Effects of Entrepreneurship Education on University Students’ Orientation towards Entrepreneurship

By

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UNITED STATES INTERNATIONAL UNIVERSITY– AFRICA

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EFFECTS OF ENTREPRENEURSHIP EDUCATION ON UNIVERSITY STUDENTS’ ORIENTATION TOWARDS ENTREPRENEURSHIP

BY

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A Research Project Report Submitted to Chandaria School of Business in Partial Fulfillment of the Requirements for the Degree of Master in Business Administration (MBA)

UNITED STATES INTERNATIONAL UNIVERSITY–AFRICA

SPRING 2018
STUDENT'S DECLARATION
I, the undersigned, declare that the research project is my original work and has not been presented to any other institution of higher learning for academic credit other than United States International University - Africa.

Signed: ..........................  Date: ........................

Njau Ruth Wangari (ID 636793)

This research project has been presented for examination with my approval as the appointed supervisor.

Signed: ..........................  Date: ........................

Dr. Joseph Ngugi Kamau

Signed: ..........................  Date: ........................

Dean, Chandaria School of Business
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ABSTRACT
The general objective of this study was to examine the effects of entrepreneurship education on universities students’ orientation towards entrepreneurship. The specific objectives were: To establish the effect of Innovativeness on students’ orientation towards entrepreneurship, to establish the effects of risk taking on students’ orientation towards entrepreneurship, and to determine the effect of pro-activeness on student’s orientation towards entrepreneurship. This study used a descriptive research design to examine the effects of entrepreneurship education on university students’ orientation towards entrepreneurship. The study population was defined as the students in the final year, final semester of study at the university taking entrepreneurship course. Stratified random sampling method was used to select the study sample. A total of 133 students were picked to participate in the study. Structured questionnaires were used to collect data from the study subject. Data was analysed through descriptive and inferential statistics. The results were presented in tables and figures.

The descriptive findings of objective one on innovativeness; all questions were highly ranked as strongly agree and agree. On the inferential, the coefficient for the relationship between innovativeness (INN) of students and students orientation towards entrepreneurship was positive and significant at .05 level ($\beta = .715, t = 5.565, p < .05$). This indicates one unit increase in students innovativeness increases students orientation towards entrepreneurship by .715. For objective two on risk taking, questions ranked as agreed and strongly agreed. On the inferential, the coefficient for the relationship between risk taking (RTT) of students and students orientation towards entrepreneurship was positive and significant at .05 level ($\beta = .349, t = 3.592, p < .05$). This indicates one unit increase in student risk taking ability increases students’ orientation towards entrepreneurship by .349. The last objective on pro-activeness, questions ranked as agreed and highly agreed. On the inferential, the coefficient for the relationship between pro-activeness (PAA) of students and students orientation towards entrepreneurship was positive and significant at .05 level ($\beta = .607, t = 5.818, p < .05$). This indicates one unit increase in student reactiveness increases students’ orientation towards entrepreneurship by .607.

This study concludes that innovativeness is an important factor with significant influence on students’ orientation towards entrepreneurship. It is also concluded that students risk
taking is important factor with significant influence on students’ orientation towards entrepreneurship. Lastly, the study concludes student pro-activeness is an important factor with significant influence on students’ orientation towards entrepreneurship. In line with the findings this study recommends that students should be taught on how to be innovative in their career life. This study recommends for entrepreneurship education to greatly focus on enhancing students risk taking behaviour so as to orient them to entrepreneurship. This study further recommends for EE to impart pro-activeness behaviour that would orient students to entrepreneurship. The students should be taught on how to scan for opportunities in their immediate environment. Students should be taught on transversal skills such as the ability to think critically, solve problems, take the initiative and work collaboratively with others.
ACKNOWLEDGEMENT

I am grateful to the Almighty God for giving me strength, wisdom and provision to complete this paper. I appreciate my supervisor Dr Joseph Ngugi Kamau and for his constant guidance, support and constructive criticism while doing this research project. Special thanks to the USIU students for sharing their knowledge and enabling the completion of this project.

