

**ASSESSING THE INFLUENCE OF ENTREPRENEURSHIP EDUCATION ON
ENTREPRENEURIAL INTENTIONS OF UNDERGRADUATE STUDENTS: A CASE
STUDY OF THE MALAWI POLYTECHNIC**

MASTER OF TECHNICAL AND VOCATIONAL EDUCATION

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**UNIVERSITY OF MALAWI
THE POLYTECHNIC**

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Master of Technical and Vocational Education Dissertation

By

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partial fulfillment of the requirements for the degree of Master in Technical and Vocational
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March, 2017

DECLARATION

I, Lusungu E. Nyirenda, declare that this thesis is my own original work. Where other sources of information have been used, they have been acknowledged. I hereby certify that this work has not been submitted before in part or full for any other degree or examination.

SIGNATURE :

DATE : **March, 2017**

CERTIFICATE OF APPROVAL

We, the undersigned, certify that we have read and hereby recommend for acceptance by the University of Malawi a thesis entitled Assessing the Influence of Entrepreneurship education on Entrepreneurial Intentions of Undergraduate Students: A Case Study of the Malawi Polytechnic.

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DEDICATION

Natalie Chitsulo, Alvin Chitsulo and Emmanuel Nyirenda

This one is for you!!

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ABSTRACT

Entrepreneurship has become one of the fastest growing disciplines in the last two decades. Subsequently, entrepreneurship courses have been mushrooming in most universities all over the world. The Malawi Polytechnic, a constituent college of the University of Malawi, offers entrepreneurship courses to Bachelor of Business Administration and Bachelor of Education (Business Studies) students. The courses run for one semester during which students are subjected to teaching and learning whose main objective is to transform their minds from just being job seekers to job creators. This study was aimed at assessing the influence of entrepreneurship education on entrepreneurial intentions of undergraduate students at the Malawi Polytechnic. The Theory of Planned Behavior and gender formed a part of the conceptual framework. Employing a survey design and using purposive sampling, a total of 160 students participated in the study sampled from four programs namely Bachelor of Business Administration, Bachelor of Education (Business Studies), Bachelor of Science (Technical Education) and Bachelor of Science in Engineering. Data was obtained through a questionnaire and analyzed using IBM SPSS statistics version 20.0 employing Spearman's rank correlation, Z-test for comparing column proportions and independent sample T-test. The findings of the study show that students' entrepreneurial intentions are high and that entrepreneurship education does influence students' entrepreneurial intentions. All the three antecedents from the theory of planned behaviour were found to be related to entrepreneurial intentions. However, it was also found that students who participated in entrepreneurship courses intend to establish their businesses later than five years after graduation unlike those who did not participate in any entrepreneurship course who intend to establish their businesses in the first five years after graduation although the difference in proportions was not statistically significant. The study, therefore, recommends that entrepreneurship education should be offered to all students regardless of their program of study, with teaching and learning of it being experiential. Further, content of entrepreneurship courses should incorporate those topics that are going to strengthen students' attitudes and perceptions of their ability to take on an entrepreneurship career with equal focus on both males and females.

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ABBREVIATIONS AND ACRONYMS

ATB	Attitude Towards Behaviour
BBA	Bachelor of Business Administration
EBS	Bachelor of Education (Business Studies)
ENG	Bachelor of Science in Engineering
GEM	Global Entrepreneurship Monitor
HOD	Head of Department
MBA	Master of Business Administration
PBC	Perceived Behavioural Control
SN	Subjective Norms
SPSS	Statistical Package for Social Sciences
TED	Bachelor of Science (Technical Education)
TPB	Theory of Planned Behaviour
UNIMA	University of Malawi

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CHAPTER ONE

INTRODUCTION

1.0 Background of Study

The challenges in the global economy and the increased global levels of poverty have made policy makers worldwide recognize the importance of entrepreneurship as a way to promote economic development. The European Commission (2006) presents a positive correlation between entrepreneurship and economic growth. In the wake of this development, there has been a shift in focus regarding the aim of education for the populace worldwide and at all levels of education. One such aim is to train citizens who are able to demonstrate personal initiative, creativity, innovation and independence in their workplaces as well as businesses to ensure such economic growth. Entrepreneurship education is seen as the vehicle through which such economic growth can be realized (Linan, Rodríguez-Cohard, & Rueda-Cantuche, 2011).

Having gained popularity and its literature hugely amassed only in the last two decades, entrepreneurship as a concept does not have a single unanimous definition. Shane and Venkataraman (2000) defined entrepreneurship as a study of sources of opportunities, the processes of discovery, evaluation and exploitation of opportunities and those individuals who discover, evaluate and exploit them. Saranson, Dean and Dillard (2006) took it further and stated that entrepreneurship is a social undertaking and should thus be studied in a context of social system. On the other hand, entrepreneurship education is viewed as “the process of providing individuals with the concepts, creativity and skills to recognize opportunities that others have overlooked and to have the insight, self-esteem and knowledge to act where others have hesitated”(Bwisa, 2012, p. 430).

From the definitions presented, it is clear that entrepreneurship has an important role to play in today’s world economy. According to Kuratko (2005), entrepreneurship has established its position as the most potent economic force over the last decade. Wilson (2009) expands on the importance of entrepreneurship by arguing that, “entrepreneurship and entrepreneurial skills are core components to building socially inclusive and highly participatory economies in an increasingly global and competitive world” (p. 1). In fact, the need for citizens with an entrepreneurial mindset is so great that even the European Union (EU) advocates for and emphasizes the importance of development of an entrepreneurial culture by fostering the appropriate mindset, entrepreneurship skills, and awareness of career opportunities for all European countries (Seikkula-Leino, 2011).

Considering the necessity of entrepreneurial skills for economic development in the world today, it has become imperative for higher education institutions to offer entrepreneurship education. Lima, Lopes, Nassif, and da Silva (2012) argue that it is no longer sufficient for institutions of higher education simply to train students to occupy traditional employment roles. Rather, entrepreneurial

capabilities are becoming much more important and sought after and should be imparted as part of higher education. To this end, there has been an increase in entrepreneurship courses, especially in institutions of higher learning in countries around the world. This increase is both in depth (of content), as well as trickling down to the lower levels of education such as secondary and primary schools. In Africa, however, the literature shows that entrepreneurship education is only and mainly offered in institutions of higher learning (Kabongo, 2008; Kaijage & Wheeler, 2013).

Not wanting to be left behind, and following this global trend, The Malawi Polytechnic, a constituent college of the University of Malawi (UNIMA), started offering entrepreneurship education to its students, particularly to business studies students. The entrepreneurship courses are offered in one semester of about sixteen weeks, and include content that is supposed to transform the students' mindset to consider entrepreneurship as a full-time career running a business. The rest of the programs that are not business related do not have specific entrepreneurship courses. Such programs simply have components of entrepreneurship in some of their subjects.

1.1 Statement of the Problem

From a behaviourist perspective, the main goal of education is to see a change in behaviour through use of behavioural learning objectives and techniques. With entrepreneurship education, one of the most important objectives and desired changes is to ensure that students develop an entrepreneurial attitude and culture that will ultimately influence the individuals to set up their own businesses, hence being entrepreneurs (Weber, 2011). This change proposed by entrepreneurship courses is not restricted to only those studying the subject. Recent research shows that many contemporary college students want to have their own businesses in the future, regardless of their major field of study (Lima et al., 2012; Minniti, Bygrave, & Autio, 2006).

The Malawi Polytechnic has been offering an entrepreneurship course to Bachelor of Business Administration (BBA) students only for over ten years now. It is only recently (the past five years) that the Department of Technical Education has introduced an entrepreneurship course to its Bachelor of Education (Business Studies) students. The other twenty four undergraduate programs of study at the institution do not offer a specific entrepreneurship course to their students. They merely have some concepts of entrepreneurship incorporated in some of the subjects which they learn. However, the extent to which the entrepreneurship courses for the two programs are effective in achieving their aim of *transforming students from job seekers to employment creators* is not known when one compares those who participate in the courses with those who do not. While the number of entrepreneurship courses is growing, the literature indicates that their actual effects on students' entrepreneurial behaviour are under-researched. Be'chard and Gre'goire, (2005) and Harrison and Leitch (2005) all agree that there is inadequate evidence and understanding of how these courses

affect entrepreneurial attitude and activity. Regarding the studies that have been conducted on this subject, the aim has been to study intentions of students to become entrepreneurs and not their behaviors. This research, therefore, assesses if entrepreneurship education offered at The Malawi Polytechnic has any effects on undergraduate students intention to become entrepreneurs.

1.2 Purpose of Study

The general purpose of the study was to determine the influence of entrepreneurship education on undergraduate students' intention to become entrepreneurs.

1.3 Research Objectives

The objectives of this study are to:

1. Assess the level of students' intention of becoming entrepreneurs.
2. Assess the influence of entrepreneurship education on the intention of undergraduate students to become entrepreneurs.
3. Identify the factors that influence students' intentions to venture into entrepreneurship

1.4 Research Questions

The key and broader research question driving this study is, does entrepreneurship education influence undergraduate students of The Malawi Polytechnic to become entrepreneurs?

The following are the more specific research questions for this study:

1. What is the level of undergraduate students' intention towards entrepreneurship?
2. How does the teaching of entrepreneurship education influence undergraduate students' intention to become entrepreneurs?
3. What are the factors that influence undergraduate students' intention to venture into entrepreneurship?

1.5 Significance of Study

This study is of utmost importance because it highlights the importance of entrepreneurship education, which is one of the key trends being embraced in and recognized by education institutions in the world today. This is because entrepreneurship has been recognized as the key driver of economic growth worldwide. Entrepreneurship is thus a crucial part of the development agenda for

Malawi (Malawi Growth and Development Strategy II, 2011-2016). In this regard, this study is important for The Malawi Polytechnic as an institution and UNIMA as a whole because it will unearth critical knowledge regarding entrepreneurship education, which may influence possible curricula changes which is in line with the government's development agenda. Further, the findings of this study will contribute to the body of knowledge on entrepreneurship education, entrepreneurial intentions and the Theory of Planned Behaviour (TPB).

Further, this study will provide curriculum designers with insights on students' realistic intentions on how to go about expanding entrepreneurship education to other programs of study, as well as implementing it in a manner that will ensure its success in developing an entrepreneurial culture and spirit in students.

1.6 Limitations of the Study

The limitation of this study is that it is only looking at awareness (usefulness of entrepreneurship) interest (inner drive to study the course) and intention (a determination to act in a certain way) to become an entrepreneur and not the behaviour itself. Just because one has an intention to do something does not necessarily mean that they will actually execute the intended behaviour. In other words, having entrepreneurial intention does not really guarantee that undergraduate students will become entrepreneurs once they get out of university. By using intentions as a measure of future behavior, a clear risk is not being able to differentiate between "dreamers" and "doers" (Delmar and Davidsson (2000).

Awareness, interest and intention rather than the actual behaviour has been chosen because it would be tedious to find former university students that participated in an entrepreneurship course who are now entrepreneurs. However, intention is the best predictor of planned behaviour (Ajzen, 1991).

1.7 Outline of Thesis

This thesis has five chapters. Chapter one provides an introduction to the thesis highlighting the problem under study as well as research questions and objectives. Chapter two offers the literature review; a discussion of similar studies done on the same topic as well as the theoretical and conceptual frameworks for the study. Further chapter three discusses the methodology for the study highlighting research design, sampling method and sample characteristics. Chapter four follows with results and discussion. This chapter discusses the findings of the study relating them to literature and explaining their implications for theory and practice. Lastly, chapter five provides study conclusions and offers recommendations drawn from the conclusions.

1.8 Chapter Summary

Entrepreneurship has been recognized as a key driver in promoting economic growth and a solution to unemployment worldwide. It is for this reason that institutions of higher learning worldwide (the Malawi Polytechnic inclusive) are offering entrepreneurship education to their students in order to equip them with knowledge and skills to ensure successful establishment and running of businesses. However, research has shown that the extent to which entrepreneurship courses are successful in influencing entrepreneurial intentions and subsequent entrepreneurial behaviour is not properly established. This study therefore investigates the influence that entrepreneurship education has on entrepreneurial intentions of undergraduate students at the Malawi Polytechnic.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter discusses the various issues already explored by other scholars pertaining to the influence that entrepreneurship education has on entrepreneurial intentions of undergraduate students. Particularly, the chapter provides a theoretical framework as well as a conceptual framework for the study. It will elaborate on what entrepreneurship and entrepreneurship education are, the need and significance of entrepreneurship education, entrepreneurship and intention, and application of TPB in entrepreneurship. Further, the chapter discusses the structure and content of entrepreneurship courses, entrepreneurship education pedagogy, and influence of entrepreneurship education on entrepreneurial intention, students' perceptions of entrepreneurship education courses, and lastly, factors that influence entrepreneurial intentions.

