreneurship education, according to Papzan, Afsharzade, & Moradi, (2013) is the purposeful intervention by an educator in the life of a learner to survive the world of business. It has as its focus an action orientation primarily embodied in teaching students how to develop a business plan (Jones & English 2004). Entrepreneurship education has come to denote all forms of knowledge delivery that seek to empower an individual to create real wealth in an economic sector thereby advancing the cause of development of the nation as a whole (Begley, Tan, Larasati, Rab, Zamora, & Nanayakkara 2005). According to Peterman and Kennedy (2003) enterprise education is defined as the process of equipping students or graduates with an enhanced capacity to generate ideas and the skills to make them happen. Entrepreneurship education equips the students with additional knowledge, attributes and capabilities required to apply these abilities in the context of setting up a new business.

Entrepreneurship education gives the students the ability to function effectively as an entrepreneur or in an entrepreneurial capacity (Taylor & Thorpe, 2004). Scot and Twomey 1988 state that developing enterprise ability can enrich both students' educational experience and career prospects especially, within micro and small enterprises.

Entrepreneurship education has also been defined as methods, content and activities that support the development of motivation, competence and experience that makes it possible to implement, manage and participate in value added processes (Papulova and Papulova, 2006). According to the

definition, focus on value creation and inclusion of students in the value creating process, is what separates entrepreneurship education from other types of processes or project based teaching.

Competences are not only based on knowledge and skills, but also on more subjective dispositions and various possible courses of action in uncertain situations (Van Der Sluis and Van Prag 2008). Entrepreneurship education must therefore have the following content; support the development of students' entrepreneurial knowledge and skills, support the development of students personal and emotional resources, provides students with experience in applying knowledge, skills and personal resources in value creating processes, and entrepreneurship education should allow students to reflect on, and take a critical and ethical view of value creation. (Papzan, Afsharzade & Moradi, 2013).

2.2.3 Career Intentions

Some career theorists view careers only in terms of the work one performs (Kets De Vries, 1999). However, a career in entrepreneurship is greatly influenced by what is occurring in a person's life and family as well (Das, 2001). Career intention is therefore defined as a motivational factor that influences career choice behaviour. In psychology literature, intentions have proven as best predictors of planned behaviour, particularly when that behaviour is rare, hard to observe, or involves considerable planning. Thus, entrepreneurship is the type of planned behaviour for which the intention model is ideally suited (Bird 1988, Krueger & Brazeal, 1994). When students acquire knowledge, they put it into action by either acting for or against it. Therefore when they learn entrepreneurship, the knowledge they gain enables them to either have an intention to pursue entrepreneurship or not.

Since career intention is influenced by the knowledge an individual has acquired, it is expected that students that have undergone entrepreneurship education programme (EEP) would in turn make informed decisions regarding their career intentions.

2.3 Theoretical framework

The theoretical framework is based on the theory of planned behaviour (TPB) and adds as key variables in the initial level of intention and the prior entrepreneurial exposure.

A variety of models have been developed by researchers in the field of entrepreneurship. They originate mostly on Bird (1988), and an extension of her initial model, proposed by Boyd and Vozikis (1994) which states that there is an influence of self-efficacy on the development of

entrepreneurial intentions and actions. Shaperos model generated by shaperol and sokol (1982) and Davisons and, Jones (1995) studies of behaviour prove that intents lead to action. It was also extended and applied by Autio, Keeley, Klofsten and Ulfstedt (1997), and they found that there was an entrepreneurial intention among university students who had studied entrepreneurship programmes in USA, Asia and Scandinavia.

The availability of multiple theoretical and empirical works based on the theory of planned behaviour has motivated this choice of framework to the study. In the theory of planned behaviour, intention is the cognitive representation of a person's explicit will to adopt a given behaviour and it is considered as an immediate antecedent of behaviour (Fayolle & Gailley 2013). Entrepreneurial intention is a determinant element to perform entrepreneurial behaviour (Peterman & Kennedy, 2003). It is a state of mind which directs and guides the actions of an individual towards the development and implementation of new business (Bird, 1988).

According to Byabashaija, Katono, and Isabalija, (2010), situational factors include prior exposure to entrepreneurship, availability of role models and social attitude towards entrepreneurship. All together are likely to have a positive bearing on individual's decision to venture into business. According to Naude, Szimirai and geodjuy (2011), entrepreneurs discover entrepreneurship opportunities depending on the information they already have. This information can be obtained from education programmes that aim at building knowledge and skills either 'about' or 'for a purpose of' entrepreneurship, generally, as a part of recognized education programmes at primary secondary or tertiary level of educational institutions. Scherer, Adams, Carley and Wiebe (1989) argue that entrepreneurial intentions are stronger with a growing degree of entrepreneurial role models in close relatives.

According to Ajzen (1992, 2002) in his theory there are three conceptual determinants of intentions. First, the attitude towards behaviour shows the degree to which a person has favourable or unfavourable evaluation on appraisal of the behaviour in question. Second, the subjective norm means the perceived social pressure to perform or not to perform the behaviour. Third, the perceived behavioural control refers to the perceived ease or difficulty of performing the behaviour and it is assumed to reflect past experiences as well as obstacles.

TPB can be used to study and predict different kinds of human intentions to behave in a certain way, for example, health related politics, stop smoking environmental awareness (Armitage&

Corner 2001). The theory has also been applied in entrepreneurial setting to study, for example, comparing Ajzen and Shaperos intention models (Krueger, 2000); factors influencing entrepreneurial intentions in TPB (Autio et al 1997, Hisrich & Brush 1984), gender effects on entrepreneurial intentions (Das, 2001); the entrepreneurial decision to transfer a firm or terminate it (Linan & Chen, 2009); and to predict nascent entrepreneurship (Naude, Szimirai, and Geodjuy, 2011).

Based on the results of previous research, it has been considered that on top of the initial level of intention, other factors linked to prior entrepreneurial exposure are belonging to a family of entrepreneurs (Begley, et al 1997), having been involved in a student organization (Fayolle 2006), living abroad for a certain period of time or taking part in a prior training program (Peterman and Kennedy 2003). Kruger (2000) shows that these various types of exposure to entrepreneurship can have a positive or negative consequence on entrepreneurial intention.

This study is trying to find out if the TPB theory is true for Malawi as a developing nation. This study will show whether the situation in Malawi supports the theory that entrepreneurship education will always have an impact on an individual's career intentions despite the environmental factors or it may prove otherwise for Malawi. The theory further argues that the intention eventually creates the behaviour. If the theory holds for Malawi, it shall mean that most students who have the intentions of becoming entrepreneurs will do so in the near future.

2.4 Conceptual framework

A conceptual framework is a theoretical structure of assumptions. They are principles and rules that hold together the ideas comprising a broad concept.

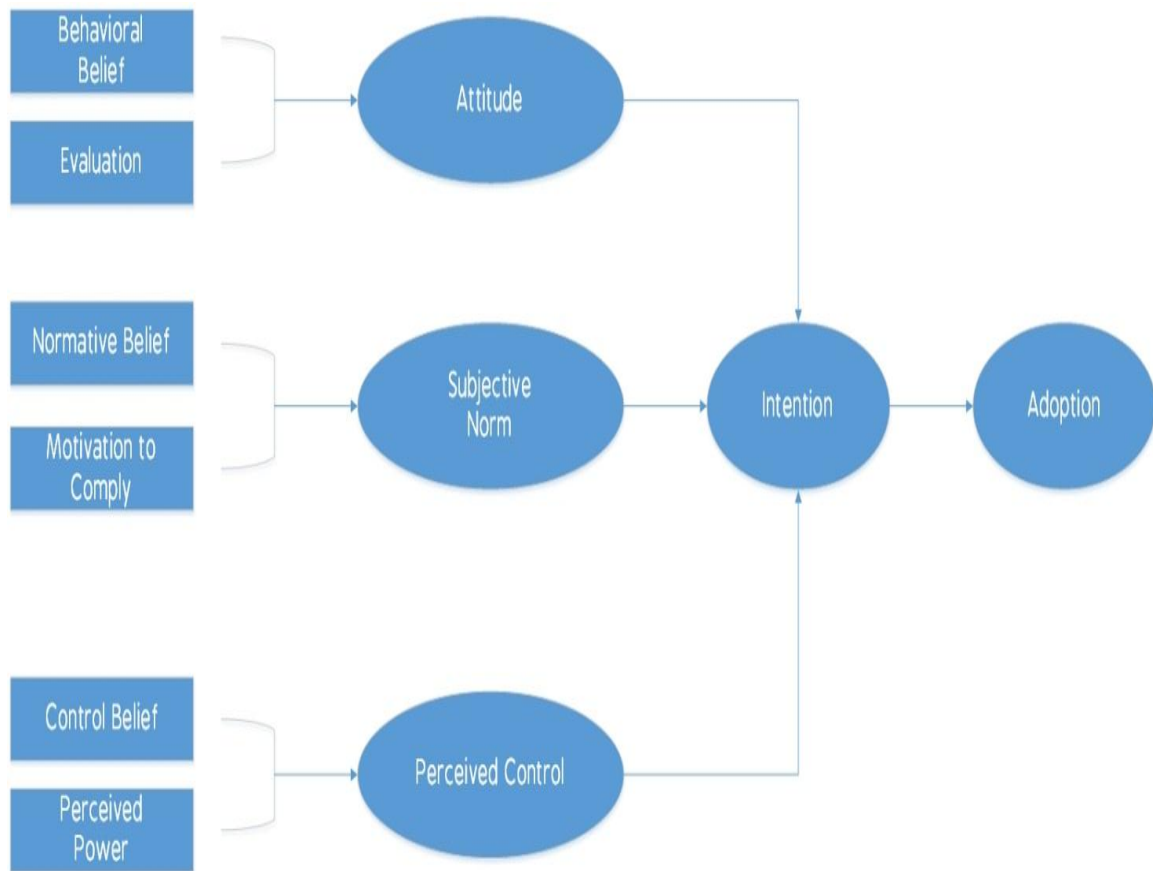


Figure 2.1: AJZEN I. THE THEORY OF PLANNED BEHAVIOUR

Figure 2.1: Conceptual framework

The concept of this research was based on the theory of planned behaviour. The research was proving that the findings of the theory apply to any situation regardless of economic, social, financial and technological differences. The entrepreneurship education given to students provides behavioural believe which creates an attitude leading to intention then adoption. The concept perceives that when students undergo entrepreneurship programmes they will have a positive attitude towards entrepreneurship then it creates an intention which later on leads to adoption of their intentions.