2.1 Theoretical Framework: Theory of Planned Behaviour (TPB)

The theoretical framework that guided the research design for this study is the TPB. This is an intention theory that was developed by Ajzen (1991) and has emerged as one of the most popular frameworks for explaining peoples intentions to perform certain behaviours. It has been used in various fields, including entrepreneurship. Intention models assume that external variables (demographic or background characteristics) do not directly affect the intention of performing a given behaviour, or the behaviour itself (Ajzen, 199; Kolvereid, 1996). According to the TPB, human behaviour is said to be influenced by three factors: Attitude Towards Behaviour (ATB), Subjective Norm (SN) and Perceived Behaviour Control (PBC).

The first antecedent of intention is (ATB). This refers to the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question. The second antecedent, SN, refers to the perceived social pressure to perform or not to perform the behavior. On this, Krueger et al. (2000) suggest that the most important social influences, such as parents, significant persons, and friends, including role models or mentors, must be empirically identified. The third and last antecedent of intention is PBC, and refers to the perceived ease or difficulty of performing the behaviour. It is assumed to reflect past experience as well as anticipated impediments and obstacles.

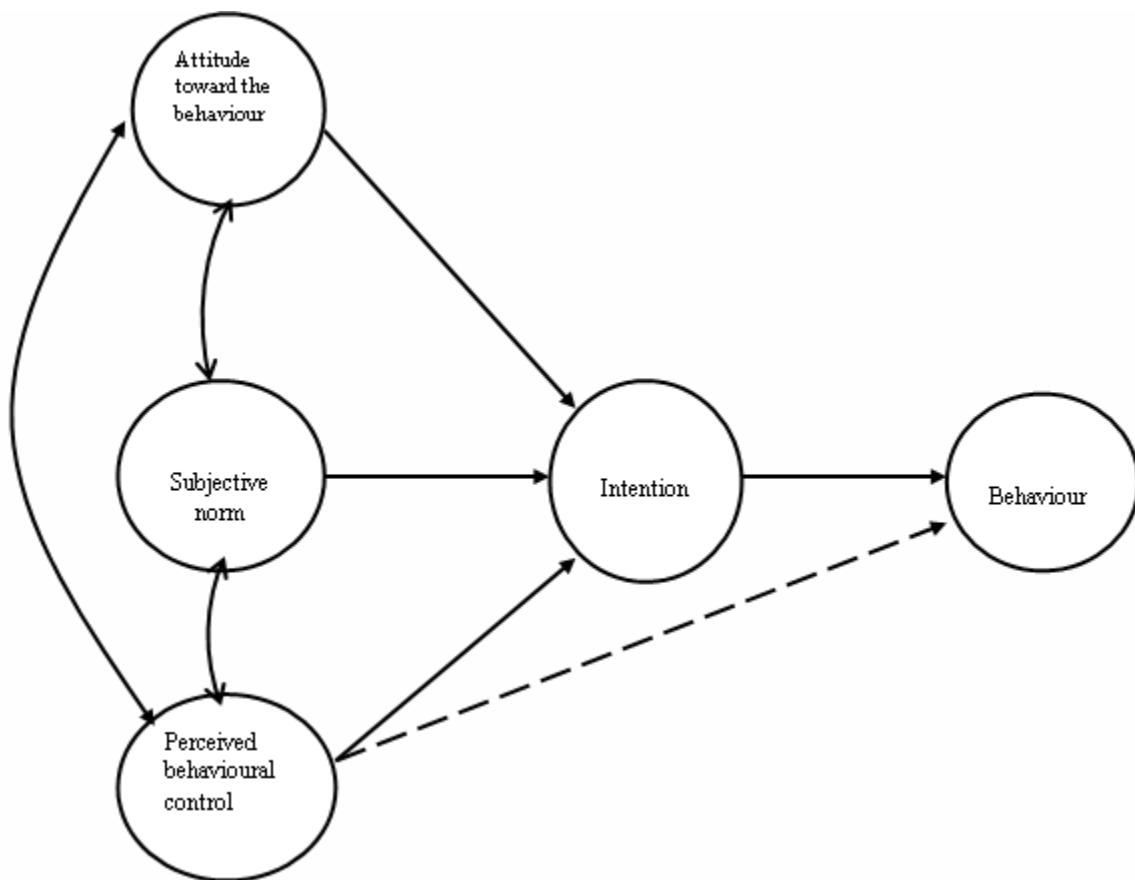


Fig. 2.1 Theory of Planned Behaviour; (Ajzen, 1991)

A combination of the three constructs mentioned above results in behavioural intention, which, ultimately, leads to the actual behaviour being executed. As a general rule, the more favorable the attitude and subjective norm, and the greater the perceived control, the stronger should be the persons intention to perform the behavior in question. With this study, entrepreneurship education, an additional independent variable to the ones explored by Ajzen (1991), is being tested to see if it influences entrepreneurial intention of undergraduate students.

2.2 Entrepreneurship

Literature indicates that the term entrepreneurship does not have a unanimous definition. Shane and Venkataraman (2000) defined entrepreneurship as a study of sources of opportunities; the processes of discovery, evaluation and exploitation of opportunities; and those individuals who discover, evaluate and exploit them. Shane's definition of entrepreneurship is that it is all about the identification, evaluation, and exploitation of opportunities (Shane, 2012). On the other hand, Ogbor (2009) defined entrepreneurship as the process of combining scarce resources in innovative ways in order to respond to the available opportunities. Also entrepreneurship is defined as a dynamic process

of creating incremental wealth by entrepreneurs who take responsibility for the major risks in terms of equity, time and career commitment (Hisrich, Michael, and Shephard, 2005).

However, Bwisa (2012) quickly pointed out that entrepreneurship extends to include intrapreneurship. The term ‘intrapreneurship’, also known as corporate entrepreneurship, has been coined to represent entrepreneurship that goes on in large scale enterprises. In other words, entrepreneurship also happens for people who work in organizations in that some of the traits displayed by entrepreneurs such as innovation, growth, flexibility and creativity are desired by corporations and hence displayed by their employees (Stevenson & Jarillo, 1990). Bwisa (2012) further highlighted three key differences between entrepreneurs and intrapreneurs anchored on the factor of production, ownership and risk taking/bearing bases as follows:

- First, for participation in the process of production entrepreneurs earn profits while intrapreneurs earn wages. The two are, therefore, different factors of production.
- Secondly, entrepreneurs are by definition owner managers, while intrapreneurs are employed managers.
- Thirdly, while entrepreneurs take and also bear business risk, intrapreneurs as employed managers take but may not necessarily bear the risk.

However, even with no single agreed upon definition, there are emerging commonalities in most definitions of entrepreneurship. Abound in most definitions are the words opportunity identification, innovation, creativity and value adding. In its raw sense, entrepreneurship is largely about setting up businesses. This is true for most entrepreneurship courses whose wide range of objectives include imparting skills to enable individuals set up their own small businesses. The notion is also true in the face of high unemployment rates. Therefore, this study makes use of the definition by Hisrich et. al. (2005) that looks at entrepreneurship as a dynamic process of creating incremental wealth by entrepreneurs who take responsibility for the major risks in terms of equity, time and career commitment (Nian et al., 2014).

The importance of entrepreneurship for any country cannot be ignored. According to Ogbor (2009), the importance of entrepreneurship, especially in the developing world, is five-fold: being the “launching pad” for success by supporting the livelihoods of the populace; providing the basis for the thriving of larger corporations; providing employment for the citizenry; being one source of income for national governments; and providing the needed investments capable of achieving economic growth. Mohanty (2005) suggested that entrepreneurship is getting a position of great importance in order to tackle the ever-growing problem of unemployment, which has been caused by the unprecedented population growth. In addition to unemployment, Casero, Mogollón, and Roldán (n.d.) contended that entrepreneurship seems to have become a solution to economic growth, the innovation of companies, and the creation of jobs.

2.3 Entrepreneurship Education

It is generally believed that potential entrepreneurs can be identified and trained (Kumar, 2003). In this regard, strides are being made towards production of entrepreneurs by all learning institutions at all levels of education, that is, primary to tertiary levels. One of the strides has been an increased introduction of entrepreneurship courses. Despite having a common goal of producing potential entrepreneurs, these courses differ in mode of delivery, content, emphases of content, and length of the actual course.

Weber (2011) defined entrepreneurship education as a whole set of education and training activities that try to develop intentions in the learners to start their own businesses and create self-employment. Bechard and Toulouse (1998) defined entrepreneurship education as a teaching process that provides information, training and educates anyone that has interest in entrepreneurial activities. Bwisa (2012) looked at entrepreneurship education as “the process of providing individuals with the concepts, creativity and skills to recognize opportunities that others have overlooked and to have the insight, self-esteem and knowledge to act where others have hesitated.” (p.439). Ehrstén and Kjellman (2001) extended on Bwisa’s definition, stating that entrepreneurship education is a constructivist-based education. This means that students are able to construct knowledge as they learn by doing in an active way. In this regard, the Confucian philosophy of “I hear and I forget, I see and I remember, I do and I understand” is being embraced (Confucius, 450 BC) as cited in van der Molen and Peijs (2009, p. 274).

Further, entrepreneurship education includes two different orientations, which are more prominent in the literature. A distinction is made between internal entrepreneurship and external entrepreneurship (Korhonen, Komulainen, & Rauty, 2012). Internal entrepreneurship has been accepted in the literature to mean corporate entrepreneurship, or entrepreneurial behaviour that happens in organizations by employees. Stevenson and Jarillo (1990) wrote that the main traits generally believed to be associated with entrepreneurship, such as growth, innovation and flexibility were also deemed to be desirable traits for large corporations, by theorists and practitioners alike, hence the birth of corporate /internal entrepreneurship. The terms, however, mean a different thing and according to Kyrö (1998), entrepreneurship education deals with three main components:

- Self-orienting, which refers to an individuals self-oriented behaviour.
- Internal entrepreneurship, which deals with entrepreneurial and enterprising behaviour, and
- External entrepreneurship, which is about doing or executing business.

In distinguishing the above three components, Kyrö (1997) argued that self-oriented entrepreneurship is the basis for developing internal and external entrepreneurship.

According to Johansson, Karlsson, and Stough (2006), entrepreneurship education ought to constitute five levels of learning:

- Why entrepreneurs act? This focuses on the issues of values and motivation.
- What needs to be done? This is the area that deals with the knowledge.
- How it should be done? This refers to the possession of abilities and skills to enable an entrepreneur to run a business.
- Who should we know? This is one of the crucial areas to success of a venture which deals with social skills and networks.
- When to act? This level has to do with experience and intuition in running a business.

In addition to the above levels of learning, Souitaris, Zerbinati, and Al-Laham (2007) suggested that knowledge gained from an entrepreneurship course would improve one's ability to identify opportunities and, therefore, increase their entrepreneurial intentions.

For the purposes of this study, it should be pointed out that entrepreneurship education is different from business education. Vesper and McMullan (1988) pointed out that one of the main objectives of entrepreneurship education that differentiates it from typical business education is to generate more quickly, a greater variety of different ideas for how to exploit a business opportunity, and the ability to project a more extensive sequence of actions for entering business. Hence, this study hinges on the definition by Weber (2011) that looked at entrepreneurship education as a whole set of education and training activities that try to develop intentions in the learners to start their own businesses and hence become entrepreneurs.

2.4 The Significance of Entrepreneurship Education

With reference to entrepreneurship education, the issue is no longer about whether it can be taught or not. Literature notes that entrepreneurial skills and traits can in fact be taught. The all important role of entrepreneurship in economic and social development and growth has been recognized in today's world. Kuratko (2005), Matlay (2005), and Nabi, Holden, and Walmsley (2006) all agreed that entrepreneurship has become an economic panacea, seen as generating employment and economic prosperity in both developing and developed countries. With globalization, which has a huge impact on large corporations and governments worldwide, plus strong global competition, job losses are inevitable. Survival and success in such an environment, therefore, depends on the ability for any nation to grow businesses, which will require individuals who possess a certain degree of entrepreneurial skills. Mohanty (2005) further echoed the need for entrepreneurship education by stating that education, as a tool of entrepreneurial development, makes the entrepreneur informed as well as rational in approach. Mohantys declaration brought into perspective the dynamism of entrepreneurship, which Charney and Libecap (2000) highlighted as they state that the benefits of entrepreneurship are three fold: social, economic and educational. With entrepreneurship, students are getting the whole package of knowledge that caters to most aspects of their lives.

Wilson (2009) argued that “innovation and economic growth depend on being able to produce future leaders with the skills and attitudes to be entrepreneurial in their professional lives, whether by creating their own companies or innovating in larger organizations. It is imperative to develop entrepreneurial skills, attitudes and behaviours in school systems (primary, secondary, higher and vocational education) reaching across all ages as part of a lifelong learning process” (Pg. 1). Further, Van der Kuip and Verheul (2004) wrote that entrepreneurship is assumed to be a major source of innovation, job creation and growth.

Cheung (2008) highlighted the contributions entrepreneurship has made towards the national development of Hong Kong when he wrote, “Hong Kong owes its success to thousands of small businesses and hundreds of corporations and it is true to say that entrepreneurs are one of the territory’s most important assets” (p. 500).

With this background, entrepreneurship education is significant in many aspects and, therefore, a justification for integrating it in all higher education institutions curriculum. It can be argued that anybody can start a business and make a success of it. Stories are told in the literature of people who are successful entrepreneurs, but hardly have any formal education. In this regard, Nian et al. (2014) reported that many starting entrepreneurs feel that there are many opportunities to start their business. The reality, though, is that many of them fail to run their business due to the lack of entrepreneurial knowledge, skills and attitudes, which are required to prosper in a business. Many entrepreneurs face challenges not because of the lack of opportunities and resources, but because they do not have the required skills and business sense. This is the point at which entrepreneurship education comes in to provide such knowledge, skills and attitudes. Further, not only will entrepreneurship education help students develop innovation and creativity skills, it will provide entrepreneurial knowledge to enable them to compete in the current entrepreneurship generation (Cheung, 2008).

Fayolle and Klandt (2006) maintain that entrepreneurship education was introduced as a solution to fill the gap that existed between school and work. Saboe, Kantor, and Walsh (2002) argued that students who cannot see the practicality of concepts taught in class will have no motivation to study and will ultimately drop out of school. This will lead to high unemployment and crime rates, hence the need for entrepreneurship education to cater as a bridge.

On this issue of entrepreneurship education and its significance, Nian et al. (2014) concluded that “the ability to create jobs, reduce unemployment and create economic boom are among the main reasons why many countries are fostering and realizing the importance of entrepreneurship education”(p. 41).

2.5 Entrepreneurship and Intention

Souitaris et al. (2007) defined intention with respect to entrepreneurship as a state of mind directing a person's attention and action towards self-employment as opposed to organizational employment. This study makes use of this definition. As regards entrepreneurship, this study looks at it as a career path in which one decides to establish and run his or her own business.

The decision to become an entrepreneur has been explained in various ways, mainly through the traits and demographic approaches. These, however, presented methodological and conceptual flaws (Gartner, 1989; Robinson et al., 1991; Krueger Reilly and Carsrud , 2000; Liñán et al., 2002). With this background and psychology literature proving that intention is the best predictor of planned behaviour, there has been a shift in recent years to explain entrepreneurial behaviour by looking at intention; and Ajzen (1991) TPB has been extensively used in such studies. The use of the TPB is on the basis that the development of a new business requires individuals to make conscious choices and decisions and is a deliberate behaviour that is intentional by nature. To this effect, (Ajzen, 1991) argued that an individual's entrepreneurial intention is a moderate predictor of future entrepreneurial behaviour. In addition, a study conducted by Krueger, et al. (2000) that had a sample of American students facing career decisions found that intention models offered strong statistical support for predicting entrepreneurial behaviour. Thus, understanding the antecedents of entrepreneurial intention increases our understanding of intended entrepreneurial behaviour. So, intention models provide a more realistic and sensible way of studying entrepreneurial behaviour than the traditional trait and demographic approaches.

It should be mentioned, however, that intention works to predict planned behaviour that is rare, hard to observe, or involves unpredictable time lags, and entrepreneurship is a typical example of such planned, intentional behaviour (Bird, 1988; Katz and Gartner, 1988; Krueger and Brazeal, 1994). According to Fayolle and Klandt (2006), there has been an increased interest from researchers to evaluate entrepreneurship education programs, with special focus on their effect on the development of and changes to the entrepreneurial intent of the students. Several studies conducted have brought about different findings, some positive and others negative.

2.6 Application of TPB to Entrepreneurship

With regard to entrepreneurship, attitude towards entrepreneurship is measured by an individual's perceived desire either to become an entrepreneur or to be organizationally employed. Therefore, high attitude towards entrepreneurship implies that the individual is more in favour of entrepreneurship than organizational employment. SN refers to perceptions and opinions of what important people in an individual's life think about them becoming entrepreneurs (Ajzen, 1991). As

already explained earlier in the chapter, important people in this case constitute parents, friends, mentors, etc. Lastly, PBC examines an individual's perceived ability to become an entrepreneur.

2.7 Structure and Content of Entrepreneurship Courses

The manner in which entrepreneurship courses are conducted and the content taught varies across countries and from institution to institution, producing varying education systems (Charney & Libecap, 2000). With regard to structuring, some provide it as a one-time course and not long term throughout the whole term/semester. The Consortium of Entrepreneurship Education in the United States (Cheng, 2008) holds that the lifelong process of entrepreneurship education has five distinct stages of development, namely: basics, competency awareness, creative applications, start-up and growth. Considering these stages, it is therefore imperative that a person is exposed to the early stages while young and progress through the rest of the stages up to university level.

In Hong Kong secondary schools, structuring of entrepreneurship education varies from school to school. The ways in which it is structured are; through integration into other subjects like Business Studies, Commerce and Accounting, as independent programs and as extra-curricular activities (Cheung, 2008).

Most entrepreneurship courses are usually of short duration when compared to other major career education programs. This is ironic considering the complexity of knowledge available to be imparted to students, which forms the entrepreneurial journey.

As far as entrepreneurship education content is concerned, there seems to be a connection between prior information, education in this instance, and the ability to detect opportunities. Shane and Venkataraman (2000), in their seminal article, stated that human beings possess loads of prior information, and this information influences their ability to recognize opportunities as long as the prior information is complementary with new information. In this regard, they suggested that entrepreneurship courses should have content that will be useful in terms of helping students to actually demonstrate the behaviour proposed in the programs goals as well as in the real world (Shane & Venkataraman, 2000).

On the same issue of content, Refaat (2009) pointed out that entrepreneurship education must include skill-building courses in negotiation, leadership, new product development, and creativity thinking. It must also expose students to technological innovation. In a study by Nian et al. (2014) respondents indicated the following skills as the ones they desired to gain from an entrepreneurship course, in order of most to least desired: problem solving skills, leadership, business planning, presentation and marketing, negotiation, idea generation, time management and intellectual property management. Garavan and O'Cinneide (1994), however, argued that the nature of content to be taught in an

entrepreneurship education program is determined by the objectives of the program. They further wrote that there are objectives that are common to most entrepreneurship courses, which determine the nature of content. The objectives are:

- acquire knowledge germane to entrepreneurship;
- acquire skills in the use of techniques, in the analysis of business situations, and in the synthesis of action plans;
- identify and stimulate entrepreneurial drive, talent and skills;
- undo the risk-averse bias of many analytical techniques;
- develop empathy and support for all unique aspects of entrepreneurship;
- devise attitudes towards change;
- encourage new start-ups and other entrepreneurial ventures.

Because of the multiplicity of the above-cited objectives, structuring of entrepreneurship courses becomes problematic with varying emphases depending on context.

2.8 Entrepreneurship Education Pedagogy

Kuratko (2005) has argued that the relevant question as far as entrepreneurship education is concerned is not “can entrepreneurship be taught?” but rather “what should be taught and how should it be taught?”. A good number of scholars (e.g. Charney & Libecap; 2000; Johansen et. al; 2012) have supported the notion that an entrepreneurial or enterprising spirit and culture can be taught and be developed in people. However, (Klein, 2006); Nandram and Samsom (2006) argued that some entrepreneurial behaviours can be learned whilst others cannot.

Even with the content incorporated in entrepreneurship courses that is deemed “teachable”, Bwisa (2012) indicated that entrepreneurship courses are more theoretical than practical. He likened this to teaching a person the fundamentals of how to swim without a swimming pool or any body of water. He argued that this teaching of swimming on dry land will leave the individual not confident enough to take the plunge. In a similar fashion, with only theoretical knowledge about entrepreneurship, most students find it hard to put whatever they learnt on dry land into practice. In this regard, more practice is required in the form of teaching and learning strategies that are more hands-on and action oriented. Bwisa (2012) further writes that “entrepreneurship education focuses less on teaching individuals in a classroom setting and more on learning by doing activities in a group setting and a network context” (p.430). This brings up the issue of how such content ought to be taught.

As far as teaching methods for entrepreneurship education are concerned, approaches away from the traditional lecture and simple question and answer are to be employed. Hong Kong teachers are said to have used such strategies as case studies, workshops, mentoring, project learning, and experiential learning. This does not mean that the traditional methods were ignored altogether (Cheung, 2008).

Concurring with Cheung, Nian et al. (2014) argued that “traditional teaching method and style might be able to teach the students about the knowledge of entrepreneurship and business strategies to success but are unable to develop the critical characteristics of entrepreneurs such as creativity and need for autonomy among the students” p.40).

Further, Gibb (1993) advocates that learners in entrepreneurship education ought to learn in the following manner:

- learning by doing;
- encouraging participants to find and explore wider concepts relating to a problem from a multi-disciplinary viewpoint;
- helping participants to develop more independence from external sources of information and expert advice, and to think for themselves — thus giving ownership of learning;
- encouraging use of feelings, attitudes and values outside of information; this, in general, will place greater emphasis on experience-based learning;
- providing greater opportunity for building up of networks and contacts in the outside world linked with their learning focus;
- helping participants to develop emotional responses when dealing with conflict situations, and encouraging them to make choices and commitments to actions in conditions of stress and uncertainty (p.48)

From the above discussion, it can be concluded that experiential learning is the most effective method for teaching entrepreneurship, where experiential learning is any learning that puts the learner at the centre of their own learning, which supports them in applying their knowledge to real-life problems or situations. Teaching and learning methods aside, Ikävalko et al. (2009, p. 5) concluded that, “the purpose of teaching methods used is for students to take more responsibility for their own learning and to try to achieve their goals, to be creative, to discover existing opportunities and in general to cope in our complicated society”. However, much as (some) entrepreneurship qualities can be taught, Kumar et al (2003) pointed out that entrepreneurship education on its own is not enough. He argued that performance of any entrepreneur out there mainly depends on their ability to perform; and this performance is a direct product of education, experience, and skill, and their willingness to perform, which is a direct result of their level of motivation.

2.9 Influence of Entrepreneurship Education on Entrepreneurial Intentions

Charney and Libecap (2000) who evaluated the impact of the Berger entrepreneurship education program from 1985 to 1999 at the University of Arizona concluded that entrepreneurship education increases the inclination of graduates to be entrepreneurs. In their study, they concluded that

entrepreneurship graduates on average are three times more likely to be entrepreneurs than are general business graduates.

In testing the effect of entrepreneurship courses on the entrepreneurial attitudes and intentions of science and engineering students, Souitaris et al. (2007) found that their studied course achieved its desired effect overall, and that the benefits of the course are three fold: learning, inspiration and resource utilization. However, inspiration was the courses most influential benefit. The study illustrated that entrepreneurship courses are a source of trigger-events, which inspire students by arousing emotions and changing mindsets. In this regard, they suggested that development of entrepreneurship courses should exploit those elements that inspire students to follow the entrepreneurial path such as teachers who motivate them and visiting entrepreneurs who provide talks on the subject of entrepreneurship.

In her study of factors influencing entrepreneurship ability “A case study of Parbat district of Nepal”, Pun (n.d.) indicated that in general, entrepreneurs with formal education have higher entrepreneurship efficiency as compared to illiterate entrepreneurs. This pointed to the influence education has on entrepreneurship, and the notion can be extended to suggest that education specifically geared towards entrepreneurship (entrepreneurship education) would have a greater impact.

On the impact of entrepreneurship education on entrepreneurship skills and motivation, Oosterbeek, van Praag, and Ijsselstein (2010) found that the Junior Achievement Young Enterprise student mini-company (entrepreneurship) course did not have its intended effect when they concluded that “the effect on students self-assessed entrepreneurial skills is insignificant and the effect on the intention to become an entrepreneur is even negative” (p.442). The authors theorize that the negative influence of the course on the intention to become an entrepreneur can be due to a more realistic view of what is needed to start an own business as was suggested in interviews that were held with lecturers and coaches. This view may have portrayed entrepreneurship as something which is difficult to attain or implement.

Cheng, Chan, and Mahmood (2009)’s study of the effectiveness of entrepreneurship education in Malaysia showed that the courses offered did not meet the students’ expectations. They reported a big gap between students’ skills expectations and their skills acquisitions. In addition, they reported a misunderstanding on what entrepreneurship in general is. It was for these reasons that they recommended a review of the curriculum for entrepreneurship education.

An increasing number of researchers (eg. Reynolds, 1991; Stanworth, Stanworth, Granger, & Blyth, 1989) point to the importance of entrepreneurship above the possession of unique traits as key in enabling one to follow the entrepreneurial path. They have opted for and have convincingly justified that “personal experience” i.e. the “personal curriculum” amassed in entrepreneurship courses, has

greater influence on the decision to create a company than the personal characteristics of the individual.

Interestingly, a study by Packham, Jones, Miller, Pickernell, and Thomas (2010) found that entrepreneurship education has a positive impact on the entrepreneurial attitude of French and Polish students. On the other hand, however, the course had a negative impact on male German students.