2.5 Impact of Entrepreneurship education on career intentions

Enterprise education has a positive impact on entrepreneurial intentions by providing entrepreneurial skills and knowledge (Peterman and Kennedy, 2003, Rae, 2006). Several empirical studies have shown that the availability of entrepreneurship training courses in academic

programmes combined with a positive image of entrepreneurs within university campuses are two major factors encouraging students to opt for an entrepreneurial career (Scot & Twomey 1988). Scot and Twomey, (1988) observe that courses in entrepreneurship, education in small business management and networks programmes aimed at changing values, attitude and norms are likely to have a positive effect on students career intentions.

Naude, Szimirai and Geodjuy, (2011) studied the impact of entrepreneurship training on the development of entrepreneurial intentions and the perception of self- efficacy. It was a sample of graduates of entrepreneurship, management and other non-business related disciplines that had enrolled in an entrepreneurship education programme (EEP). The survey was done before and after enrolment. The results of the survey before EEP showed that: students who had done entrepreneurship and business management courses had a positive attitude towards entrepreneurship as opposed to the non-business students. The results of the survey after EEP revealed that entrepreneurship education has an effect on career choice. The non-business students had a positive attitude towards entrepreneurship together with the entrepreneurship and management students.

Robertson, Gibbons, Baron, MacIver and Nyfield (1999), found that 67% of those studying entrepreneurship expressed a desire for self-employment. Kabui & Maalu (2012) state that entrepreneurship education can enhance and develop traits that are associated with entrepreneurship and provide skills needed to start business. A key assumption under entrepreneurship education is that entrepreneurship skills can be taught and are not fixed personal characteristics. Van Der Sluise and Van prag (2008) agree with that entrepreneurship as a discipline can be learned. Recent research has paid attention to entrepreneurship promotion among university graduates (Linan & Chen, 2009). Much of this research was done in developed countries and there is a glaring need to conduct a similar study and establish if there is any relationship between entrepreneurship education and entrepreneurial intentions in developed and developing countries like Malawi.

There are a number of reasons why the findings of previous research may not be applicable to Malawi. The structure and resources available to a developing country like Malawi are different from those of the developed countries like America and Britain. Economic growth in Malawi is slow and technology is not as advanced as it is in developed nations. Furthermore, developed

nations tend to advocate free and liberal markets whilst developing nations are conservative with highly regulated markets.

In addition to these, the culture of developed countries is different from that of developing nations. For example in Malawi most students are raised to go to school to attain higher education to become employed (FinScop, 2012). Business start-ups are associated with those that did not make it to university. According to FinScop (2012) only 3% of Malawian entrepreneurs attained college education, the remaining percentage is shared amongst, primary school dropouts, secondary school dropouts and graduates. Whilst in developed nations where literacy levels are above 97% and entrepreneurship is perceived as more rewarding and for the educated, it is the educated individuals who pursue entrepreneurship. These are some of the factors therefore that may influence different perceptions students from the two nations may have of opportunities available in their countries.

2.6 Impact of education on entrepreneurship

The economic evidence on the role education plays on career choice and performance are mixed. Education enables one to get employment with better pay, at the same time education facilitates success in a business. Generally, education improves performance in all areas; more education is correlated with higher wealth and lower start-up costs for enterprises (Van der Sluise & Van Praag, 2008). Education provides diversification of strategies in a business. In Malawi, it has assisted in the diversification of farming activities as it has generated better opportunities from outside (Hatlebakk, 2009).

According to Hattab (2014), education can further impact on business performance through increased managerial ability. Education increases the survival rate of a business through the facilitation of improved capabilities of the entrepreneur, including adjusting to new external conditions and adopting new technology.

If the graduates in Malawi engage in entrepreneurial activities, they are most likely to succeed because they would have better managerial skills, they would be able to seek opportunities outside their field of major and would easily adopt and understand new technology.

2.7 Entrepreneurship education at global level.

A study by Klein (2006) looked at alumni from universities of Icesi, Cali, and Colombia in order to find out which proportion of alumni started their own business in the condition and characteristic

of their business. It was found out that the entrepreneurial courses and extra-curricular activities did help alumni in starting their own business venture and succeeded in it.

Chen, Chanand, & Manhood (2009) conducted a study about effectiveness of entrepreneurial education in Malaysia. They found that with an effective entrepreneurship education, students will become successful entrepreneurs that can face today's global economy.

For Indonesia a survey was conducted and the findings showed that the teaching methods and subject material were important for helping students in understanding the entrepreneurship education programme. The teaching methods and subject's materials needed further improvements and develop new teaching methods in order to support students to understand entrepreneurship (Abduh, Martiz & Rushworth, 2012).

2.8 The role of entrepreneurship education in entrepreneurship

Entrepreneurship education plays a great role in developing entrepreneurs. According to Nian, Bakar, and Islam (2014), entrepreneurship education is important because of its ability to contribute to economic growth and job opportunities. This has inspired many universities to offer entrepreneurship education both in academic and non-academic programmes.

However scholars like Klein (2006), and Praag and Ophem (1995), while supporting that entrepreneurship can be taught and learned, the effectiveness of entrepreneurship education still remain to be unseen. Methods of teaching entrepreneurship and learning styles of students are important factors to determine the effectiveness of entrepreneurship education. Not all students are able to follow one particular way of teaching since different students have their own different ways of learning, (Nian, Bakar & Islam, 2014). The success of a learning method differs from student to student.

2.8.1 The importance of business management skills in running a business

Basic knowledge in management is needed at the initial stage of running an enterprise and also later during development stages. As a sole founder or owner of a business right at the beginning, the management of an enterprise is done by the owner. All functions needed with doing business are done by the owner (Papulova & Papulova, 2006).

When an enterprise is successfully expanding, an entrepreneur who is the founder and owner is not capable of running it due to lack of knowledge and managerial skills. As a manager of a business,

he or she should have all the basic skills and knowledge in managerial functions such as: planning, organizing, leading, and controlling. A manager also needs to have an overview of finance, market and marketing development, and competition.

As an entrepreneur, one may be well driven by passion of what they offer, and be focused on what customers want, and how they can gain an edge on their competitors, Chawla and Joshi, (2011). Business management skills help one identify, assess and capitalize on new opportunities.

Business management skills help one to discover how to be a leader that people follow, new time management, how to be in control of one's work and life, effective delegation techniques, powerful goal setting strategies, and how to constantly improve one's abilities.

According to Korten (2001) management skills are a central component of a firm's innovation strategy. Management skills must be a critical driver of small firm's innovation capacity.

Statistics in Canada show that, small firm population is characterised by high rates of turnover, high birth rates and death rates. Cockx, Re Vocht, Helgen and Bockstale (2000) show that over two thirds of micro sized firms (firms < 5 employees) and almost half of small sized firms (5-99) fail within 5 years of start-up and nearly 10% of new SMEs are gone within 10 years. Most of these firms fail due to lack of managerial skills and knowledge.

In the USA several studies conducted prove that there is a range of problems with SMEs and there is a prevailing notion that "small enterprises do not work" (Papulova & Papulova, 2007). Within any given year, over one million SMEs are founded, at-least 40% of those businesses fail within a year, and the failure rate over time is even worse, at-least 80% of the one million will be out of business within five years, and 96% will have closed doors before a decade (Garbe, Djafar & Mansor, 2001).

According to the National Agency for Development of Small and Medium Enterprises in Canada, the reason most businesses fail is because most small businesses are founded by technicians, specialists or professionals in certain fields, e.g. carpenters, lawyers, doctors, plumbers, and engineers, who may form an enterprise based on their skills, without any basic knowledge in business management (Fayolle 2007). The Slovak study further points out that the second most significant reason for not wanting to be in business (right after lack of financial capital) were missing skills and experience needed for conducting business (Hatten 2009).

2.9 Content and structure of entrepreneurship course outline.

Different aims and objectives of entrepreneurship education have been discussed by many authors. The common ones are: increasing knowledge base for the participants, improving their entrepreneurial skills, and to provide participants with the relevant set of skills and competences for establishing a new start up or managing an existing firm (Heinonen & Hytti 2006).

Universities are academic institutions guided and governed by academic principles. When imparting knowledge and skills to its learners, there is a great challenge that lies into crafting an appropriate identity for entrepreneurship education. Entrepreneurship is often associated with practice and everyday activities, and is characterized by its unique, subjective and integrating nature. On the other hand, university education is based on academic research and knowledge and is characterized by a general, functionally specialized objectively rational aim to develop a theoretical and critical thinking of students (Heinonen & Hytti, 2006).

At The Polytechnic's Faculty of Engineering, the module title is Business Management and Entrepreneurship. The module is presented by respective departments but the learning process is managed by the Faculty of Commerce under the department of business studies. The module is covered within a semester of 16 weeks, with four hours per week divided into three hours of lecturing and one hour for tutorials.

The aims of the module are to: introduce to the student clear understanding of characteristics and operations of a business entity; introduce the students to the culture of entrepreneurship and the process of converting dreams into business ventures; and to give the students a clear understanding of key aspects of financial management in business.

The faculty expects the students to demonstrate the following skills and knowledge after undergoing the course: assess the factors contributing to the success or failure of new business ventures; explain the nature and characteristics of an entrepreneur and entrepreneurship; examine and interpret financial statements; produce a viable business plan; and demonstrate understanding of business dynamics, marketing and sales principle strategies.

The content of the modules includes: people and organizational management; finance and accounting for engineering manager; dynamics of business; marketing and sales and entrepreneurship. The mode of assessment is 30% continuous assessment and 70% end of semester examinations.

There are a wide variety of teaching methods that could be used to teach entrepreneurship to student. Nian, Bakar and Islam (2014) mentions of the traditional approach which involves: creation of a business plan or tutorials to the interactive methods such as case studies and guest speakers.

Research in the USA found that the most popular teaching method in the universities was the development of business plans, class discussions and guest speakers (Solomon, 2007).The results showed that traditional teaching methods like creation of business plans still remain popular in USA. It also showed that education institutions are shifting towards a knowledge sharing pedagogy as class discussions and guest speakers are becoming popular.

In Malaysia students claimed that they focused more on the theories that were used in examinations while the practical side of entrepreneurship such as problem solving and decision making were less and developed. This became one of the factors that caused ineffectiveness of entrepreneurship education in Malaysia (Cheng, Chang &Manhood 2009).

2.9.1 Entrepreneurship education for non-business students

A study in Europe by Cockx et al (2000) showed that about two thirds of the higher institutions of education offered entrepreneurship courses to business students while a third or half of the institutions offered these courses to non-business students. Entrepreneurship courses were found to be compulsory for business students to six or ten percent of the institutions.

Fayolle (2005) identified three reasons for teaching entrepreneurship to non-business students, these are: non-business students account for a greater population of the students, and as such there is a vast pool of potential entrepreneurs to be. Secondly, non-business students have several entrepreneurship- characteristics that business students do not have; it could be technical skills or professional skills. Lastly to enhance the relevance of entrepreneurship education for non-business students, there is need to make them aware of the potential business start-ups as a career choice.