2.10 Students Perceptions of Entrepreneurship Courses

Students perceptions of entrepreneurship courses vary. Different studies have registered varying perceptions. A study by Nian et al. (2014) entitled Students Perception on Entrepreneurship Education: The Case of Universiti Malaysia Perlis found that “entrepreneurship education in the higher learning institution is performing well and that there was positive perception from the students toward the entrepreneurship education” (p.47).

In their study of Attitude Towards Entrepreneurship Among Omani College Students Trained in Business, Segumpan and Zahari (2012) found that there was a positive attitude towards entrepreneurship among college students mainly because students understood its level of importance to national development. But even with that positive attitude, recommendations were made to improve curriculum content, and the respondents even suggested the course be compulsory so that every student is equipped with entrepreneurship knowledge and skills.

Further, Johansen, Schanke, and Clausen (2012) found a positive attitude towards entrepreneurs and, hence, entrepreneurship by Norwegian secondary school pupils enrolled in an entrepreneurship course (called Company Program) than those that were not enrolled in the course. The importance of studying attitudes towards entrepreneurship is highlighted by Kolvereid (1996) and Guerrero et al.(2008) as they argued that “an investigation of pupils' attitudes towards entrepreneurs is important because these attitudes may also reflect how desirable they find the prospect of becoming an entrepreneur themselves as a future career choice” p.113). Lim (2011) took it further and pointed out that when the tough times roll in the process of running a business, it is the positive attitude towards entrepreneurship that gets one through and helps them persevere and ultimately survive the tough times.

2.11 Factors that Influence Entrepreneurial Intention

There has been a debate on whether entrepreneurs are either born or made, resulting in various research projects being conducted to unearth the factors that make one to become an entrepreneur. As mentioned above, the earlier trait approach to entrepreneurship (born entrepreneurs) (Brockhaus, 1980; 1982; McClelland, 1961) as cited in Peterman and Kennedy (2003) has lost ground to newer approaches advocating for made entrepreneurs through intentions and emotions.

Nian et al. (2014) who examined factors influencing entrepreneurship came up with six factors, with the seventh being “other factors”. The respondents cited the following factors in order of the most influential to the least: own interest, family influence, high profile entrepreneurs, friends, media, and university programs. The other factors were business opportunities, high profit and mentorship.

Further, Pun (n.d.) argued that entrepreneurs arise as a result of socio-demographic and motivational factors. On socio-demographic factors, she talked of factors like sex, educational attainment, age, marital status, and ethnicity. On motivational factors, she cited persons of inspiration, such as neighbors, including friends or relatives, family members, and role models/exemplary persons. Further on motivational factors, Dollinger (1999) highlighted individual reasons like sufficient capital, desire for earning more money, and independent work. Lastly, he also cited environmental factors, including family background (having a family member already involved in business), sufficiently available raw materials, and labor and market demand of the products as additional factors that may influence one to take up an entrepreneurship career.

2.11.1 TPBs Antecedents to Entrepreneurial Intentions

Apart from the type of factors already presented, research by many scholars has recognized the roles of entrepreneurial attitudes, SN and PBC in predicting entrepreneurial intentions (Peng et al. 2012; Krueger et al. 2000; Linan et al. 2011).

A study conducted to establish factors affecting entrepreneurial intentions by Peng et al (2012) on senior university students in Xian, China explored such factors as individual/psychological factors, family back-ground factors and social environment factors and the influence they have on entrepreneurial intentions of university students. The study found that individual/psychological factors and university students’ entrepreneurial experience have significant positive impact on their SN. Family background factors have no significant impact on students’ entrepreneurial attitude, SN, and entrepreneurial intention. In social environment factors, both supporting policies and entrepreneurial environment of society exert significant positive impact on students’ entrepreneurial attitude, and SN, which exert significant positive impact on students’ entrepreneurial intentions as intervening variables. Lacks of self-confidence, funds, time, family support, business skills and entrepreneurial education have significantly negative impact on students’ entrepreneurial intentions.

Further Khuong and An (2016) conducted a study on factors affecting entrepreneurial intentions of the Students of Vietnam National University. They examined such factors as personal traits, prior entrepreneurial experience, external environment, social norm and perceived feasibility and the effect they have on entrepreneurial intention. They found that prior entrepreneurial experience, external environment and perceived feasibility were the three independent variables that significantly affected the positive perception toward entrepreneurship and consequently, they had positively indirect effect on entrepreneurial intention. On the other hand, perceived feasibility and personal traits significantly

affected the negative perception toward entrepreneurship and provided negatively indirect effect on the entrepreneurship intention.

Also, Linan et al. (2011)'s study of factors affecting entrepreneurial intention levels found that personal attitude and PBC are the most relevant factors in stimulating entrepreneurial intentions. Thus, education institutions need to develop entrepreneurship courses that target these factors in order to develop entrepreneurial intentions in their students.

2.11.2 Gender as a factor that influences Entrepreneurial intention

Despite an increase in the number of female owned businesses worldwide, men are still more active in the field of entrepreneurship. According to Kickul, Wilson, and Marlino (2007), women entrepreneurs make up 25% of all businesses in advanced market economies. The number is even smaller for the middle income countries in Africa, Asia and Latin America, as the percentage of men participating actively in entrepreneurship is pegged at about 75%. (Minniti, Arenius, & Langowitz, 2005).

In their study of the relationship between gender, entrepreneurship education, self-efficacy and entrepreneurial intention for teenage and Master of Business Administration (MBA) students, Kickul et al. (2007) found that the subjects' self-efficacy in relation to their intention to establish a business venture was low compared to their male counterparts. Their explanation for this is the expectations imposed by society on women that limit their career choices and discourage entrepreneurship for them. However, after being exposed to an entrepreneurship education program, the MBA women's entrepreneurial self-efficacy increased. This is based on the notion that self-efficacy can be changed. In this regard, well designed entrepreneurship programs aimed at boosting women's self-confidence are of essence if women are to take up entrepreneurship career path. In this case, self-efficacy is the same as self-confidence.

Further, research on the career interests of teenagers, who are the potential entrepreneurs of the future, has revealed significantly less interest among girls than among boys in entrepreneurial careers (Kourilsky and Walstad, 1998; Marlino and Wilson, 2003). Packham et al (2010) who studied French, Polish and German undergraduates also found that even though women perceived a greater benefit from learning entrepreneurship education, male students are the ones who demonstrated a significant entrepreneurial attitude after having gone through the course.

On the other hand, some studies have found contrary results. For example, Oosterbeek et al. (2010) found that entrepreneurship education had a negative impact on both males and females, but that it was more prominent for the females who may have experienced that running a business is hard when combined with other duties. On the other hand, Pun (n.d.), found that female entrepreneurs in Nepal, had a slightly greater "high ability" value than their male counterparts. As far as Omani college

students are concerned, there is an insignificant difference in terms of attitudes towards entrepreneurship between males and females (Segumpan & Zahari, 2012).

2.12 Conceptual Framework

Having examined the literature on what entrepreneurship education in general entails and its influence on entrepreneurial intentions as well as TPB, the following is, hence, a conceptual framework for the study

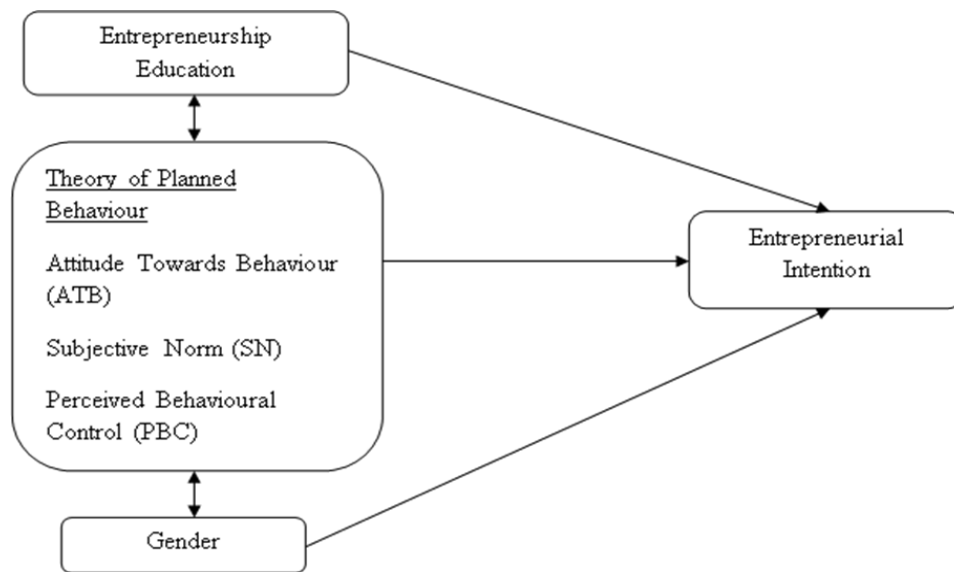


Fig.2.2 Conceptual framework

The conceptual framework in Fig. 2.2 features entrepreneurship education, the antecedents from the TPB and gender. The contribution that the TPB has made towards the study of intentions is so tremendous that it cannot be ignored in this study. It is for this reason that the greater part of the conceptual framework is made up of the TPB antecedents. The arrows represent a positive influence in the direction of the arrow as follows:

- Entrepreneurship education influences entrepreneurial intention.
- Antecedents of ATB, SN and PBC from the TPB have an influence on entrepreneurial intention.
- Gender has an influence on entrepreneurial intention.

However, the arrows following the factors to each other simply indicate their interactive nature.

2.13 Chapter Summary

The possibilities for inculcation of entrepreneurial knowledge and skills through entrepreneurship education are endless, with the literature saying that such skills can be taught and that entrepreneurs are made not born. More so, the need to impart these skills is greater now more than ever, with nations looking to entrepreneurship as a driver of economic growth and poverty alleviation resulting from unemployment. With this background, a lot of entrepreneurship courses have mushroomed in almost all higher institutions of learning worldwide. However, undergraduate students going through these courses have varying perceptions of what the courses entail, as well as, the influence that these courses have on their intention to choose entrepreneurship as a career. On the other hand, there are other factors such as gender, family background and parents which may influence this intention and are not part of entrepreneurship courses. Harmony needs to be brought into the curriculum so that content, pedagogy and delivery modes lead to the acquisition of the much desired entrepreneurial knowledge and skills for national development. The TPB is a good place to start in this quest for developing an entrepreneurial culture and mindset for the good of the nations.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

Kothari (2004) defines research methodology as a way to systematically solve the research problem. It refers to the various steps that are generally adopted by a researcher in studying the research problem, along with the logic behind them. Particularly in the social sciences, the term is simply about how research is conducted. This chapter, therefore, presents the sampling frame and sampling techniques employed, as well as the sample size. Further, the chapter highlights the study location, data collection methods and analysis. The chapter goes on to explain the study assumptions and ethical considerations.

3.1 Research Design

Selltiz, Wrightsman, and Cook (1976) define research design as the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose (p. 50). This study was a quantitative research and employed the survey design. According to Gay, Mills, and Airasian (2011), survey research involves collecting data to test hypotheses or to answer questions about people's opinions on some topic or issue. As regards this study, opinions were sought from undergraduate students on the influence of entrepreneurship education on entrepreneurial intention.

Bachelor of Business Administration (BBA), Bachelor of Education (Business Studies) (EBS), Bachelor of Science (Technical Education) (TED) and Bachelor of Science in engineering (ENG) students formed the sample frame of the study. Choice of these programs was on the basis of participation and non-participation in an entrepreneurship course, as well as the nature of the program in terms of knowledge and skills attained. The sample was reached at through use of purposive sampling.

3.1.1 Population

This study employed the survey design in order to measure the level of intention of two groups of students: entrepreneurship and non-entrepreneurship groups. The sample for this study was drawn from the Malawi Polytechnic student population. From the 26 programs offered at The Polytechnic, only four of them were used to draw the sample from. Thus the sample comprised all third year BBA and all final year EBS students in the entrepreneurship group while some final year TED and ENG students formed the sample for the non-entrepreneurship group. The latter programs were chosen on

the basis that their nature leads to acquisition of technical skills, which are deemed entrepreneurial. Both groups were comprised of subjects facing career decisions, and therefore were representative of the population of interest. Table 3.1 shows the total enrolment of students that formed the population for this study from which the sample was derived.

Table 3.1 Total enrolment for study population

Program	Enrolment
BA 3	63
EBS 4	36
TED	59
ENG	83
Total	241

It should be mentioned here that the names of the entrepreneurship courses for the programs in the entrepreneurship group are different. For BBA, the course is called Entrepreneurship and Innovation Management and is offered in second semester of the third year. For EBS, the course is called Small Business Enterprise and is offered in the second semester of the final year. These modules are typically offered in about 12 weeks. The difference in the nomenclature for the courses is probably due to the fact that they originate from two different departments under different faculties. However, both entrepreneurship courses aim at transforming students mindsets from being job seekers to job creators.