Non-business students especially those with an engineering back ground, are likely to end up at positions in innovation and product development (Fayolle 2007).Therefore teaching these individuals entrepreneurship may be critical for the innovation and growth potential of established organizations.

2.9.2 Entrepreneurship as an add on subject

It is argued that most students put more effort on their majors, and do not take add on subjects seriously. However, the need to understand some business basics is considered important for university students regardless of the discipline (Heinonen & Kovalalain, 2008). Abduh, Martiz & Rushworth (2012), argue that although entrepreneurship may not be explicitly considered viable in future career choice today, it is likely that work in future will have more entrepreneurial characteristics than today: employment in a small or medium sized company, contribution to innovation and opportunity recognition in any organization, project based employment, working as a freelancer or practicing ones profession as an entrepreneur (for example medical doctor, lawyers, interpreters).

However Jones and English, (2004) point out that the major challenge of introducing entrepreneurship programmes to non-business faculties is that existing curricula may have limited scope for expansion hence these faculties may not gain as much knowledge as the business students in business management. Sometimes the programmes are voluntary and hence their take up may be relatively low; consequently their effectiveness remains limited in the university as a whole.

2.10 Chapter summary

This chapter has discussed some of the key words of the research: entrepreneurship, entrepreneur and career intentions. It has looked at the impact of education on entrepreneurship where it lists the importance of education. It has also highlighted the importance of business management skills in running a business, as a business grows business management skills become very crucial for the survival and further growth of the business. From the literature it is clear that other studies have proved that entrepreneurship education influences student's career decision. But the problem could be the content, being considered as an add-on course hence not given the right amount of time and dedication by the faculty, and the content not as deep as that of business related courses. It is therefore important to assess the impact of the programme on engineering students; the content being taught, the mode of delivery and assessment and also their attitude towards entrepreneurship programmes.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter looks at the methodology that was employed to carry out the study. The chapter touches on the areas: research design; sampling where sampling frame and sampling technique will be looked at; and the study type and location. The chapter will further look at reliability and validity of the research methods employed, data collection, data analysis, study assumption and limitations. Finally the chapter covers the ethical consideration of the research.

3.2 Research design

This study is wholly quantitative. According to Wyse, Wolfenden, Campbell and Campbell (2011) quantitative research is used when trying to quantify a problem, by way of generating numeric data or data that can be transformed into usable statistics. It is used to quantify attitudes, opinions behaviours, and other defined variables. The two main variables in this research are entrepreneurship education (independent) and career intention (dependent). The data collected is numeric and it is trying to quantify student's career intentions after being exposed to entrepreneurship.

3.3 Sampling

Sampling has been defined as the act, process or technique of selecting a representative part of a population for the purpose of determining parameters or characteristics of the whole population (Veal, 2005).

3.3.1 Sampling frame

Sampling frame defines the whole population from which the sample is to be selected (Veal, 2005). The sampling frame for this research consists of the Faculty of Engineering, second and fifth year students in the 2015/2016 academic year. According to the head count done in class, the faculty has five engineering programmes: BME (42), BEE (73), BIE (26), BAT (20), and BETE (37). However the actual figures in class did not match the records at the registrar's office because the office had not updated its system for the academics year.

3.3.2 Sampling Technique

According to Arber (1993) sampling provides a study with representative subsection of a defined population in order to make inferences about the entire population. This study involved total population sampling; this is a type of purposive sampling technique where you choose to examine the entire population (Arber 1993). The entire population consisted of 100 second year students and 93 fifth year student in which 44 were female students and 149 male students. The researcher chose total population study because the population was well defined and small. The population shared an uncommon characteristic; all students were at the time of the study pursuing engineering programmes at the Polytechnic. There are two main advantages of total population study and these are: it involves all members within the population therefore it is possible to get a deep insight into the phenomenon one is interested in (Zimkund, 2010). With a wide coverage of population there is also a reduced risk of missing potential insights from members that are not included. The second advantage according to Zimkund (2010) is that total population is a purposive sampling technique, this means that it is not possible to make statistical generalisation about the sample being studied.

Total of 193 students were sampled, of which 100 were second year students and 93 were fifth year students. No sampling method was adapted to measure gender representation because from the figures, females were not well represented. In second year there was only a single female student in BEE; the rest of the programmes had no female students. In both years all together there were a total of 44 female students in BEE, BAT, BETE, and BIE, with no females in BME. The table below shows the number of participants in each programme.

Table 3.1: Sampling frame

| Programme | Males | Females | Total |
|------------------|--------------|----------------|--------------|
| BME | 20 | 0 | 20 |
| BEE | 46 | 7 | 53 |
| BIE | 29 | 18 | 47 |
| BAT | 32 | 10 | 42 |
| BETE | 22 | 9 | 31 |
| | 149 | 44 | 193 |

3.3.3 Sample size

Participants in the study consisted of students who were, at the time of the study, in their second year and fifth year of study in Bachelor's Degree in engineering respectively. Students at the university level start contemplating different occupational decisions including starting their own business. The total number of students is 193 with 100 in second year and 93 in fifth year. The sample size included all students in the Faculty of Engineering pursuing Bachelor of Science in Mechanical Engineering (BME), Bachelor of Science in Electrical Engineering (BEE), Bachelor of Science in Industrial Engineering (BIE), Bachelor of Science in Automobile Engineering (BAT) and Bachelor of Science in Telecommunication (BETE). Entrepreneurship and business management is introduced to engineering students in the fifth year, the course is designed in such a way that student should have a basic knowledge in running a business.

3.4 Study Type

This study is cross sectional. Zimkund (2010) defines a cross sectional study as a type of observational study that analyses data collected from a population, or representative subset, at a specific point in time. Other scholars also call it transversal study or prevalence study. A cross sectional study involves using different groups of people who differ in the variable of interest but share other characteristics such as education background, socioeconomic status and ethnicity. The fifth year students and second year students have some things in common, such as education background, being from engineering department, both pursuing non-business related field, and having being exposed to the very same learning environment. The fifth year group did entrepreneurship and the second year is the control group.

3.5 Study Location

The study was done at The Polytechnic campus in the city of Blantyre. The location was chosen because of a number of factors. Firstly the college is a public university that has been around for about fifty years. The Faculty of Engineering has just introduced entrepreneurial education and the students do not have academic and professional knowledge in business related education. The curriculum offered at the college is tailor made for the country's needs and expectations.

Secondly, the college is centrally located in the city of Blantyre where the researcher resides. This helped the researcher to easily manage time and financial resources.

3.6 Reliability and Validity

Validity is the degree to which any measurement approach or instrument succeeds in describing or quantifying what it is designed to measure (Zimkund, 2010). According to Golafshan (2003), validity refers to whether the research is really measuring what it intends to measure. It provides answers to the research question, and it further provides the answers using appropriate methods and procedures. Validity is achieved by ensuring the sample selection is unbiased (Veal, 2005).

The researcher had selected all second and fifth year engineering students. This had eliminated unbiased sample selection because every member in the sampling frame was part of the sample.

Reliability of a measure is the degree to which a measurement technique can be depended upon to secure consistent results upon repeated application (Zimkund 2010). Reliability of a sample can be achieved by selecting a large sample. In this research a large sample will be selected, by using whole population of engineering students in second and fifth years.

3.7 Data collection

Data was collected using closed ended questionnaire which was designed in order to measure the variables that have an impact on entrepreneurial intentions. The questionnaire was distributed to all engineering students in second and fifth year. All items were built on a five-point likert type scale.

3.8 Data analysis

Veal (2005) defines data analysis as a process of examining something in order to find what it is or how it works. The data collected was analysed manually and using excel spread sheets. Most of the data was displayed in tables, graphs and charts and mostly the figures were converted into percentages.

3.9 Study assumptions

The study was based on the following assumptions: firstly, the researcher assumed that the sample or population selected was representing several people from the society. These included the mature entry group who have been exposed to employment or job seeking, and the normal entry group representing graduates who have never been in a formal employment or had any formal career. Secondly, it was assumed that what the students feel about entrepreneurship in the present day would be similar to what they will believe in the near future or after graduating. Lastly it was

assumed that the behaviour of the engineering students is similar to all non-business students at the university.

3.10 Study limitations

The study is an academic paper, and the research had to be done within six months. This was a limitation because it was going to be necessary to find if the intention of the students had turned into reality. The fifth year students needed a follow up questionnaire two years after completing their tertiary education. To overcome this challenge the researcher used a control group, the second year students.

Secondly, the research was only conducted at the University of Malawi's Polytechnic in Blantyre. But other universities like Lilongwe University of Agriculture and Natural Resources LUANAR and Mzuzu University MZUNI, have engineering students who have done entrepreneurship education. This was due to limited financial resources for the researcher to travel to other regions.

3.11 Research and ethical considerations

According to David and Resnik (2011), ethics are norms for conduct that distinguish between acceptable and unacceptable behaviour. Norms promote aim of a research such as knowledge, truth, and avoidance of error. This means ethics would prohibit fabrication, falsifying or misrepresentation of research data. Ethics also promote values that are essential to collaborative work such as trust, accountability, mutual respect and fairness.

The three areas of ethical concern in a research are: relationship between science and society, professional issues and treatment of research participants.

The relationship between science and society does not relate much to social science research as it does to pure science. It is important for researchers to study what is considered important to a society at a given time. At the moment entrepreneurship is very relevant to Malawi and studies relating to it are considered important as government is trying to find ways of promoting and teaching entrepreneurship to the youth in order to promote a culture of self-employment.

The researcher did adhere to professional issues by using appropriate research methods, correct reporting, use information appropriately and avoid bias. There was fabrication or alteration of results in form of duplication or partial publication.

Ethical issues relating to treatment of participants, and informed consent to all participants were adhered to as the students were notified in what they were participating in, through their lecturers or heads of department.

In terms of freedom to withdraw, although the participating students were not informed, participants had the freedom to withdraw at any time without any penalties.

In case of confidentiality and anonymity, the researcher did not in any way reveal the identity of the participants to anyone. Furthermore, the identity of every participant had not been known by anyone including the researcher as no names were used in answering of the questionnaires.

3.12 Chapter summary

This chapter has described how and where the research was conducted. The following have been presented in the chapter: research design, sampling, the sampling frame, and the sample size. The chapter further discussed the study type and how the data was analysed. It also discussed the study location, issues of reliability and validity, and the technique used in collecting data. It further presented the limitations of the study, and how ethical issues were handled.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter presents the results of the data analysis relating to responses from The Malawi Polytechnic students, a constituent college of the University of Malawi, who enrolled in the engineering courses. The first category of students are in Year 2 and has not taken Entrepreneurship as a core course. The second category is made up of students who have taken Entrepreneurship as a core course. These are students in Year 5.

The students who participated in the questionnaire survey were those enrolled in Bachelor of Science in Industry Engineering, Electrical Engineering, Mechanical Engineering, Energy Engineering and Telecommunications Engineering from the 2015/2016 academic year. Strict confidentiality and privacy was maintained while collecting the data with the approval obtained from the Academic Registrar.

4.2 Profile of the Respondents

The personal background questions helped to categorize respondents by asking them about their current level of study, age, and the programme they are studying. This data helped to gain insights in other dependent variables regarding entrepreneurial intention. These questions helped to make sure the samples were similar for different students. For example this allowed the researcher to check whether the students' that were being compared were of similar average age and follow similar programs.

Table 4.2: Profile of Respondents

| Characteristic | BME % | BEE % | BIE % | BAT % | BETE % | TOTAL % |
|-----------------------|-----------------|-----------------|-----------------|-----------------|------------------|-------------------|
| Gender | | | | | | |
| Male | 10 | 25 | 15 | 16 | 10 | 76 |
| Female | 1 | 4 | 10 | 0 | 5 | 24 |
| Age | | | | | | |
| 15-20 | 10 | 5 | 6 | 15 | 13 | 49 |
| 21-30 | 3 | 9 | 4 | 6 | 2 | 24 |
| 31-35 | 5 | 7 | 1 | 2 | 2 | 17 |
| 36 over | 5 | 0 | 5 | 0 | 0 | 10 |
| Entry | | | | | | |
| Normal | 20 | 19 | 21 | 15 | 8 | 83 |
| Mature | 5 | 2 | 10 | 0 | 0 | 17 |
| Level of study | | | | | | |
| Year 5 | 21 | 3 | 2 | 10 | 9 | 45 |
| Year 2 | 15 | 9 | 11 | 10 | 10 | 55 |

Descriptive statistics is used in the study to analyse the demographic variables. The demographic variables measured in the study consisted of four items namely; gender, age, current program of study and nature of entry.

Finally the demographics established that 37 (20%) of the total respondents were studying Bachelor of Science in Mechanical Engineering, 73 (40%) respondents were studying Bachelor of Science in Electrical Engineering, 16 (9%) were studying Bachelor of Science in Industrial Engineering, 20(11%) were studying Bachelor of Science in Automobile Engineering and 37 (20%) were studying Bachelor of Science in Telecommunication Engineering. The demographic analysis is summarised in the tables below.

Table 4.3: Programme of Study

| PROGRAMME | NUMBER | PERCENT |
|-----------|--------|---------|
| BME | 18 | 10 |
| BEE | 53 | 29 |
| BIE | 45 | 25 |
| BAT | 38 | 21 |
| BETE | 29 | 16 |
| TOTAL | 183 | 100 |

4.2.1 Response Rate

The researcher distributed questionnaires to all second year and final year students doing engineering courses. In total there were 193 students in second and fifth year. In order to keep the non-response rate to a minimum, instructions were given to the academic staff that assisted the respondents in filling the questionnaires in a correct manner. The questionnaires were given out to the respondents and were instructed to complete and return them immediately. However, in cases where the respondents were unable to complete the questionnaires it was arranged to collect them later that week.

Ninety-three (93) questionnaires were distributed to the second year students and one hundred (100) questionnaires were distributed to final year students. One hundred and eighty (180) questionnaires were returned representing 93% response rate. The response rate for the second year students was 100% whereas for fifth year students was 90%.

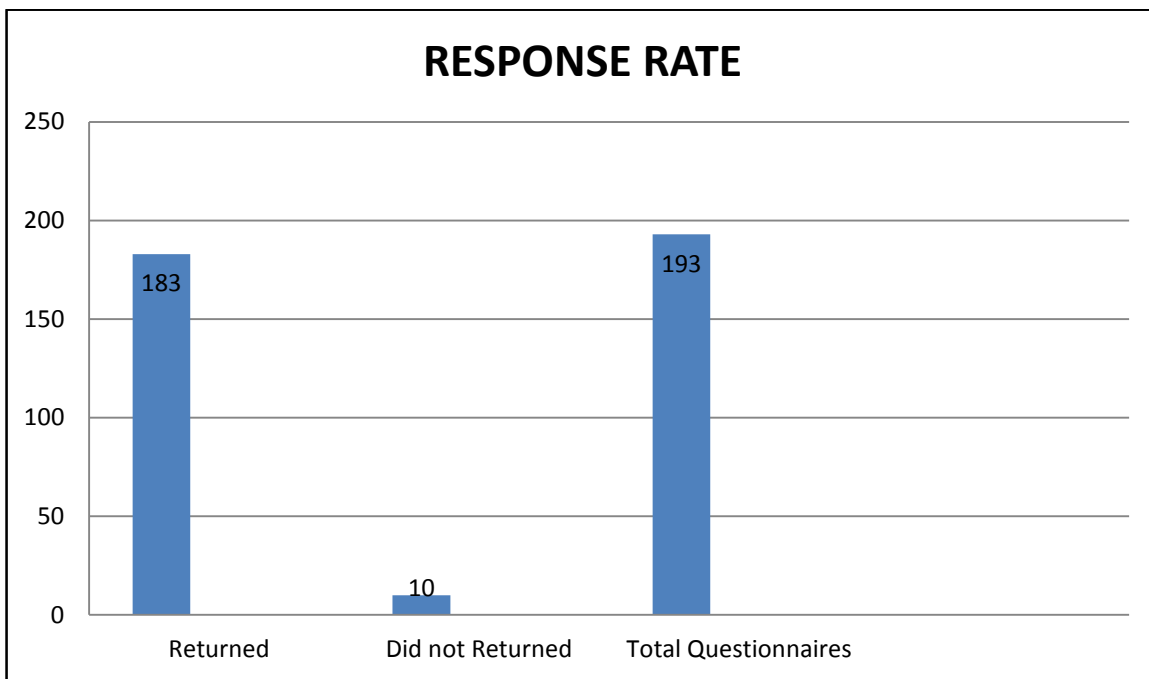


Figure 4.2: Response rate

4.2.2 Data Cleaning and Screening

After collecting the questionnaires, the data was manually tabulated and entered into excel spread sheet. A total of 193 questionnaires were distributed and the questionnaires returned to the researcher for analysis were 183 questionnaires (94.8%). In most cases, questionnaires use positive questions to extract data from respondents (Zikmund, 2003; Veal, 2005). In the study, for positive related questions, the Likert scale recorded as 1 – strongly disagree, and 5 – strongly agree. Two questionnaires were not properly completed therefore the researcher removed them accordingly from the list.

4.3 Analysing data using Research objectives

The main objective of the study was to establish the effectiveness of entrepreneurship education in developing entrepreneurial intentions among university engineering students studying at The Malawi Polytechnic. Entrepreneurship education, also known as entrepreneurial education is used to deliver entrepreneurial knowledge, skills and abilities to the students that would help them succeed in their career as entrepreneurs. Entrepreneurship education trains the student to gain innovative enterprise skills and capture the opportunities to succeed in business venture.

The following were specific objectives:

- i. Find out students' perceptions towards entrepreneurship education programmes.
- ii. Assess the relevance of course content in entrepreneurship education in Malawi to university students.
- iii. Examine the relationship between entrepreneurship education and students career choices in Malawi.
- iv. Are the teaching methods appropriate for entrepreneurship?

4.3.1 Discussion of Analysis of Objectives

4.3.1.1 Objective 1: Establish the perception of university students towards entrepreneurship in general.

The first objective was to establish the perception of university students towards entrepreneurship in general. The students were required to indicate the extent to which they agree or disagree on a five point Likert scale whether they would want to start their own business after completing school. To assess whether the students had any entrepreneurial intentions, the scale was merged to two points –agree and disagree, with those who scored 3-neutral were considered as disagreeing with the statement.

Out of 183 students, 118 students are in favour of entrepreneurship, which represents 64%. Year five students demonstrated a greater desire to pursue entrepreneurship. 63% of the fifth year students want to pursue entrepreneurship and only 55% of the second year students want to be entrepreneurs in the future. On the desire to pursue a career in entrepreneurship between students who have mentors, year two students were more influenced by mentors than fifth year students. However fifth year students are more inspired by university education (59%), and business ideas (25%) as compared with the second year group.

This is summarised in the table below.

Table 4.4: Triggers of entrepreneurship.

| ITEM | YEAR 2 | | YEAR 5 | | TOTAL |
|--|--------|----|--------|----|-------|
| | YES | NO | YES | NO | |
| Respondents favouring entrepreneurship | 55 | 45 | 63 | 27 | 183 |
| Respondents inspired by role models | 52 | 48 | 38 | 52 | 183 |
| Respondents inspired by family members | 46 | 54 | 32 | 58 | 183 |
| Respondents inspired by business idea | 5 | 95 | 23 | 67 | 183 |
| Respondents inspired by university education | 48 | 52 | 53 | 37 | 183 |

The findings are in tandem with the literature review, and several other studies (Kets de Vries, 1977; Hisrich & Brush, 1984; Scott & Twomey, 1988; Scherer *et al.* 1989; Taylor & Thorpe, 2004) exploring the reasons why individuals become entrepreneurs, have identified previous exposure to business, role models and networks as important. Individuals who have family members or close friends who are entrepreneurs tend to be more likely to start their own business than those individuals who have not experienced the same level of exposure to entrepreneurship (Collins & Moore, 1970; Cooper & Dunkelberg, 1984). Shapero and Sokol (1982) and Praag and Ophem (1995) suggested that willingness and presence of an opportunity are both necessary conditions for self-employment to occur and both were found to be enhanced through experience gained in entrepreneurship.

Krueger and Brazeal (1994) argued that an individual's situational perceptions based on past and current experiences can influence their entrepreneurial intention. Bandura (1986) has linked previous entrepreneurial experience to self-efficacy and derived that previous entrepreneurial experience may lead to increased levels of entrepreneurial self-efficacy given the opportunities provided for role-modelling and learning through doing. McMullan and Shepherd (2006) have studied entrepreneurship education and previous entrepreneurial experience together and found both of them as important motivators and contributors to the formation of entrepreneurial intentions provided there is a feasibility of entrepreneurship and desirability of individual.

4.3.1.2 Objective 2: Assess the relevance of course content in entrepreneurship education in Malawi to university students.

The second objective was to assess the relevance of course content in entrepreneurship modules to the engineering students at the polytechnic. Students should be exposed to more on analytical, creative thinking, problem-solving, innovative, decision-making and effective communication skills, in their entrepreneurial programs and activities to motivate them towards entrepreneurship. A 'student-centred' learning approach, instead of a 'teacher-centred' learning approach is more suited to entrepreneurship students. This approach is based on an individual's creativity, analytical and working skills, and even with the intent of changing of behaviour towards entrepreneurship. Preparing students for business plans and starting business projects would increase their attitude towards entrepreneurship, where they are actively involved in such projects which could eventually turn out as a small business for them in future. The universities could encourage internship and partnership with small medium industries for the students to actively participate and involve in business projects.