3.1.2 Sampling Method

Non-probability sampling was employed to determine the nature of respondents for the study. The study particularly used purposive sampling. According to Kothari (2004) non-probability sampling is that sampling procedure which does not afford any basis for estimating the probability that each item in the population has of being included in the sample. On the other hand, purposive sampling involves selecting certain units or cases based on a specific purpose rather than randomly (Tashakkori & Teddlie, 2003). Also referred to as judgment sampling, purposive sampling involves the researcher selecting a sample using his experience and knowledge as well as relevance of the group to be sampled.

This sampling method was chosen so that only those doing entrepreneurship education were specifically chosen to be in the entrepreneurship group. As for the respondents in the non-entrepreneurship group, purposive sampling was employed taking into consideration nature of program in terms of skills students acquire which would enable one go into entrepreneurship as well as year of study which was final year students because they are at a point of making a career decision. Further, this sampling method was used in order to balance up the numbers for the two groups. Even though the total enrollment of the students in the non-entrepreneurship group was 142, the researcher

purposively chose 99 students to match with the number of students studying entrepreneurship using purposive sampling. Equal numbers of males and females were selected for the entrepreneurship and non-entrepreneurship groups. In the end, using purposive sampling, both groups had 41 females and 58 males each, making a total of 99 students in each group.

Overall, choice for the above mentioned method was based on its superiority in ensuring reduced bias and a more representative sample of the population in terms of composition and characteristics with regard to the aim of the study.

3.1.3 Sample Size

With the use of purposive sampling method a total of 198 undergraduate students were selected as participants for the study. The entrepreneurship group comprised 99 respondents studying an entrepreneurship course, with 58 males and 41 females. On the other hand, the non-entrepreneurship group also had 99 respondents not studying entrepreneurship with similar numbers of males and females.

Table 3.2 Total sample for the study

Name of program	Entrepreneurship group		Non-entrepreneurship group	
	Male	Female	Male	Female
BBA	41	22	-	-
EBS	17	19	-	-
TED	-	-	33	26
ENG	-	-	25	15
Total	58	41	58	41

3.2 Study Location

This study was conducted at The Malawi Polytechnic. The choice for this location was influenced by the convenience it provided in terms of time and funds to be used. Further to this, The Malawi Polytechnic is situated in the heart of the commercial city of Blantyre, such that the targeted sample is assumed to have had more exposure to entrepreneurs who were putting into practice similar concepts and theory, which some of the students were learning at the time unlike those in rural areas.

3.3 Data Collection

Having identified the research sample, data was personally collected at the study location from the entrepreneurship and non-entrepreneurship groups.

3.3.1 Data Collection Techniques

Primary data for this study was obtained through a structured questionnaire in line with the research objectives and questions. A structured questionnaire consists of definite, concrete and pre-determined questions to ensure that all respondents reply to the same set of questions (Kothari, 2004). According to Leary (1995), there are distinct advantages in using a questionnaire as opposed to conducting interviews. For starters, questionnaires are less expensive and easier to administer than personal interviews; second, they lend themselves to group administration; and, lastly, they allow confidentiality to be assured. It is for these reasons that the researcher chose to use questionnaires as the research instrument.

The questionnaire consisted of statements to which respondents responded by choosing from a five-point Likert scale. The scale consisted of strongly disagree at number 1 to strongly agree at number 5. The questionnaire was adapted from the one recommended by Linan and Chen (2009) to the extent of aligning it with the objectives of the study and also ensuring that the data collected was valid and reliable. Being an adapted questionnaire, it also consisted of questions to which respondents had to answer yes or no and another five-point Likert scale consisting of very negative to very positive. There was also an open ended question that requested the respondents to provide any further comments on the topic. Both groups responded to the same set of questions.

3.3.2 Data Collection Process

The data collection process began with seeking approval from the heads of departments (HODs) of the four programs. A letter was written and personally presented to the HODs. After permission was granted, the researcher made arrangements to meet with the respondents from each group on a day that was convenient to them. The researcher then personally administered the questionnaires to the two groups; each group was assembled together in one place and questionnaires were distributed to the respondents. Respondents were given instructions on how to complete the questionnaire and were advised to complete them without consulting other respondents. Immediately after completing the questionnaires, the researcher collected the questionnaires. This process was done for the sole reason of ensuring at least a hundred percent response rate of respondents.

3.3.3 Validity and Reliability in terms of questionnaire design and data analysis.

Reliability is the extent to which a test or procedure produces similar results under constant conditions on all occasions (Bell, 2010). On the other hand, validity refers to the degree to which test (or instrument) measures what it is supposed to measure and, consequently, permits appropriate interpretation of scores (Gay et al., 2011). In this regard therefore, to ensure the reliability of this study, Cronbachs alpha was calculated for all the variables which was found to be above the acceptable threshold (0.63-0.80). On the other hand, content validity was arrived at through use of an

adapted questionnaire by Linan and Chen (2009) which has been used by several authors and has proved to measure entrepreneurial intention. The questionnaire was also piloted and the responses provided data that addressed the objectives of the study.

3.4 Data Analysis

IBM SPSS Statistics Version 20.0 was employed during statistical analysis. It was used in different respects to analyze data for all the three objectives, that is, measure the level of intention between entrepreneurship and non-entrepreneurship groups as well as assess the influence of entrepreneurship education on entrepreneurial intentions of undergraduate students. In line with this, independent sample T-test, frequencies, z-test for comparing column proportions and spearman rank correlations were carried out. Spearman's rank correlation was used because the study made use of ordinal ranked data.

3.5 Study Assumptions

This study was working on the overall assumption that participation in an entrepreneurship course influences all undergraduate students' entrepreneurial intentions. This is considered as the total effect, however. Another assumption is that antecedents from the TPB and gender also influence entrepreneurial intentions of undergraduate students. These antecedents are ATB, SN and PBC.

3.6 Ethical Considerations

According to Blaxter et al. (2006) in Bell (2010, p. 47), ethical research involves, "getting the informed consent of those you are going to interview, question, observe, or take materials from. It involves reaching agreements about the uses of this data, and how its analysis will be reported and disseminated. And it is about keeping to such agreements when they have been reached." With this background, ethical clearance was obtained from the students by stressing to them that participation in the study was voluntary and that responses provided would be treated with utmost confidentiality, and the respondents themselves remained anonymous. In this regard, respondents signed a consent form and were advised not to write their names on the questionnaire. The responses provided were used for this study alone and nothing else. Also as mentioned above, clearance was sought from the HODs of the various participating programs before the researcher interacted with their respective students.

3.7 Chapter Summary

Working on the assumption that entrepreneurship education positively influences entrepreneurial intentions of undergraduate students, a sample of 198 students, obtained through purposive sampling was asked to complete questionnaires. The questionnaire, consisting of close-ended questions required respondents to choose their responses from a five-point Likert scale. Taking on a

quantitative approach, this study employed IBM SPSS version 20.0, in particular, the independent sample T-test and correlation as methods for analyzing data. The study adhered to all ethical considerations as well as all rules of validity and reliability. The study was conducted at The Malawi Polytechnic.

CHAPTER FOUR RESULTS AND DISCUSSION

4.0 Introduction

This chapter presents the findings of the study. It provides interpretations of the data and further offers discussion on the findings. The chapter examines respondent characteristics, level of students' entrepreneurial intentions, factors influencing entrepreneurial intentions as well as the influence of entrepreneurship education on entrepreneurial intentions of undergraduate students.

4.1 Respondent Characteristics

Table 4.1: Descriptive Statistics for Respondent Characteristics

Variable	N=160	Frequency	Percentage (%)
Gender			
Male		96	60.0
Female		64	40.0
Age			
less than 20		3	1.9
21-25		123	76.9
26-30		13	8.1
31-35		15	9.4
More than 35		6	3.8
Program of study			
Entrepreneurship group		80	50.0
BBA		55	34.4
EBS		25	15.6
Non-entrepreneurship group		80	50.0
TED		39	24.4
ENGINEERING		41	25.6

Table 4.1 gives the descriptive statistics of the various characteristics of the respondents. A total of 160 respondents participated in the study. Initially, 198 questionnaires were to be distributed to the

initial sample of 198 respondents but only 160 questionnaires were completed giving an 81% response rate.

In terms of gender of the respondents, 96 were male, representing 60% of the sample and 64 were female, giving a 40% representation of the total sample. A 50-50 representation of gender was sought but could not be attained because the total number of females who participated in entrepreneurship courses was 32 against 48 males. The number of males could not be reduced to 32 because the study aimed at involving all students participating in entrepreneurship because they were already few compared to the non-participants.

From the data presented, 123 (76.9%) were found to be between 20 and 25 years old. Those between 31 and 35 age bracket account for 9.4%. The least number of respondents were those less than 20 (1.9%) years old, followed by 26-30 (8.1%) and more than 35 (3.8%) years old. This age pattern can be explained by the fact that the study was looking at undergraduate students, and the bulk of those consists of students within the 21-25 year bracket. On the other hand, the group under study also consisted of adult learners who had come back to school after having been to the industry for a while, hence a second highest percentage for the 31-35 age bracket.

With regard to program of study of the respondents; which also indicates participation and non-participation in entrepreneurship education, the bulk of the respondents were from BBA (34.4%) seconded by Engineering (25.6%), then TED (24.4%) and finally EBS (15.6%). However, the totals for both the entrepreneurship and non-entrepreneurship groups were 50% each. Thus 50% of the respondents were those who participated in an entrepreneurship course (BBA and EBS) and they formed the entrepreneurship group while the other 50% were those who did not participate in an entrepreneurship course (Engineering and TED) and they formed the non-entrepreneurship group.

4.2 Students entrepreneurial intentions

Table 4.2 presents results of the descriptive statistics of entrepreneurial intention as well as the antecedents of entrepreneurial intention.

Table 4.2: Descriptive statistics for Entrepreneurial intention and antecedents to entrepreneurial intention

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Entrepreneurial Intention	160	1	5	3.92	.764
Perceived Behavioral Control	160	1	5	3.63	.784
Subjective Norm	160	1	5	3.91	.655
Attitude Towards Behavior	160	1	5	4.42	.805

The results show that over the whole sample of the students, entrepreneurial intention is fairly high (Mean =3.92); thus on average most respondents agreed to the statements on entrepreneurial intention. The results also show that perceived behavioral control, subjective norm and attitudes towards behavior was fairly high, thus most students agreed to the statements on perceived behavioral control, subjective norm and attitudes towards behavior.

The result above could be explained from a standpoint that all students whether participating in entrepreneurship (education) or not, have heard about entrepreneurship; it has become an everyday common word for this generation such that all students might have heard about it or know people who are entrepreneurs. They might have seen or heard about the importance and advantages of entrepreneurship hence the positive responses on the statements on entrepreneurial intention. Ajzen (2002) in Linan and Chen (2009) argue that “a greater knowledge of different entrepreneurial aspects will surely contribute to more realistic perceptions about entrepreneurial activity thus indirectly influencing intentions.” There are many sources from which entrepreneurial knowledge and skills may be obtained be it the internet, television, magazines etc. Among other reasons, S. Lee, Chang, and Lim (2005) substantiate this claim as they write that “the global explosion of e-business and new business opportunities created by advances in information and telecommunication technologies (ICT) have widely popularized entrepreneurship for new venture creation” (p.27).

Further, the overall high entrepreneurial intentions of students in both groups can be explained in a way that these students see entrepreneurship as a solution to unemployment whose rate continues to increase every day in Malawi. Forty six percent of the respondents made mention of their intentions to establish their own businesses because they see entrepreneurship as a solution to scarcity of employment. They mentioned of seeing other graduates remaining unemployed for years. They further commented that in an unstable economy like ours, there is no guarantee that one’s job will be secured for a long time even if one does manage to get a job. So entrepreneurship through establishing and running a business seems like a solution and overall better option than employment.

In fact, the results from the Global Entrepreneurship Monitor (GEM) project revealed that developing countries with their poor economic conditions such as high unemployment rates and low wages have shown higher entrepreneurial activities than developed countries (Bosma and Levie 2010). Iakovleva, Kolvereid, and Stephan (2011) also substantiate this claim as they concluded that “respondents from developing countries were more likely to envisage future careers as entrepreneurs and have stronger entrepreneurial intentions than those from industrialized countries.”

This finding is consistent with the findings of the research by Hattab (2014) who found that entrepreneurial intentions were high across the whole sample of respondents from three faculties of Engineering, Computer Science and Business Studies in his study of the impact of entrepreneurship education on entrepreneurial intentions of university students in Egypt. On the contrary, Ozaralli and Rivenburgh (2016) found that entrepreneurial intentions were low for both U.S and Turkish university students in their study of factors influencing entrepreneurial intentions. As their ATB was high in relation to entrepreneurial intention, other factors such as perceived risks of establishing a business venture as well as preference for employment in the public sector which offer lucrative salaries accounted for the low intention on the part of the US students. With the Turkish students, their low entrepreneurial intentions were attributed to poor economic and political conditions that are not favourable to business establishment.

4.2.1 Estimated Dates for Business Establishment

Table 4.3 gives a cross tabulation and Z-test of establishing a business after graduation and entrepreneurship education. This is used to further explore how students in the entrepreneurship and non-entrepreneurship groups compare in their level of entrepreneurial intention by looking at how soon they intend to establish a business after graduation.

Table 4.3 Crosstabulation and Z-test of establishing a business after graduation and entrepreneurship education

How soon to establish a business after graduation	Entrepreneurship education		Total
	Non-entrepreneurship group (TED and Engineering)	Entrepreneurship group (EBS and BBA)	
Soon after graduation	34(52%) _a	31(48%) _a	65
3 years after graduation	29(52%) _a	27(48%) _a	56
5 years after graduation	11(38%) _a	18(62%) _a	29
7 years after graduation	4(80%) _a	1(20%) _a	5
Later than 7 years	2(40%) _a	3(60%) _a	5
Total	80	80	160

*Each subscript letter denotes a subset of entrepreneurship education categories whose column proportions do not differ significantly from each other at the .05 level.

The results show that most students (52%) in the non-entrepreneurship group responded that they intend to establish a business soon after graduation than those in the entrepreneurship group (48%). Among those who responded that they intend to establish a business 3 years and 7 years after graduation, the results also show that most students from the non-entrepreneurship group responded that they intend to establish a business 3 years after graduation (51.8%) ,7 years after graduation (80%) compared to those in the entrepreneurship group.

Most of the students who take entrepreneurship courses (entrepreneurship group) responded that they intend to establish a business 5 years later after graduation (62%) and later than 7 years after graduation (60%) compared to those who do not take entrepreneurship courses (non-entrepreneurship group). However, a Z-test for comparing column proportions between the two groups showed that the difference in the proportions is not statistically significant.

The finding that the majority of respondents from the entrepreneurship group want to establish their businesses more than five years after graduation is interesting and it raises a question as to why students who have higher entrepreneurial intentions and knowledge in entrepreneurship are opting to take that much time to establish a business when they would otherwise have been the first ones. This

finding contradicts with the findings of (Hamidi et al., 2008) who found that students engaged in academic entrepreneurship courses have higher intentions to start their own businesses in the future in their study of creativity in entrepreneurship education. On the other side of this, Lüthje and Franke (2004) found that students from universities in Munich and Vienna with low levels of (business) founding intentions lacked a distinctive entrepreneurship education. Having gone through an entrepreneurship course, a possible explanation for this finding may be that, as Kirby (2005) argued, “entrepreneurship programs around the world educate students *about* entrepreneurship rather than educating them *for* entrepreneurship”. In fact, Rideout and Gray (2013, p. 346), in their study of whether entrepreneurship education works or not, concluded that “in truth, entrepreneurship education appears to be one of those phenomena where action and intervention have raced far ahead of the theory, pedagogy and research needed to justify and explain it.

On the other hand, the higher percentage of respondents from the non-entrepreneurship group intending to establish their own businesses soon after graduation can be explained in terms of the nature of their programs, which instill technical skills in metalwork, woodwork and welding (for TED) as well as mechanical civil and electrical engineering skills (for Engineering), which could be channeled into establishing a business. This finding is consistent with the findings by Lüthje and Franke (2003) whose study of engineering students (who did not take any entrepreneurship course) revealed that more than half the respondents will have their own businesses in the foreseeable future (within 5.2 years) after graduating from university. They further conclude that students studying at technical (research) universities are “a promising source of future (high-tech) entrepreneurs” (Lüthje & Franke, 2003, p. 142).

Overall, Hamidi et al. (2008) suggest that further research be done on the influence of educational programs on entrepreneurial intentions leaning towards the availability of successful role models in a particular field which may determine levels of students entrepreneurial intention towards business establishment.

This can be explained in two ways from the comments expressed by those in the entrepreneurship group. 17% of the respondents cited lack of start-up capital and 15.4% cited lack of a practical approach to teaching of entrepreneurship courses as major challenges to them starting their own businesses.

Respondents lamented on the lack of a practical approach to entrepreneurship courses pedagogy where students are exposed to the actual entrepreneurship practices on the ground. This includes such things as how to write a business plan, cash flow statements as well as interaction with actual entrepreneurs through field assignments or internships. Students fail to apply the knowledge gained in the entrepreneurship courses after graduation. They argued that as much as entrepreneurship education opens one’s mind to the endless possibilities available, the theory part of entrepreneurship

is very different from the practical side of it. Otherwise all people who have knowledge of it or teach it would already be entrepreneurs. The respondents further went on to point out that their courses also lack motivation and inspiration. Teaching and learning modes should thus be revised to include inspiration and motivation.

Respondents pointed to the lack of resources for setting up and running a business as one of the problems that prevent people from establishing businesses in their comments. In fact, 12.2% of the respondents ticked out access to capital as one of the factors that influence entrepreneurial intentions which came fourth out of eleven other characteristics. The respondents mentioned unwillingness of banks and other lending institutions to provide loans as well as their through high interest rates of borrowing money which are prohibitive. Further, 8% of the respondents wrote that our economy is too unstable and entrepreneurship thrives in a stable economy. They called on the government to provide a conducive environment for entrepreneurship to thrive through provision of loans as starter pack.

4.3 Influence of Entrepreneurship education on Entrepreneurial intentions of undergraduate students

Table 4.4 presents results for an independent sample T-test comparing the level of entrepreneurial intention as well as the antecedents to entrepreneurial intention from the TPB between the entrepreneurship and non-entrepreneurship groups.

Table 4.4: Entrepreneurship education, antecedents of entrepreneurial intention and entrepreneurial intention

Variables	entrepreneurial intention		attitudes towards behavior		perceived behavior control		subjective norms	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Entrepreneurship education								
Non-entrepreneurship group(N=80)	3.80	.742	4.32	.764	3.50	.751	3.85	0.747
Entrepreneurship group (N=80)	4.03	0.769	4.55	0.793	3.76	0.783	3.97	0.540
Difference in mean	-0.236		-0.223		-0.258		-0.126	-0.236
t-value	-1.97		-1.81		-2.12		-1.21	
P-value	0.05**		0.07		0.035**		0.228	0.05**

**Significant at 0.05

The results show that the students mean entrepreneurial intention in the group of students that participated in an entrepreneurship course (entrepreneurship group) is higher than the mean entrepreneurial intention in the group of students that did not participate in an entrepreneurship course (non-entrepreneurship group). Further test of significance of the difference in the mean entrepreneurial intention shows that there is a statistically significant difference in the mean entrepreneurial intention between the two groups ($t = -1.97, d = -0.236, p < 0.05$)

This result is explained in a way that students from the entrepreneurship group may have more insights regarding entrepreneurship as a career option unlike their counterparts in the non-entrepreneurship group because they have been exposed to content on the subject of entrepreneurship. Their higher entrepreneurial intention may be from an informed position. The opposite may be true for the non-entrepreneurship group. Their lack of exposure to entrepreneurship education may be responsible for their low entrepreneurial intentions as entrepreneurship education provides knowledge and skills on how to go about establishing and running a business.

Hattab (2014) found that students' entrepreneurial intentions increased after being exposed to entrepreneurship education. Ozaralli and Rivenburgh (2016) had a similar finding in their study of antecedents to entrepreneurial behaviour in the United States of America (USA) and Turkey. They found that U.S. and Turkish students who had taken classes that included some content and insights

helpful in starting a new business expressed a higher intention to start a new venture. Charney and Libecap (2000) found similar results in their study of the impact of the Berger Entrepreneurship Program at the University of Arizona. They compared participants and non-participants of the mentioned program. Their data revealed that on average, participants of the program were three times more likely to be involved in the creation of a new business venture than the non-participants. They found that entrepreneurship education alone increased the probability of an individual being instrumentally involved in a new business venture by 25 percent. This was found to be lacking in non-participants. More specifically, entrepreneurship students were 11 percent more likely than were non-entrepreneurship students to own their own businesses after graduation” (Charney & Libecap, 2000, p. 2).

On the other hand, Hattab (2014) found that engineering students who were never exposed to any entrepreneurship education had the highest percentage of respondents that showed disinterest in an entrepreneurship career. This is consistent with the findings of this study as the non-entrepreneurship group had some respondents studying engineering. Also, Oosterbeek et al. (2010)’s results in their study of the impact of entrepreneurship education on entrepreneurship skills and motivation of college students in the Netherlands. They found that the objectives of the program were not being achieved and that entrepreneurship education had a negative impact on the students’ entrepreneurial intentions. Further, in their comparative analysis of attitudes towards entrepreneurship education, Packham, Jones, Miller, Pickernell, and Thomas (2010) found that entrepreneurship education had a positive impact on entrepreneurial intentions of French and Polish students on one hand. On the other hand, the course had a negative impact on male German students.

Further, an interesting finding by Lüthje and Franke (2004) showed that even though the whole sample had taken an entrepreneurship course, respondents from the German speaking universities of Munich and Vienna presented lower entrepreneurial intentions than their U.S counterparts from the Massachusetts Institute of Technology (MIT). Substantiating on this claim, Richardson (1993) as cited in Hattab (2014) found that there is a significant difference between perceived contributions of education with different academic majors in his study of academic major and alumni perception of growth and development. From this premise, Hattab (2014) therefore argued that “it is anticipated that business students would be more disposed towards starting their own business, due to the nature of courses they were exposed to, including marketing, accounting and management courses. These courses provide students with further knowledge and know-how of starting and growing a business. Students of non-business specializations lack the exposure to the business world as their courses were more focused on technical aspects” (p.14).

Even though the entrepreneurship group had significantly higher entrepreneurial intentions than the non-entrepreneurship group, 17.3% of the respondents comprising respondents from both groups hailed the importance of entrepreneurship education for all students regardless of their program of

study. They hailed the course to be very important that it should be included in the curriculum for those not studying it so that they can develop skills in business establishment and running.

4.3.1 Influence of TPBs antecedents on entrepreneurial intention

The mean of PBC, SN and ATB towards entrepreneurial intention between the entrepreneurship and non-entrepreneurship groups are also compared as shown in Table 4.4 above. The mean PBC was statistically significantly higher in the entrepreneurship group than in the non-entrepreneurship group ($t=-2.12, d=-0.258, p<0.035$). While for SN and ATB, the means in the group of students that participated in an entrepreneurship course are higher than in the group of students that did not participate in an entrepreneurship course. However, the results indicate that the difference in the means is not statistically significant $t=-1.21, d=-0.126, p>0.228$ and $t=-1.81, d=-0.223, p>0.07$ respectively.

The higher mean statistical significance for PBC for the entrepreneurship group may again be explained along the lines that they have gone through an entrepreneurship course and the course may have imparted knowledge and skills which may have made the students develop a conviction that an entrepreneurship career is possible since PBC is to do with an individual's perception of ability towards something.

On the other hand, nonsignificance of ATB and SN could be explained from the view point that entrepreneurship involves a lot of risk and as such employment may seem to be the easier and safer option. Significant others and an individual's negative attitudes towards entrepreneurship in this regard may influence one not to venture into entrepreneurship.

Non significance of ATB is surprising compared to SN. Research by Lu'thje and Franke (2003) found that attitude towards entrepreneurship proved to contribute the strongest explanation for entrepreneurial intentions of the technical students.”

In general, subjective norms tend to contribute more weakly on intention of the three antecedents of the TPB. Ajzen (1991) found that SN is frequently the weakest element and it has been non-significant in a number of different studies which applied the TPB to various actions (Linan et al., 2011). In regard of this traditionally weak role of SN, Linan and Chen (2009) report that some studies simply omit it while those who did include it found it to be nonsignificant.

In general however, Iakovleva et al. (2011) found that respondents from developing countries score higher on the TPBs antecedents of entrepreneurial intentions than those from developed countries.

4.4 Factors Influencing Entrepreneurial Intentions

Respondents were required to indicate those factors which they considered to be influencing entrepreneurship from a list of eleven factors. Using frequency distribution as a yard stick, an

individual's own interest ranks highly as the factor that influences entrepreneurship (14.6%), seconded by availability of business opportunities (13.1%), and preference for being an independent professional is on third place (12.4%). This was closely followed by access to capital for the business on fourth place (12.2%). Entrepreneurship education came fifth (11.5%). However, age and gender were last but one and last on the list, with frequencies of 1.6% and 0.8% respectively.

With reference to the above pattern of results, the personality characteristic of an individual's interest in entrepreneurship is the factor that most students chose as influencing entrepreneurial intentions. Most people believe that in order to do anything, it all starts with the individual, such that all other factors were secondary. Respondents (8.6%) alluded to the fact that as much as one can be taught entrepreneurship, but for the most part it comes from the individuals own desire. They believe that without the desire one may be taught but still remain unentrepreneurial." In this regard, own interest is internal, coming from the individual. The other factors only add on to the spark that is already there, which is the interest. This is in line with the findings of Nian et al. (2014) who found that an individual's own interest in entrepreneurship ranked highly of all factors examined to influence entrepreneurial intentions. In contrast Lüthje and Franke (2004) found that overall, personality characteristics did not explain development of entrepreneurial intentions in the sample for his study of.