The respondents were therefore asked relevant questions where they were required to express their views through a likert scale from 1 to 5. The respondents were asked to express the extent of the depth of knowledge in the following areas of entrepreneurship: start up basics, business planning, family entrepreneurship, team recruitment and management, responsibilities of an entrepreneur, entrepreneurship finance and problem recognition and solution development. To assess whether the students had in depth knowledge of the areas listed above, the scale was merged to two points –agree and disagree, with those who scored 3 (neutral) were considered as disagreeing with the statement. The results are summarised in the Table below.

Table 4.5: Depth of knowledge

| To what extent do you have in depth knowledge in the following areas: | Year 2 Knowledge level | Year 5 Knowledge level |
|--|-------------------------------|-------------------------------|
| 1. Start-up basics | 20% | 64% |
| 2. Business planning | 12% | 71% |
| 3. Family Entrepreneurship | 17% | 60% |
| 4. Team Recruitment and Management | 17% | 75% |
| 5. Responsibilities of an Entrepreneur | 10% | 68% |
| 6. Entrepreneur Finance | 24% | 58% |
| 7. Problem Recognition and Solution Development | 13% | 41% |

The table 4.4 above shows the differences of the scores between Year 2 students who had not yet done an Entrepreneurship course and Year 5 students who had just completed the Entrepreneurship course. Knowledge about the skills of an entrepreneur for Year 5 students is 66% as compared to 18.3% of the Year 2 students.

Respondents from year five were also required to indicate the skills that they desired to learn from entrepreneurship education as well as skills that they acquired during their learning process. The desired skills of respondents in descending order are problem solving skills (72%), leadership and communication (68%), networking (68%), new product/services development (63%), implementation of ideas (61%), team recruitment (59%), and finance management (55%).

Table 4.6: Skills and depth of knowledge in descending order

| SKILLS | Depth of knowledge (Descending Order) |
|----------------------------------|--|
| Problem Solving | 72% |
| Leadership | 68% |
| Networking | 68% |
| New product/ service development | 63% |
| Implementation of ideas | 61% |
| Team Recruitment | 59% |
| Finance Management | 55% |

Scott and Twomey (1988), find a positive correlation between entrepreneurship education and entrepreneurship outcomes. Following education in entrepreneurship increases the likelihood of becoming self-employed, founding a business as well as the financial performance of the business. Being a successful entrepreneur requires competencies. Even though entrepreneurs respond to a certain market opportunity, they still think about starting a business and do not become entrepreneurs out of a reflex.

4.3.1.3 Objective 3: Examine the relationship between entrepreneurship education and students career choices.

The third objective was to examine the relationship between entrepreneurship education and students career choices in Malawi. The measure of attitude towards entrepreneurship is in accordance with the proposal by Linan and Chen (2009). Linan and Chen (2009) measured attitude towards entrepreneurship through an aggregate attitude scale which included five statements. In this study, attitude towards entrepreneurship has been measured through a 5-point Likert-scale with four items. Respondents were asked to rate their level of agreement (from 1=strongly disagree to 5=strongly agree) with four different statements about their personal valuation of being an entrepreneur.

The researcher used the following statements in order to measure the attitude towards entrepreneurship: (a) I am ready to do anything to become an entrepreneur, (b) My professional goal is to become an entrepreneur, (c) I will make every effort to start my own firm in the future (d) I am determined to start my own firm in the future (e) I have got intentions of starting my own firm in the next 10 years.

In terms of entrepreneurial intentions of student’s right after their studies, 61% of the final year students who participated in the entrepreneurship program have intentions to found their own business. Meanwhile, only around 28% of the second year students who had not yet learned entrepreneurship course intend to be a founder (see Figure 4.3).

The researcher used ‘entrepreneurship education’ as an independent variable and entrepreneurial intention as dependent variable. The dependent variable “entrepreneurial intention” has been measured in various ways. In order to construct this dependent variable, the researcher made the following statements to which the respondent could either agree or not agree. The statements are: (a) I will make every effort to start and run my own firm, (b) I am determined to start my own firm and (c) I have got the intention of starting own firm in the next 10 years.

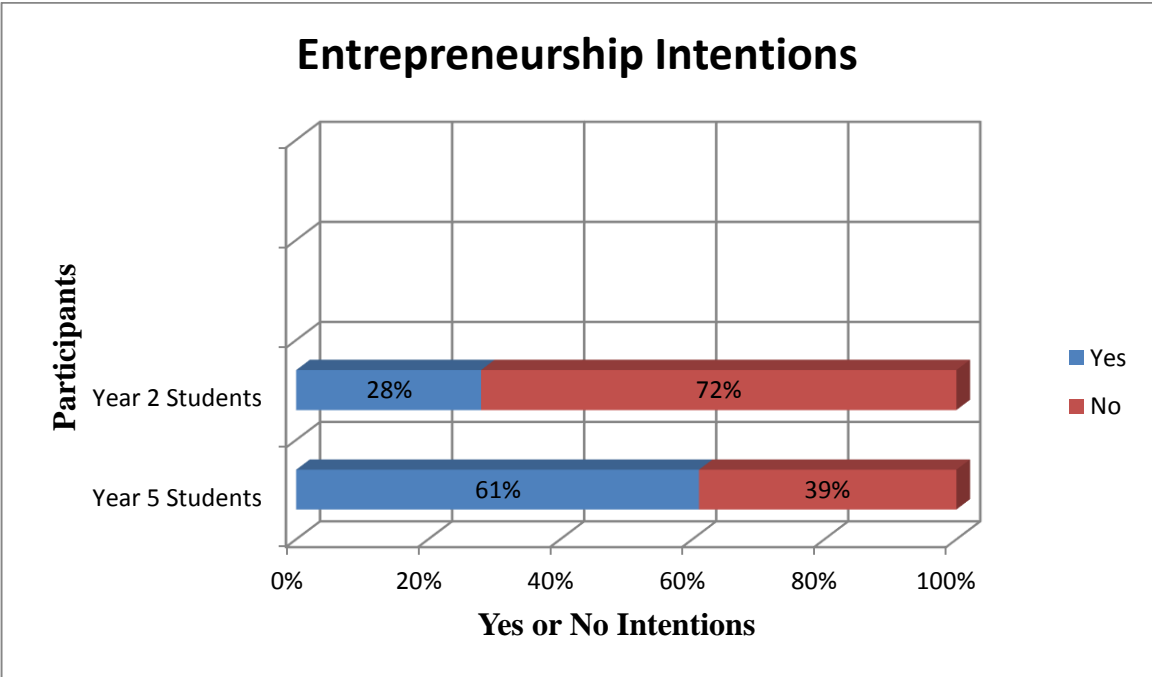


Figure 4.3: Percentage of participants in an entrepreneurship program and non-participants who intend to found own business right after their studies.

The results show that participation in an entrepreneurship education exerts an effect on entrepreneurial intention after studies through attitude towards entrepreneurship.

Nevertheless, females in Year 5 who took entrepreneurship education courses are more likely to have higher entrepreneurial intention ten years after their studies than females in Year 2 who have not yet done an entrepreneurship course.

Regarding male students, significant results are obtained for both entrepreneurial intentions directly and ten years after studies. In particular, Year 5 male students who participated in entrepreneurship education course are more likely to have higher entrepreneurial intention than Year 2 students who have not yet done entrepreneurship course.

4.2.1.4 Objective four: examine the relationship between delivery methods and students career intentions in Malawi.

The fourth objective was to find out how much the methods of delivery have impacted on the students in their career choices. In terms of mode of delivery respondents were required to choose one or more teaching methods that was used in entrepreneurship education. The most common teaching method that was used in delivering entrepreneurship subject is lectures (89%), case studies (43%), business simulation (10%) and multimedia exercise (10%). However, all students indicated that they did not use any of the following teaching and learning methods: guest speakers, role play, practices and interviewing entrepreneurs. Although the interactive teaching methods have been applied in entrepreneurship education yet the regularity still remain low. The faculty should increase the regularity of these teaching methods in delivering entrepreneurship education as traditional teaching methods might not able to teach some of the entrepreneurship knowledge and skills to the students (Klein, 2006).

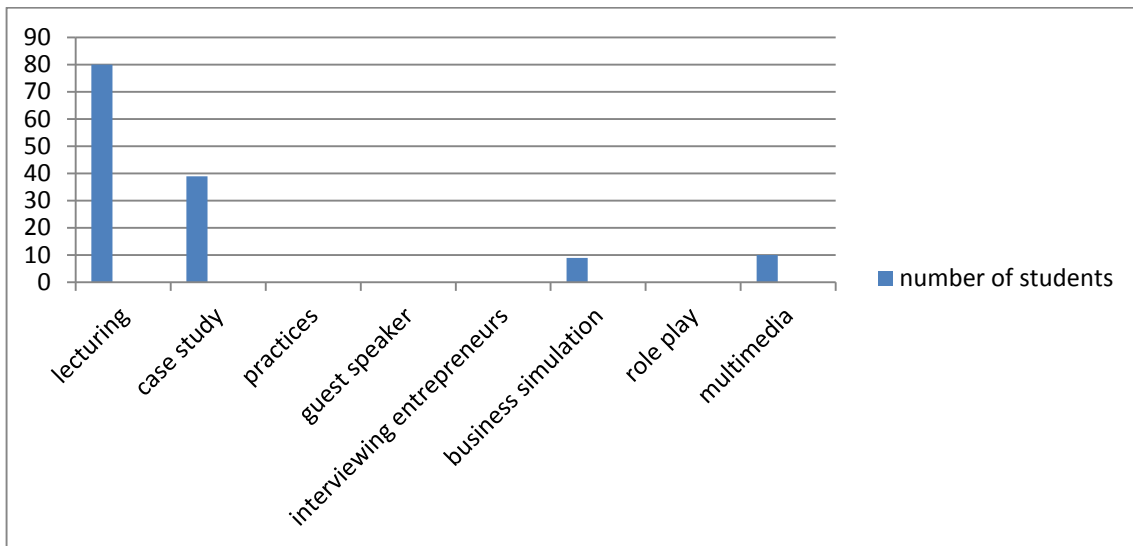


Figure 4.4: Teaching methods employed at the faculty.

The most common teaching method in this programme was lecturing with 80 respondents, second is case study with 39 respondents, business simulation and role play each had 9 and 11 respectively; other teaching methods like guest speaker, role play and interviewing entrepreneurs were not used in the learning process.

The respondents were also required to choose one or more assessment methods that were used in entrepreneurship education. The most common method used was written exams, while the second most used was group projects. Practices were never used at all giving 0%.

Table 4.7: Mode of assessment in the faculty

| Mode of assessment | Number of students |
|------------------------|--------------------|
| Written exams | 98% |
| Oral presentation | 27% |
| Writing business plans | 67% |
| Individual projects | 10% |
| Practical's | 0% |
| essay | 53% |
| Group projects | 38% |
| | |

From the list above the mode of assessment was listed in descending order, 98% of the respondents chose written exams as the common method of assessment. None of the respondents indicated that practical's were used in assessment.

4.4 Chapter summary

The chapter covered the analysis of the research based on the four specific objectives. The data collected from the respondents has shown that entrepreneurship education has an effect on students' career choices. The evidence can be seen from the results that the respondents who had done entrepreneurship expressed a greater desire of becoming entrepreneurs and they acquired more knowledge in entrepreneurship and business management as compared to the respondents who did not learn entrepreneurship. However other factors like mentors, family business and college friends also affect career decisions. The preceding chapter will conclude the research and provide recommendations where necessary.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the findings based on the theoretical framework and research objectives, and makes recommendations. The main objective of this research was to find out the impact of entrepreneurship education on students career intention. The study was carried out in Blantyre at The Polytechnic, constituent college of the University of Malawi. The sample was a population of all engineering student from second year and fifth year. The second year students were a control group because they had not learned entrepreneurship education at the time of study. The fifth year students had just completed their courses in entrepreneurship and business management.

Fayolle (2006) suggests that entrepreneurship education is effective when it enables participants to develop higher capacity for imagination, flexibility, and creativity as well as developing ability to think conceptually and to perceive change as opportunity.

The findings indicate that entrepreneurship education influences students' career choices. It has been established that students have a positive perception about entrepreneurship. With the right combination of teaching methods, and enough knowledge and skills imparted to them through the course content, student will be able to realize their dream of running their own businesses in future.

5.2 Conclusion

The following are the conclusions drawn from the research, based on the objectives.

5.2.1 The perception of university students towards entrepreneurship.

The study reveals that students in year five have a positive perception towards entrepreneurship. They demonstrated a great desire of pursuing entrepreneurship after completing school. Further the students who had done entrepreneurship education programmes demonstrated a greater desire than those who had not done entrepreneurship education. 70% of the final year students showed desire to pursue entrepreneurship and 53% of the second year student desire to pursue entrepreneurship.

5.2.2 The relevance of course content in entrepreneurship education

The second objective was to assess the relevance of the course content in entrepreneurship education to university student. Based on the course outline, the Faculty of Engineering provides

the following indicative knowledge: people and organisation, finance and accounting for engineering managers, dynamics of students, marketing and sales and entrepreneurship. Final year students who had done entrepreneurship courses demonstrated very little knowledge in problem recognition and solution development. But the knowledge they displayed in the other areas of study are prove that the course content of entrepreneurship education offered at the faculty has equipped the student with adequate skill in entrepreneurship.

5.2.3 The relationship between entrepreneurship education and students career choices.

The third objective was to examine the relationship between entrepreneurship education and students career choices in Malawi. Most of the final year students had entrepreneurial intentions and very few of the second year students had entrepreneurial intentions. The results show that participating in entrepreneurship programmes exerts an effect on entrepreneurial intention.

5.2.4 The relationship between delivery methods and students career choices.

The last objective analysed the relationship between delivery methods and students career choice. The study revealed that the students underwent the traditional way of learning, which is lecturing and a few case studies, with other teaching methods not being used in the learning process. If all the teaching methods were employed the findings of the study were going to give more evidence that entrepreneurship education does have a positive influence on student's career choices.

All in all, there is clear evidence that entrepreneurship education contributes to students intentions to pursue entrepreneurship, most of the final year students who had done entrepreneurship education had expressed greater knowledge in what they had learned in class. Secondly more than half of the fifth year student who had done entrepreneurship had the intention of being entrepreneurs. However the mode of delivery was biased most of the teaching methods in entrepreneurship were not used and the content was very shallow, these factors could have affected the results of the study. On the other hand the assessment methods used were not good enough to measure student's skills and knowledge in entrepreneurship and business management.

5.3 Recommendations.

Based on these findings, it is recommended that the Faculty of Engineering needs to increase the consistency of other teaching methods such as business simulation and involvement in business activities beside lectures. This is because some of the entrepreneurship knowledge and skills cannot be gained through traditional teaching methods. Only the interactive teaching methods are able to

develop these knowledge and skills. Klein, (2006) gives an example of leadership, that it cannot be learned by reading from books or writing examinations but only through real time practical in business activities and other interactive methods. Hence, the Faculty needs to increase the innovative teaching methods in order to teach their students about entrepreneurship knowledge and skills effectively.

The effectiveness of entrepreneurship program is determined by its strong influence to involve students in entrepreneurs' activities. Therefore, the Faculty of engineering needs to organize more entrepreneurship activities to influence the students get involved in business activities. Through the exposure in business activities, the students will be influenced and motivated to engage more in entrepreneurship education. There is also a need to expand the subject matter for entrepreneurship education at the faculty. More facilities need to be prepared for entrepreneurship education as the current facilities are unable to handle the additional improvement. As mentioned earlier, various studies about entrepreneurship education had been conducted and they suggested that investment in entrepreneurship education can bring huge benefits to the economy and society.

5.4 Area for Further Research

Below are some of the areas for further study to find out the impact of entrepreneurship education. This study focused on the entrepreneurship education at the Faculty of Engineering only. Hence, a more comprehensive research of entrepreneurship education in the context of Malawi needs to be carried out to examine the overall performance of entrepreneurship education in Malawi.

Future study on the intentions of engineering students at the University of Malawi the Polytechnic to be involved in business activities could be carried out to examine the reasons and factors that influence them to take part in business activities. Additional research about the relationship between the traditional teaching methods and interactive teaching methods and their impact towards the entrepreneurship education at the faculty also need to be investigated. This is because the different teaching methods will have different feedback when it is applied in entrepreneurship education.

It will be interesting to carry out this research further to enrich our understanding of the extent to which intentions are converted into entrepreneurial actions. This requires a follow up of individuals in this study who indicated a high likelihood of starting businesses of their own in the next three years to see if they actually did. Equally interesting lessons would be learnt from those who have

not realized their intentions. It would be interesting for both policy makers and entrepreneurship course designers and instructors to learn the extent to which reasons for not starting or delaying to start their own businesses are external or internal to the individual. For example, one internal variable suggested by Shapero and Sokol (1982) is the individual's propensity to act. The general belief is that intentions lead to behaviour according to the theory of planned behaviour originated by (Bird, 1998) and proved further by (Ajzen, 1992), but it would be interesting to know what mediates or moderates this relationship in a country where there is a large presence of necessity entrepreneurs (see FinScop, 2012).

5.5 Chapter Summary

In summary the research was investigating the effectiveness of entrepreneurship education in developing entrepreneurial intentions among university engineering students. From the findings, both students who have not yet done entrepreneurship and those who have done entrepreneurship had positive attitude towards entrepreneurship programmes. The relevance of the course content to entrepreneurship in Malawi was evident though there is a need to revisit the course content as most year five students were not conversant with course content such as; problem solving and solution development which is key in entrepreneurship. It has also been found that there is a relationship between entrepreneurship education and students career choice. However, the mode of delivery should move from traditional lecturing to student-centred type of learning. The findings of this study should be interpreted with caution, as the lecturers and heads of departments who designed the course outline were not involved in the study. This report may not apply to other universities or departments because the course content and mode of delivery depends on the resources the department has.

REFERENCE

- Abduh, M. Martiz A. Rushworth S. (2012). An evaluation of the entrepreneurship education in Indonesia: a case study of Bengkulu University. *International Journal of Organisation Innovation*, 4 (4), 21-47.
- Ajzen, A. (1992). Theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*. 50(2), 179-211.
- Ajzen, A. (2002). Perceived behavioural control, self-efficacy, locus of control, and the theory of planned behaviour. *Journal of Applied Social Psychology*, 32(4), 665-683.
- Auriol, E. (2013). *Barriers to formal entrepreneurship in developing countries*. Washington, USA: World Bank.
- Autio, E., Keeley, R.H. Klofsten, M., Parker, G.G.C. & Hay, M. (2001). Entrepreneurial Intent among Students in Scandinavia and in the USA. *Enterprise and Innovation Management Studies*, 2, (2), 145–160
<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.475.5851&rep=rep1&type=pdf>
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. New York, USA: Prentice Hall.
- Begley, T.M., Tan, W.L., Larasati, A.B., Rab, A., Zamora, E. & Nanayakkara, G. (1997). *The relationship between social cultural dimension and interest in starting business: A multi country study, frontiers of entrepreneurship research*. Babson Kauffman entrepreneurship conference, Ghent. Retrieved from: <http://www.babson.edu/entre/fer>.
- Bird, B. (1988). Implementing entrepreneurial ideas: The case of intention. *Academy of Management Review*, 13(3), 442-453.
- Boyd, N.G. & Vozikis G.S. (1994). The influence of self-efficacy on the development of entrepreneurial intentions and actions. *Entrepreneurship Theory and Practice*, 18(4) 63-77.
- Burns, P. (2001). *Entrepreneurship and Small Business: Start-up, growth and maturity*. New York, USA: Macmillan.

- Byabashaija, W. , Katono, I. (2011). The impact of college entrepreneurial education on entrepreneurial attitude and intention to start a business in Uganda. *Journal of Developmental Entrepreneurship*. 16(1), 127-144.
- Campos, H.M. Acuna, L.S.A. Nunodela, J.P. &Valenzuela, F.A.A. (2012). Entrepreneurial orientation in Mexican microenterprises. *Journal of Sustainable Development*, 9 (3), 5-20.
- Castel, V., Phiri, M. & Stampini, M. (2010). *Education and employment in Malawi*. Working Papers Series No. 110. Tunis, Tunisia: African Development Bank.
- Chawla, D. & Joshi, H. (2011). Impact of knowledge management of learning organisation practices in India. *The Learning Organisation*. 18 (6), 501-516.
- Chen, M.Y., Chan. W.S. & Manhood A. (2009). The effectiveness of entrepreneurship education in Malaysia. *Education and Training*, 51(7), 555-226.
- Cho, Y. & Honorati, M. 2013. *Entrepreneurship Programs in Developing Countries: A meta regression analysis*. Policy Research Working Paper; No. 6402. Washington, DC., USA: World Bank. Retrieved from: http://siteresources.worldbank.org/INTLM/Resources/390041-1212776476091/5078455-1398787692813/9552655-1398787896405/Cho-Honorati-Entrepreneurship_Programs_in_Developing_Countries.pdf.
- Cockx, R. ReVocht, S. Heylen, J. & Van Bockstale, T. (2000). *Encouraging entrepreneurship in Europe, a comparative study focused on education*. University of Antwerp, centre for business administration.
- Conry, R. (2013). *The importance of entrepreneurship for jobs, people and a better society*. New York, USA: Word Press.
- Cooper, A.C & Dunkelberg W.C (1986) Entrepreneurship paths to business ownership. *Strategic Management*. 7(1), 53-68.
- Davison, M. & Jones, MB. (1995). A quantitative analysis of extreme choice. *Journal of the Experimental Analysis of Behaviour*, 64(2), 147-162.