Even though the personality trait of interest topped the list, contextual/societal factors such as availability of business opportunities and access to finance for business establishment made it to second and fourth place respectively. In line with this result, Peng, Lu, and Kang (2012) found that lack of these factors has a significant negative influence on entrepreneurial intentions.

On the other hand, entrepreneurship education courses came fifth in terms of frequency as a factor that influences entrepreneurship. This could be the case because the majority of students who did not choose this factor were in the control group. This could mean that these students were not being objective because they have not been exposed to entrepreneurship education and were thus not aware of what it is all about. Segumpan and Zahari (2012) found that Omani college students in a business program who had studied entrepreneurship had a positive attitude towards entrepreneurship education. Their positive attitude was to do with their "perception on the entrepreneur's ability to see opportunities and transform them into an interesting proposition" (p.69). On the other hand, Gibson, Harris, Mick, and Burkhalter (2011) found that university students studying different programs showed stronger attitudes towards entrepreneurship than college students. This means that perceptions of and attitudes towards entrepreneurship would infer how an individual views entrepreneurship education as a factor influencing entrepreneurial intentions.

Overall, the findings above point us in the direction that entrepreneurship is influenced by so many factors. That is to say, the decision to become an entrepreneur is arrived at taking a combination of

different factors into consideration. This is consistent with the findings of by Lee and Wong (2004) who concluded that the intentions to carry out certain behaviour were shaped and affected by different factors, such as, needs, values, wants, habits and beliefs; entrepreneurship is the behaviour in question in the context of this research.

4.4.1 Gender as a factor influencing entrepreneurial intentions

As regards gender, the study found that it does not influence entrepreneurial behaviour in any way. On the list of factors influencing intentions, it came last with a frequency of 0.8%. Further, table 4.5 gives a comparison of entrepreneurship intention between students in the entrepreneurship and non-entrepreneurship groups by gender.

Table 4.5 Gender and entrepreneurial intention

Non-entrepreneurship group		
Variables	entrepreneurial intention	
	Mean	SD
Gender		
Male	3.886	0.781
Female	3.666	0.672
Difference in mean	0.222	
t-value	1.298	
P-value	0.198	
Entrepreneurship group		
Variables	entrepreneurial intention	
	Mean	SD
Gender		
Male	4.1562	0.5929
Female	3.8489	0.9572
Difference in mean	0.3073	
t-value	1.774	
P-value	0.08	

****Significant at 0.05, * significant at 0.10**

The results indicate that for students in the non-entrepreneurship group, the mean entrepreneurial intention for male students is higher compared to that of female students. However, the mean difference in entrepreneurial intention is not significantly different.

Similarly, for the students in the entrepreneurship group, the mean entrepreneurial intention is also higher for the male students compared to the female students. However, the results also show that the mean difference in entrepreneurial intention is not statistically significant. Generally, the results show that the mean entrepreneurial intention is not statistically different between male and female students in the two groups.

Farashah (2013) found similar results in his study of the process of impact of entrepreneurship education and training on entrepreneurship perception and intention on Iranians. He found that gender was nonsignificant in predicting entrepreneurial intention. On the other hand, this finding is contrary to some findings which consider gender to be a hindering factor to women in establishing their own businesses and making a success of them. Tong, McCrohan, and Erogul (2012) claim that “gender, education, employment and income matter too: women, unemployed people, low-educated or low-income people were less likely to become entrepreneurs than their counterparts” (p. 13).

In their study of the relationship between gender, entrepreneurship education, self-efficacy and entrepreneurial intention for teenage and Master of Business Administration (MBA) students, Kickul et al. (2007) found that the subjects self-efficacy in relation to their intention to establish a business venture was low compared to their male counterparts. Their explanation for this is the expectations imposed by society on women that limit their career choices and discourage entrepreneurship for them. However, after being exposed to an entrepreneurship education program, the MBA women’s entrepreneurial self-efficacy increased. This is based on the notion that self-efficacy can be changed. In this regard, well designed entrepreneurship programs aimed at boosting women’s self-confidence are of essence if women are to take up an entrepreneurial path. In this case, self-efficacy is the same as self-confidence.

Further, research on the career interests of teenagers, who are the potential entrepreneurs of the future, has revealed significantly less interest among girls than among boys in entrepreneurial careers (Kourilsky and Walstad, 1998; Marlino and Wilson, 2003). Packham et al. (2010) who studied French, Polish and German undergraduates also found that even though women perceived a greater benefit from learning entrepreneurship education, male students are the ones who demonstrated a significant entrepreneurial attitude after having gone through the course.

In explanation to women’s low entrepreneurial intentions in comparison to their male counterparts, Gupta, Turban, Wasti and Sikdar (2009)’s study with business students in the United States, India, and Turkey, indicated that both men and women associate entrepreneurship with masculine

characteristics. Even with increasing numbers of women entrepreneurs, Mueller and Thomas (2000) and De Bruin et al. (2006) in found that entrepreneurship is still looked at as a male-dominated field.

On the other hand, some studies have found contrary results. For example, Oosterbeek et al. (2010) found that entrepreneurship education had a negative impact on both males and females, but that it was more prominent for the females who may have experienced that running a business is hard when combined with other duties. On the other hand, Pun (n.d.), found that female entrepreneurs in Nepal, had a slightly greater “high ability” value than their male counterparts. As far as Omani college students are concerned, there is an insignificant difference in terms of attitudes towards entrepreneurship between males and females (Segumpan & Zahari, 2012).

4.4.2 Antecedents of Entrepreneurial Intention from the TPB

Apart from the above cited factors, the antecedents from the TPB were also examined as factors that may influence entrepreneurial intention. Table 4.5, therefore, gives the correlation results on the relationship between entrepreneurship intention and antecedents to entrepreneurship intention by comparing the entrepreneurship and non-entrepreneurship groups.

Table 4.6: Spearman's rank correlation between Entrepreneurial Intention, Perceived Behavioral Control, Subjective Norm and Attitude Towards Behavior for Non-entrepreneurship group

Variables	Entrepreneurial Intention	Attitude towards behavior	Subjective norm	Perceived behavioral control
Entrepreneurial Intention	1			
Attitude towards behavior	0.3937 (0.0003)***	1		
Subjective norm	0.4427 0.0000***	0.3320 0.0020***	1	
Perceived behavioral control	0.5921 (0.000)***	0.3863 0.0004***	0.2755 0.0140**	1

Table 4.7 Spearmans rank correlation between Entrepreneurial Intention, Perceived Behavioral Control, Subjective Norm and Attitude Towards Behavior for Entrepreneurship group

Variables	Entrepreneurial Intention	Attitude towards behavior	Subjective norm	Perceived behavioral control
Entrepreneurial Intention	1			
Attitude towards behavior	0.7156 (0.000)***	1		
Subjective norm	0.2228 0.0499**	0.1268 0.2658	1	
Perceived behavioral control	0.7432 (0.000)***	0.5517 0.000***	0.3001 0.0076***	1

*** significant at 0.01, ** significant at 0.05

Tables 4.6 and 4.7 give results of the Spearman's rank correlation between entrepreneurship intention and antecedents to entrepreneurial intention for the students who take entrepreneurship courses (entrepreneurship group) and for those who do not take entrepreneurship courses (non-entrepreneurship group). Spearman's rank correlation was used to explore the relationship between entrepreneurial intention and antecedents to entrepreneurial intention for the two groups. For the entrepreneurship group, the results reveal that there is a strong positive relationship between students entrepreneurship intention and their PBC ($r=0.7432, p<0.000$). Similarly there is a strong positive relationship between entrepreneurship intention and ATB ($r=0.7156, p<0.000$). The results also show that there is a weak positive relationship between students entrepreneurship intention and their SN ($r=0.2228, p<0.05$).

For the non-entrepreneurship group, the results show that there is a strong positive relationship between students entrepreneurial intention and their PBC ($r=0.5921, p<0.000$). The results also show that there is a weak positive relationship between students entrepreneurial intention and their SN ($r=0.4427, p<0.000$) and similarly a weak positive relationship with ATB ($r=0.3937,$

$p < 0.0003$). Cronbach's alphas for all the three antecedents were above the acceptable threshold (between .60 and .89).

From the correlation results, all three antecedents to entrepreneurial behaviour as suggested by Ajzen (1991), are positively related to entrepreneurial intention hence all of them having a chance of making the undergraduate students develop entrepreneurial intentions. Linan et al. (2011, p. 209) Linan and Chen (2009) and Gurbuz and Aykol (2008) also found that personal attitude (ATB) and PBC are the most relevant antecedents explaining entrepreneurial intentions. For both the entrepreneurship and non-entrepreneurship groups, SN has been found to have a weak positive relationship with entrepreneurial intentions, Autio, Keeley, Klofsten, Parker, and Hay (2001) and Krueger et al., (2000) found SN to be the least influential antecedent of entrepreneurial intention of the three antecedents of the TPB. In general, subjective norms tend to contribute more weakly on intention. Ajzen (1991) found that this is frequently the weakest element and it has been non-significant in a number of different studies which applied the theory of "planned behaviour" to various actions. (Linan et al., 2011). In regard of this traditionally weak role of SN, Linan and Chen (2009) report that some studies simply omit it while those who did include it found it to be nonsignificant.

The findings of this study that all antecedents have a positive relationship with entrepreneurial intention is consistent with Ozaralli and Rivenburgh (2016) who found that Turkish students demonstrated a stronger attitude towards entrepreneurship, higher levels of PBC as well as SN. In support of these findings, Iakovleva et al. (2011) found that developing countries exhibited higher scores on Ajzen's antecedents of entrepreneurial intentions than developed countries which proves true for undergraduate students at The Malawi Polytechnic.

The findings of this study, therefore, support the positive associations between entrepreneurial intentions and SN, ATB, and PBC of Ajzen's TPB.

4.5 Chapter Summary

Overall, the study found that students' levels of entrepreneurial intention were high for both the entrepreneurship and non-entrepreneurship groups. Scarcity of employment in Malawi is the main reason for this result. Further, using independent samples T-test, the study has established that entrepreneurship education does influence entrepreneurial intentions of undergraduate students. However, the study found that respondents from the non-entrepreneurship group are the ones intending to set-up their businesses earlier (first five years after graduation) unlike the respondents from the experimental group though the difference in proportions was not statistically significant. Lack of start-up capital and practicality of entrepreneurship courses are the two reasons why this is so. Of the three antecedents to entrepreneurial intentions from the TPB, mean difference for PBC was found to be highly statistically significant while mean difference for ATB and SN were found to be

statistically nonsignificant. Regarding factors leading to an entrepreneurship career, individual interest ranked top in terms of frequency distribution out of the eleven factors presented in this study. Entrepreneurship courses ranked fifth, with age and gender ranked last but not least and last, respectively. Gender and age were also found to have no influence on entrepreneurial intentions. Further, using Pearson correlation, all three antecedents of the TPB were found to be positively related to entrepreneurial intentions as factors influencing entrepreneurial intentions.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter presents a general overview of the study and its subsequent findings, the implications of the findings for theory and practice, and a critique of the study. In addition, recommendations and areas for future research are outlined, derived from the study's findings.

5.1 Overview of Research Findings

This study was aimed at investigating the influence of entrepreneurship education on entrepreneurial intentions of undergraduate students at The Malawi Polytechnic. In order to achieve the general objective, the study's specific objectives were as follows:

1. Assess the level of students' intention of becoming entrepreneurs.
2. Assess the influence of entrepreneurship education on the intention of undergraduate students to become entrepreneurs.
3. Identify the factors that influence students' intentions to venture into entrepreneurship.

One hundred and sixty respondents composed of BBA and EBS students in the entrepreneurship group as well as TED and ENG students in the non-entrepreneurship group completed questionnaires, from which results were derived.

5.1.1 Students entrepreneurial intentions

The study found that overall, entrepreneurial intentions for all respondents in the entrepreneurship and non-entrepreneurship groups were high. Being a developing country, the Global Entrepreneurship Monitor (GEM) project substantiates this finding when they found that entrepreneurial intentions are high for individuals in developing countries because of poor economic conditions resulting in high unemployment rates (Bosma and Levie, 2010) as cited in Linan and Chen (2009). However, it was interesting to find that though entrepreneurial intention was higher in the entrepreneurship group than in the non-entrepreneurship group, the majority of respondents from the non-entrepreneurship group intend to establish their businesses in the first five years after graduation compared to their counterparts in the entrepreneurship group whose majority intend to establish their businesses later than five years after graduation.