- Das M. (2001). Women entrepreneurs from India: problems motivations and success factors. *Journal of Small Business and Entrepreneurship*. 15 (4) 336-352.
- Dubbey, J.M. Chipofya, C.C. Mkandawire, J.A. Kasomekera, Z.M. Kathamalo, O.J. & Machili, G.G. (2007). How effective is our University? A study from University of Malawi. *Higher Education Quarterly*. 45(3), 219-223.
- Fayolle, A. & Gailly, B. (2015). The impact of entrepreneurship education on entrepreneurial attitude and intention: *Journal of Small Business Management*, 53 (1), 75-95.
- Fayolle, A. (2005). Evaluation of entrepreneurship education. Behaviour performing or intention increasing? *International Journal of Entrepreneurship and Small Business* 2 (1), 89-98.
- Fayolle, A. (2007). Handbook of research in entrepreneurship education. Northampton, Edward Elgar publishing inc.
- Freiling, J. & Schelhowe, C.L. (2014). Impact of entrepreneurial orientation on the performance of internationalization. *Open Journal of Business and Management*, 10(4), 169- 199.
- Garbe, A.S. Djafar, F. & Mansor, S.A. (2013). Evidence of opportunity and necessity driven entrepreneurship in Nigeria. *Journal of Small Business and Entrepreneurship*, 9(3) 57- 78.
- Gobbi SM. (2012). Making Youth Entrepreneurship Work in Sub-Saharan Africa. *Journal of Small Business and Entrepreneurship*. 2(1), 305-315. Retrieved from <http://dx.doi.org/10.4236/ojbm.2014.24036>.
- Golafashan N. (2003). Understanding reliability and validity in qualitative research. *The Qualitative Report*, 8(4). 597-607. Retrieved from <http://nsuworks.nova.edu/tqr/vol8/iss4/6>.
- Hall, D.H.T. (2005). Link between higher education and employers in Malawi: the need for dialogue: *Journal of Higher Education Policy and Management*. 27(1), 67-79.
- Hatlebakk, M. (2009). *Livelihood strategies and regional poverty in Malawi*. Bergen, Chr. Michelsen institute.
- Hattab, H.W. (2014). Impact of entrepreneurship education on entrepreneurial intention of university students in Egypt, *Journal of Small Business Management*. 23(18), 146-160.

- Hatten, T.S. (2009). *Small Business Management. 5th Ed.* Washington, DC, Cengage learning.
- Helmchem, T.B. (Ed). (2012). *Entrepreneurship – Born, Made and Educated.* Rijeka, Croatia: InTech.
- Herrington M. D. Kelley R. (2012). *African entrepreneurship. Sub-Saharan African regional report*, IDRC, Canada.
- International Labour Organization. (2012). UN system task team on the Post-2015 UN development agenda: Macroeconomic stability, inclusive growth and employment. Retrieved from: www.un.org/millenniumgoals/.
- Heinonen, J. & Hytti, U. (2008). Back to basics: The role of teaching in developing the entrepreneurial university. *International Journal of Entrepreneurship and Innovation. 11(4)*, 283-292. DOI: 10.5367/ijei2010.0006.
- Hisrich, R. D., & Brush, C. (1984). The woman entrepreneur: Management skills and business problems. *Journal of Small Business Management*, 22 (1), 30-37.
- Jones C. & English J. (2004). A contemporary approach to entrepreneurship education, *Education and Training. 46* (8/9) 416-423.
- Jones, G. & Wahdwani, R.D. (2006). *Entrepreneurship and Business history: Renewing the research agenda.* Retrieved from: <http://www.hbs.edu/faculty/Publication%20Files/07-007.pdf>.
- Kabui, E. & Maalu, J.K. (2012). Perception of entrepreneurship as a career by students from selected public secondary schools in Nairobi. *International Journal of Education and Research. 2(3)*, 101-120.
- Kadzamira, E.C. (2003). *Where has all the education gone in Malawi?* Sussex, Brighton, UK: Institute of Development Studies.
- Kamphanje, B.P. (2012). *Evaluating graduate recruitment programme in Malawian Banking industry.* Retrieved from <http://ssrn.com/abstract=2004505>
- Kets de Vries, M.F.R. (1977). The entrepreneurial personality, a person at the crossroads. *Journal of Management Studies. 14* (1), 34-57.

- Klein (2006) Can entrepreneurship be taught. *Journal of Agricultural and Applied Economics*. 38(2), 429-439. retrieved from: <http://mospcae.library.umsystem.edu/xmlui/bitstream/handle/10355/137/can%20entrepreneurship/20be% pdf>.
- Korten D. (2001). *When corporations rule the world. 2nd ed.* San Francisco and West Hartford, USA: CT Kumarian Press and Berrett Koehler, West Hartford.
- Krueger, N.F. (2000). The impact of prior entrepreneurial exposure on perception of new venture feasibility and desirability. *Entrepreneurship Theory and Practice* 18(1), 5-21.
- Krueger, N.F & Brazeal D. (1994). Entrepreneurial potential and potential entrepreneurs. Retrieved from: <http://cemi.com.au/sites/all/publications/Krueger%20and%20Brazeal%201994.pdf>.
- Kutimm, M. Kallaste, M. Venesaar, U. & Kiss A, (2013). Procedia- social and behavioural sciences. *Journal of Contemporary Issues in Business Management and Education*. 110 (1), 658-668.
- Linan, F. & Chen, Y. (2009), Development and cross cultural applications of a specific instrument to measure entrepreneurship intentions. *Entrepreneurship Theory and Practice*. 33(3), 593-617. Retrieved from: <http://institucional.us.es/vie/documentos/resultados/LinanChen2009.pdf>.
- Lingelbach, D.C. Vina, L. & Asel, P. (2005). *What's distinctive about growth oriented entrepreneurship in developing countries?* Available at: <http://Users/Dell%20User/Downloads/SSRN-id742605.pdf>.
- Mcmullan, C.M. & Shehperd, D.A. (2006). Entrepreneurial action and the role of uncertainty in the theory of the entrepreneur, *Academy of Management Review*. 31 (1), 132-152.
- Ministry of Industry and Trade (2012). Finscop MSME Malawi survey 2012. www.finmark.org.za/finscope-malawi2012-MSME-survey/.
- Naude, W. Szirmai, A. & Geodjuy, S. (2011). *Innovation and Entrepreneurship in Developing Countries*. London, Oxford University Press.

- Nian, T. Bakar, R & Islam, A. (2014). Student's perception on entrepreneurship education: the case of university of Malaysia Perlis. *International Education Studies* 17(10), 223- 256.
- Oyeyola, O.T. Ajibosh, I.O. Raimi, L. Raheem S. & Igwe C.N. (2013). Entrepreneurship for sustainable economic growth in Nigeria. *Journal of Business Management*. 2(2), 197-215.
- Papulova, E. & Papulova, Z. (2006). *Competitive Strategy and Competitive Advantage of Small and Midsized Manufacturing Enterprises in Slovakia*. E-leader Slovakia International leadership and networking conference, Nitra.
- Papzan, A. Afsharzade N. & Moradi, K. (2013). Entrepreneurial intention determinants: an empirical model and a case of Iranian students in Malaysia. *Journal of Business Management*. 9(3), 33-45.
- Peterman, N.E. & Kennedy, J. (2003). Enterprise education: influencing student's perception of entrepreneurship. *Entrepreneurship Theories and Practice* 15(4), 13-30.
- Praag, C.M. & Ophem, H.V. (1995). Determinates of willingness and opportunity to start as entrepreneurs. *Kyklos*. 48(4), 513-540.
- Remeikiene, R. Starteine, & G. Daiva, D. (June 2013). *Explaining entrepreneurial intention of university students: the role of entrepreneurship education*. Paper presented at 'Management, Knowledge & Learning International Conference 19-21 June 2013'. Zadar, Croatia.
- Resnik, D.B (2011). *What is Ethics in Research and why is it important*. Retrieved from: <https://www.niehs.nih.gov/research/resources/bioethics/whatis/index.cfm>.
- Robertson I. Gibbson P. Baron H. MacIver R. & Nyfield G. (1999). Understanding management performance. *British Academy of Management*, 10(1), 5-12.
- Samuelson, W.F. & Marks, S.G. (2012). *Managerial Economics, 7th Ed*. New York. USA: John Wiley & Sons.
- Scherer F.R. Adams, J.S. Carley S. & Wiebe, F.A (1989). Role model performance effects on development of entrepreneurial career. *Performance Entrepreneurship Theory and Practice*. 13(3), 53-71.

- Scot, M.G. & Twomey D.F. (1988). The long term supply of entrepreneurs: Students career aspirations in relation to entrepreneurship. *Journal of Small Business Management*. 26 (4) 35-43.
- Shapero A. & Sokol L (1982). The social dimensions of entrepreneurship. In: Kent C, Sexton L and Vesper K (eds). *Encyclopedia of Entrepreneurship*. Englewood Cliffs, NJ: Prentice Hall, 72–90.
- Solomon, G. (2007). An examination of entrepreneurship education in the United States. *Journal of Small Business and Enterprise Development* 14(2) 168-182: [http: dx.doi: org/10.1108](http://dx.doi.org/10.1108).
- Taylor, D.W. & Thorpe, R. (2004). Entrepreneurial learning process: A process of co-participation. *Journal of Small Business and Enterprise Development*. 11(2)203-211.
- Turker, D. & Selcuk S.S. (2009). Which factors affect entrepreneurship intention of university students, *Journal of European Industrial Training?* 33(2) 142-159.
- Van Der Sluis J. M. & Van Prag et al. (2008). Education and entrepreneurship selection and performance: a review of the empirical literature. *Journal of Economic Surveys*, 22(5), 795-841.
- Veal, A.J. (2005). *Business Research Methods*. 2nd ed. South Melbourne, Vic. Pearson Addison Wesley.
- Wilkinson N. (2005). *Managerial Economics*. 3rd ed. New York, USA: University press.
- Wyse, R. Wolfeden, L. Campbell, E. Campbell, K. (2011). A pilot study of telephone based parental intervention to increase fruits and vegetable consumption in 3-5 year old children. *The Nutrition Society*, 14(12) 2245-2253.
- Zimkund, W.G. (2010). *Business Research Methods*. 8th ed. Oklahoma, USA: Oklahoma State University.

Appendices

Appendix One: Questionnaire for all students

My name is Esnath Chirambo Gondwe, pursuing a degree of Masters in Business Administration at the Polytechnic, University of Malawi. I am conducting an academic research as requirement for the fulfilment for the award of the degree of Masters in Business Administration.

Your response to the questions below will help in acquiring information that will be helpful to this research. I respect your privacy, as such: you are requested not to give any form of identification information. Your views will be treated confidential.

Instructions:

Circle the appropriate answer (please use the pencil provided)

Section A.

Personal data

Age: _____

Sex: male female

Entry: normal mature

Programme:

BME

BEE

BIE

BAT

BETE

Section B

To what extent do you have in depth of knowledge in the following areas of entrepreneurship?

Circle 1-totally disagree and 5-totally agree

- a. Start up basics
1 2 3 4 5
- b. Business planning
1 2 3 4 5
- c. Family entrepreneurship
1 2 3 4 5
- d. Team recruitment and management
1 2 3 4 5
- e. Responsibilities of an entrepreneur
1 2 3 4 5
- f. Entrepreneurial finance
1 2 3 4 5
- g. Problem recognition and solution development.
1 2 3 4 5

Section C

To what extent do you agree with the following statements regarding your entrepreneurial capacity?

Value them from 1-totally disagree to 5-totally agree

- a. To start a firm and keep it would be easy for me
1 2 3 4 5
- b. I am prepared to start a viable firm
1 2 3 4 5
- c. I can control the creation process of a new firm
1 2 3 4 5
- d. I know the necessary practical details to start a firm
1 2 3 4 5
- e. I know how to develop an entrepreneurial project
1 2 3 4 5

f. If I tried to start a firm, I would have a high probability of succeeding.

1 2 3 4 5

Section D

Indicate your level of agreement with the following statements

Value them 1-totally disagree to 5-totally agree

a. I am ready to do anything to become an entrepreneur.

1 2 3 4 5

b. My professional goal is to become an entrepreneur

1 2 3 4 5

c. I will make every effort to start and run my own firm

1 2 3 4 5

d. I am determined to start my own firm in the future

1 2 3 4 5

e. I have got the intention of starting own firm in the next five years

1 2 3 4 5

f. I have the intention of starting my own firm someday.

1 2 3 4 5

Section E

Has anything happened in your life that made you think of becoming an entrepreneur?

If the triggers below do not apply please do not answer.

Value from 1(strongly disagree) 5 (strongly agree)

a. Entrepreneurs in the family

1 2 3 4 5

b. Identification of business idea

1 2 3 4 5

c. Motivational speaker

1 2 3 4 5

d. Mentor

1 2 3 4 5

e. University education

1 2 3 4 5

f. Taking over family business

1 2 3 4 5

Section F

(This section is for 5th year students only)

1. Do you think you have high satisfactory capacity to become an entrepreneur

Indicate from 1 (strongly disagree) to 5 (strongly agree)

a. Opportunity recognition

1 2 3 4 5

b. Creativity

1 2 3 4 5

c. Problem solving

1 2 3 4 5

Leadership and communication skills

1 2 3 4 5

d. Development of new product or service

1 2 3 4 5

e. Networking and making professional contacts

1 2 3 4 5

f. Implementation of ideas

1 2 3 4 5

2. Teaching and learning environment in entrepreneurship courses.

Out of the teaching methods below choose **one or more** methods that were mostly used in the learning process.

a. Lecturing

b. Case study

c. Practices

d. Guest speakers

e. Interviewing entrepreneurs

f. Business simulation

g. Role play

h. Multimedia exercise

3. Rate the performance of entrepreneurship education offered at the faculty of engineering
 - a. Excellent
 - b. Very good
 - c. Good
 - d. Poor
 - e. Very poor

4. Chose **one or more** methods of assessment used by the faculty of engineering
 - a. Written exams
 - b. Oral presentation
 - c. Group projects
 - d. Writing business plans
 - e. Individual projects
 - f. Practical's
 - g. Essay

The end

Thank you for your participation

Appendix Two: Collected Data

Table A2.1: to what extent do you have in depth knowledge in the following areas of entrepreneurship?

| Statement | Strongly disagree | | disagree | | neutral | | agree | | Strongly agree | |
|--|-------------------|-----|----------|-----|---------|-----|-------|-----|----------------|-----|
| | Yr5 | Yr2 | Yr5 | Yr2 | Yr5 | Yr2 | Yr5 | Yr2 | Yr5 | Yr2 |
| responses | 6 | 24 | 5 | 56 | 1 | 10 | 38 | 15 | 20 | 5 |
| Business planning | 6 | 11 | 18 | 63 | 2 | 4 | 48 | 7 | 16 | 5 |
| Family entrepreneurship | 1 | 22 | 20 | 53 | 5 | 8 | 44 | 5 | 10 | 12 |
| Team recruitment and management | 7 | 33 | 26 | 35 | 15 | 3 | 52 | 8 | 16 | 9 |
| Responsibilities of an entrepreneur | 4 | 16 | 19 | 26 | 6 | 41 | 49 | 7 | 12 | 3 |
| Entrepreneurial finance | 8 | 13 | 25 | 48 | 5 | 15 | 33 | 16 | 19 | 8 |
| Problem recognition and solution development | 2 | 17 | 49 | 58 | 2 | 12 | 30 | 10 | 7 | 3 |

Table A2.2: to what extent do you agree with the following statements regarding your entrepreneurial capacity?

| Responses | Strongly Disagree | | Disagree | | Neutral | | Agree | | Strongly Agree | |
|--|-------------------|-----|----------|-----|---------|-----|-------|-----|----------------|-----|
| | Yr5 | Yr2 | Yr5 | Yr2 | Yr5 | Yr2 | Yr5 | Yr2 | Yr5 | Yr2 |
| Starting my own firm will be easy | 12 | 9 | 30 | 48 | 1 | 14 | 36 | 19 | 12 | 10 |
| I am prepared to start a viable firm | 17 | 16 | 21 | 29 | 2 | 33 | 28 | 17 | 11 | 5 |
| I can control the creation process of a new firm | 8 | 12 | 23 | 33 | 6 | 29 | 41 | 18 | 18 | 8 |
| I know necessary practical details to start a firm | 13 | 21 | 19 | 38 | 0 | 16 | 46 | 13 | 12 | 12 |
| I know how to develop entrepreneurial project | 22 | 15 | 26 | 29 | 3 | 26 | 27 | 15 | 21 | 15 |
| I have high probability of succeeding my own firm. | 133 | 14 | 15 | 31 | 8 | 19 | 52 | 28 | 10 | 8 |

Table A2.3: indicate your level of agreement with the following statements?

| Responses | Strongly disagree | | disagree | | neutral | | Agree | | disagree | |
|--|-------------------|-----|----------|-----|---------|-----|-------|-----|----------|-----|
| | Yr5 | Yr2 | Yr5 | Yr2 | Yr5 | Yr2 | Yr5 | Yr2 | Yr5 | Yr2 |
| I am ready to do anything to become an entrepreneur | 9 | 3 | 26 | 18 | 1 | 10 | 28 | 44 | 27 | 25 |
| My professional goal is to become an entrepreneur | 0 | 42 | 1 | 43 | 2 | 15 | 76 | 29 | 13 | 5 |
| I will make every effort to start and run my own firm | 8 | 2 | 16 | 18 | 0 | 22 | 48 | 42 | 18 | 16 |
| I am determined to start my own firm in the future | 12 | 11 | 29 | 21 | 0 | 12 | 39 | 36 | 10 | 20 |
| I have got the intention of starting a firm in the next 5yrs | 18 | 16 | 32 | 28 | 3 | 14 | 26 | 31 | 14 | 11 |
| I have the intention of starting my own firm someday. | 1 | 13 | 10 | 46 | 1 | 10 | 50 | 25 | 29 | 6 |

Table A2.4 has anything happened in your life that made you think of becoming an entrepreneur?

| Responses | Strongly disagree | | disagree | | neutral | | agree | | Strongly agree | |
|---------------------------------|-------------------|-----|----------|-----|---------|-----|-------|-----|----------------|-----|
| | Yr5 | Yr2 | Yr5 | Yr2 | Yr5 | Yr2 | Yr5 | Yr2 | Yr5 | Yr2 |
| Entrepreneurs in the family | 21 | 24 | 51 | 48 | 0 | 5 | 15 | 18 | 3 | 5 |
| Identification of business idea | 22 | 26 | 45 | 49 | 0 | 20 | 17 | 5 | 6 | 0 |
| Motivational speaker | 14 | 32 | 56 | 52 | 0 | 12 | 15 | 4 | 5 | 0 |
| Mentor | 16 | 4 | 36 | 30 | 0 | 14 | 26 | 47 | 12 | 5 |
| University education | 14 | 7 | 23 | 27 | 0 | 18 | 21 | 31 | 32 | 17 |
| Taking over family business | 27 | 24 | 60 | 61 | 2 | 14 | 1 | 10 | 0 | 0 |

Table A2.5: Do you think you have high satisfactory capacity to become an entrepreneur?

Year 5 only

| Responses | Highly Disagree | Disagree | Neutral | Agree | Highly Agree |
|---|-----------------|----------|---------|-------|--------------|
| Statement | Yr5 | Yr5 | Yr5 | Yr5 | Yr5 |
| Opportunity recognition | 8 | 19 | 5 | 43 | 15 |
| Leadership | 6 | 20 | 3 | 46 | 15 |
| Implementation of ideas | 9 | 8 | 1 | 56 | 33 |
| New product development | 12 | 9 | 1 | 56 | 12 |
| Creativity | 5 | 20 | 2 | 48 | 15 |
| Problem solving | 3 | 16 | 6 | 57 | 8 |
| Networking and making professional contacts | 3 | 11 | 2 | 66 | 8 |

Table A2.6: choose one or more teaching methods that are mostly used?

| Teaching methods | Number of students |
|----------------------------|--------------------|
| Lecturing | 80 |
| Case study | 39 |
| Practices | 0 |
| Guest speaker | 0 |
| Interviewing entrepreneurs | 0 |
| Business simulation | 9 |
| Role play | 0 |
| Multimedia exercise | 10 |

Table A2.7: Rate the performance of entrepreneurship education offered at the faculty of engineering

| Rating | Number of students |
|-----------|--------------------|
| Excellent | 0 |
| Very good | 34 |
| Good | 45 |
| Poor | 16 |
| Very poor | 5 |

Table A2.8: choose one or more teaching method mostly used in entrepreneurship?

| Assessment methods | Number of students |
|-----------------------|--------------------|
| Written exams | 88 |
| Oral presentation | 24 |
| Group projects | 34 |
| Writing business plan | 60 |
| Individual project | 9 |
| Practical's | 0 |
| essay | 59 |

The end