5.1.2 Influence of entrepreneurship education on entrepreneurial intentions of students

Using independent sample T-test, the study found that entrepreneurship education does influence students' intentions to establish a business after graduation with mean entrepreneurial intention being

higher and statistically significant in the entrepreneurship group than in the non-entrepreneurship group.

5.1.2.1 Influence of the TPBs antecedents on entrepreneurial intentions

Further, using TPB, the study also found that PBC was highly statistically significant in influencing entrepreneurial intentions unlike SN and ATB which were found to be high in both groups but were statistically nonsignificant meaning that they did not influence entrepreneurial intentions.

5.1.3 Factors that influence Entrepreneurial intention

It was also found that there is no one single factor that influences entrepreneurship, but rather a combination of factors, ranging from personal traits to situational factors to academic influences, such as entrepreneurship courses. However, the factor that had the highest frequency and which had more comments backing it than the others was individuals own interest. It was found that entrepreneurship starts with an individual and that all other factors are but complementary.

5.1.3.1 TPBs antecedents as factors influencing entrepreneurial intentions

This study supports the TPB in a sense that all three antecedents to entrepreneurial intention were found to be positively related to intention as suggested by the TPB. Though this was the case, SN was found to have a weaker relationship with entrepreneurial intention unlike the other two antecedents (ATB and PBC).

5.1.3.2 Gender as a factor that influences entrepreneurial intention

Further, gender and age had the least frequencies, which indicated that their influence on one's ability to become an entrepreneur is very minimal. A comparison of gender against entrepreneurial intention revealed that gender has no influence on entrepreneurial intention.

5.2 Study Conclusions

From the findings of this study, the study concludes that overall, students' entrepreneurial intentions are high and that entrepreneurship education positively influences undergraduate students entrepreneurial intentions. Further, PBC was highly significant in influencing entrepreneurial intentions as opposed to ATB and SN. However, as antecedents to entrepreneurial intentions, all three were found to be positively related to entrepreneurial intention. It is also concluded, for this study, that factors influencing entrepreneurial intentions are many but that the personality trait of an individual's own interest comes first and that the rest are but complimentary. Further, gender does not influence entrepreneurial intention.

5.3 Implications of Findings for Theory and Practice

The findings of this study have several implications for theory and practice. It has contributed to the body of knowledge on entrepreneurship education and the TPB.

On entrepreneurship education, time has come for all university students to be exposed to it because most students have a higher entrepreneurial intention regardless of their program of study. The role of entrepreneurship education in this regard will be to nurture that intention and equip the students with the necessary skills, knowledge and attitudes to enable the students to actually channel their intentions into the actual behaviour. This means adopting an experiential approach to teaching of entrepreneurship courses where students engage in the practical aspects of entrepreneurship to put into action the theory learnt. This is very important as an implication for this study as it found very interesting that those in the entrepreneurship group opted to establish their businesses later than five years after graduation unlike their counterparts in the non-entrepreneurship group who opted to establish their businesses soon after graduation. Apart from changing the pedagogy, other factors also need to be included that cater to the psychological needs of an entrepreneur to-be. Thus, the findings of this study could be applied in the amendment of curricula for entrepreneurship courses at the Polytechnic, and even inform new curricula developments for the same.

On TPB, this study has substantiated that PBC is indeed a strong influencer of entrepreneurial intention. Also, this study supports the TPB and other research previously done on it that all the three antecedents of ATB, SN and PBC are related to entrepreneurial intentions. However this study found ATB to be statistically nonsignificant in influencing entrepreneurial intentions which is a huge deviation to most findings that find ATB to be hugely significant in influencing entrepreneurial intentions.

5.4 Critique of the study

This study only used a sample from four programs out of the twenty six programs offered at the Polytechnic. If the sample had been increased, the findings could have been generalized to a broader population.

5.5 Recommendations

From the results established through this study, the researcher makes the following recommendations:

5.5.1 Entrepreneurship education for all

Since entrepreneurial intentions have been found to be high among all students, it is recommended that entrepreneurship courses be introduced in all programs at The Polytechnic. This will be ideal

since research shows that many contemporary college students want to have their own businesses in the future, regardless of their major field of study (Lima et al., 2012; Minniti, Bygrave, & Autio, 2006). Students' high entrepreneurial intentions should be tapped into and channeled towards development of knowledge and skills that will provide strong convictions in students to start up their own businesses. It is only through provision of entrepreneurship education, in whatever form, that students' minds can be enlightened and awoken to the importance of entrepreneurship in general and why they have to be a part of it. Further to this, students do not fully know the harsh realities of life after college. They always think they will immediately be absorbed into the job market and occupy high-paying positions, a fact which is not true for everyone considering the high unemployment rates. Therefore, entrepreneurship education should be offered to all students regardless of their program of study. Further, female students should also be inspired and encouraged to pursue entrepreneurial career. Deliberate efforts should be made to invite both male and female entrepreneurs to act as role models and inspire and motivate the students.

5.5.2 Experiential and Practical approach to teaching of entrepreneurship

Since the study found that students that participated in entrepreneurship courses intended to establish their businesses later than five years compared to their counterparts due to lack of practicality in the courses, it is recommended that teaching and learning of entrepreneurship should take an experiential and practical approach. Thus teaching and learning should employ practical and experiential methods and exercises, which students can work on in order to produce tangible products. Entrepreneurship courses therefore should go beyond theory to further develop and nurture students' practical abilities of establishing and running a business. This would mean teaching students *for* entrepreneurship and not *about* entrepreneurship (Kirby, 2005). This entails exposing students to the realities of entrepreneurship by taking them through the whole process of establishing a real business, which they will have to evaluate as being successful or not at the end of the courses duration. They can work on this project in small groups. On this, Ozaralli and Rivenburgh (2016) recommended that "from the point of view of education, it means that entrepreneurial training needs to consider, not only increasing perceived feasibility and desirability, but also the concept of entrepreneurship, the role of the entrepreneur and the development of the venture after start-up."

5.5.3 Entrepreneurship that develops all faculties of the individual

From the findings of this study, it is further recommended that content that will develop different abilities of the students be incorporated into the entrepreneurship courses. This will go a long way in producing established entrepreneurs who are well rounded and balanced in their running of businesses. Content should aim at developing personality traits that will enable students to survive in an entrepreneurship career. Students should be able to develop analytical and creative skills so they can assess contextual factors that can impact on their business. Further, the students should also be

psychologically nurtured. Interest in all things entrepreneurial needs to be developed. This can be done by inviting established entrepreneurs to inspire and motivate them. These entrepreneurs should be involved in entrepreneurship education by being invited to deliver lectures to students about entrepreneurship and acting as mentors to students at the same time. Further to this, there should be a link between the university and the business sector so that entrepreneurship is enhanced. For example, students could go on internship just to study and experience how business is handled on a day-to-day basis. This can develop a positive attitude towards entrepreneurship as well as ability to run a business.

5.6 Areas for future research

A tracer study research is recommended to follow up the students to establish whether they will really act on their intentions to establish businesses at the estimated dates as outlined in the questionnaire. Further, a pre-test post-test methodology is proposed for a similar study on entrepreneurial intentions of undergraduate students at The Malawi Polytechnic so that gaps can be isolated. In general, more similar research needs to be conducted with undergraduates at other universities so that results can be generalized to a broader sample.

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APPENDICES

Appendix A: Questionnaire for Students



QUESTIONNAIRE FOR STUDENTS

My name is Lusungu E. Nyirenda, a student at The Polytechnic studying for the Master of Technical and Vocational Education. In partial fulfillment of my studies, I am conducting a research on **Assessing the Influence of Entrepreneurship Education on Entrepreneurial Intentions of Undergraduate Students: A case Study of the Malawi Polytechnic**. In this regard, I request your participation through completion of this questionnaire. Note that all responses shall be treated with utmost confidentiality and anonymity.

Please tick the appropriate box

1. Sex

Male	
Female	

2. Age

<20 21-25 26-30 31-35 >35

3. Program of study

Bachelor of Business Administration	
Bachelor of Education (Business Studies)	
Bachelor of Science in Technical Education	
Bachelor of Science in Engineering	

4. Entrepreneurship background

	Yes	No
Currently, I am an entrepreneur		
Currently, my parents are entrepreneurs		
Parents were once entrepreneurs		
Other family member(s) are entrepreneurs		
Other family member(s) were once entrepreneurs		

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

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Attitude Towards Behaviour					
a) Being an entrepreneur implies more advantages than disadvantages to me					
b) Starting my own business sounds attractive to me.					
c) If I had the opportunity and resources, I'd like to start a business					
d) I personally consider entrepreneurship to be a highly desirable career alternative for people with my professional and education background					
e) I would rather establish a new company than be the manager of an existing one.					
Perceived Behavioural Control					
f) It would be easy for me to start my own business					
g) I am confident that I would succeed if I started my own business					
h) I am able to control the creation process of a new business					
Entrepreneurial Intention					
i) I have the skills and capabilities required to succeed as an entrepreneur					
j) To start my own business would probably be the best way for me to take advantage of my education					
k) For me, developing a business idea would be easy.					
l) Entrepreneurship courses prepare students for a career as entrepreneurs					
m) Entrepreneurship can be taught					

6. Please indicate how much you care about the opinion of the folpersons (Subjective Norms) with regard to entrepreneurship:

	Very Negative	Negative	Neutral	Positive	Very Positive
a) Parents					
b) Other family members					
c) Friends					
d) Fellow students					
e) People important to me in general					

7. What do you think are the factors that make one become an entrepreneur?

	Yes	No
a) Family background		
b) Own interest		
c) High profile entrepreneurs		
d) Friends approval of entrepreneurship		
e) Media		
f) Entrepreneurship education courses		
g) Availability of business opportunities		
h) Preference for being an independent professional		
i) Age		
j) Gender		
k) Access to financial resources		

8. What are the challenges hindering success of entrepreneurship education courses?

	Yes	No
a) Lack of a practical approach to entrepreneurship education		
b) Inadequate content		
c) Inappropriate Teaching and learning methods (pedagogy)		
d) Incompetent teacher		
e) Uninspiring teacher		
f) Lack of motivational talks by established entrepreneurs (role models)		

9. Do you plan to establish your own business after you graduate?

Yes	
No	

10. If yes, how soon after you graduate?

Soon after graduation	3 years after	5 years after	7 years after	Later than 7 years

12. Do you have any comments?

Appendix B: Description of Variables

Variable	Measurement
Entrepreneurial Intention	<p>Five-point Likert scale (from 1-strongly disagree to 5-strongly agree), average score (3 items)</p> <p>I have the skills and capabilities required to succeed as an entrepreneur</p> <p>To start my own business would probably be the best way for me to take advantage of my education</p> <p>For me, developing a business idea would be easy.</p>
Entrepreneurship Education	<p><u>Experimental Group</u></p> <p>BBA and EBS</p> <p><u>Control Group</u></p> <p>TED and ENG</p>
Attitude Towards Behaviour (ATB)	<p>Five-point Likert scale (from 1-strongly disagree to 5-strongly agree), average score (3 items)</p> <p>Please indicate your level of agreement with the following statements:</p> <p>Being an entrepreneur implies more advantages than disadvantages to me.</p> <p>Starting my own business sounds attractive to me.</p> <p>If I had the opportunity and resources, Id like to start a business.</p>
Subjective Norm (SN)	<p>Five-point Likert scale (from 1-very negative to 5-very positive), average score (3 items)</p> <p>Please indicate how much you care about the opinion of the folpersons with regard to entrepreneurship:</p> <p>Parents.</p> <p>Friends.</p> <p>People important to me in general.</p>
Perceived Behavioural Control (PBC)	<p>Five-point Likert scale (from 1-strongly disagree to 5-strongly agree), average score (4 items)</p> <p>Please indicate your level of agreement with the following statements:</p>

	<p>It would be easy for me to start my own business.</p> <p>I am confident that I would succeed if I started my own business.</p> <p>I am able to control the creation process of a new business.</p>
Gender	<p>Male</p> <p>Female</p>

Appendix C: Request for permission to collect data at The Polytechnic



The Polytechnic

Head of Department

Technical Education

Faculty of Education and Media Studies

Ext No: 246

Ref : TED/E/008

MEMORANDUM

TO: HEAD OF DEPARTMENT (BUSINESS ADMINISTRATION)

FROM: LUSUNGU NYIRENDA

DATE: 13TH APRIL, 2015

SUBJECT: PERMISSION TO COLLECT DATA FOR A MASTERS STUDY

As a requirement for my Masters in Technical and Vocational Education at The Polytechnic, I am undertaking an academic research whose title is “**Assessing the Influence of Entrepreneurship Education on Entrepreneurial Intentions of Undergraduate Students: A case of the Malawi Polytechnic**”. In view of this, I would like to ask for permission to have access and collect data from your students.

The proposed data plan is that all third year students (that have participated in your Entrepreneurship and Innovation module) will be selected for a quantitative study. The data collection process is proposed for 16th April, 2015 at a convenient time to the students.

Your attention on this matter will be highly appreciated.

Lusungu E. Nyirenda