I finally acknowledge the family of Mr. and Mrs. Peter Njau Muigai for their financial, emotional and intellectual support throughout my MBA journey.
DEDICATION

I dedicate this project to my parents Mr. and Mrs. Peter Njau Muigai for their never ending support throughout my study and in the preparation of this project.
TABLE OF CONTENTS

STUDENT'S DECLARATION ..................................................................................................................... ii
COPYRIGHT ........................................................................................................................................... iii
ABSTRACT ............................................................................................................................................. iv
ACKNOWLEDGEMENT ......................................................................................................................... vi
LIST OF TABLES .................................................................................................................................. x
LIST OF FIGURES ............................................................................................................................... xi
ACRONYMS AND ABBREVIATIONS ................................................................................................. xii

CHAPTER ONE ................................................................................................................................. 1
1.0 INTRODUCTION ............................................................................................................................. 1
  1.1 Background of the Study ................................................................................................................ 1
  1.2 Statement of the Problem ............................................................................................................. 6
  1.3 General Objective....................................................................................................................... 7
  1.4 Specific Objectives ..................................................................................................................... 7
  1.5 Significance of the Study .......................................................................................................... 7
  1.6 Scope of the Study ...................................................................................................................... 8
  1.7 Definition of Terms ................................................................................................................... 8
  1.8 Chapter Summary ...................................................................................................................... 9

CHAPTER TWO ................................................................................................................................... 10
2.0 LITERATURE REVIEW ................................................................................................................ 10
  2.1 Introduction .................................................................................................................................. 10
  2.2 Entrepreneurship Education and Innovativeness ....................................................................... 10
  2.3 Entrepreneurship Education and Risk Taking .......................................................................... 17
  2.4 Entrepreneurship Education and Proactiveness ...................................................................... 23
  2.5 Chapter Summary ...................................................................................................................... 28

CHAPTER THREE .......................................................................................................................... 29
3.0 RESEARCH METHODOLOGY .................................................................................................... 29
  3.1 Introduction ............................................................................................................................... 29
  3.2 Research Design ....................................................................................................................... 29
3.3 Population and Sampling Technique ................................................................. 29
3.4 Data Collection Methods ..................................................................................... 31
3.5 Research Procedures ............................................................................................. 32
3.6 Data Analysis Methods ......................................................................................... 32
3.7 Chapter Summary .................................................................................................. 33

CHAPTER FOUR ........................................................................................................... 34
4.0 RESULTS AND FINDINGS ..................................................................................... 34
  4.1 Introduction .............................................................................................................. 34
  4.2 Response Rate ........................................................................................................ 34
  4.3 Demographic Characteristics ............................................................................... 34
  4.4 Descriptive Analysis of Study Variables ............................................................... 38
  4.5 Inferential Analysis ............................................................................................... 45
  4.6 Regression Model .................................................................................................. 51
  4.7 Predictive Relevance of the Model ....................................................................... 52
  4.8 Chapter summary ................................................................................................... 53

CHAPTER FIVE .............................................................................................................. 54
5.0 DICUSSION, CONCLUSIONS AND RECOMMENDATIONS ................................ 54
  5.1 Introduction ............................................................................................................ 54
  5.2 Summary ................................................................................................................ 54
  5.3. Discussion of the Results .................................................................................... 56
  5.4. Conclusions .......................................................................................................... 61
  5.5 Recommendations ................................................................................................. 62

REFERENCES ............................................................................................................... 64
APPENDICES ............................................................................................................... 72
  Appendix I: Introductory Letter ................................................................................ 72
  Appendix II: Questionnaire ....................................................................................... 73
### LIST OF TABLES

Table 3.1: Sample Size .................................................................31
Table 4.1: Response rate ................................................................34
Table 4.2: County/Country of Residence........................................37
Table 4.3: Innovativeness of Students Orientation towards Entrepreneurship .........................................................39
Table 4.4: Risk taking on Students’ Orientation towards Entrepreneurship .........................................................40
Table 4.5: Pro-active ness on Students Orientation towards Entrepreneurship .........................................................42
Table 4.6: Students Orientation towards Entrepreneurship ..................................................................................44
Table 4.7: KMO and Bartlett’s Test .................................................................45
Table 4.8: Total Variance Explained .................................................................46
Table 4.9: Communalities and Pattern Matrixa .................................................................47
Table 4.10: Construct Reliability .................................................................48
Table 4.11: Item- Total Statistics .................................................................48
Table 4.12: Inter-item Correlation Matrix .................................................................49
Table 4.13: Normality Test .................................................................50
Table 4.14: VIF test .................................................................51
Table 4.15: Regression weights .................................................................52
Table 4.16: Model Summary on Relevance of the Model .................................................................53
LIST OF FIGURES

Figure 4.1: Gender. ..................................................................................................................35
Figure 4.2: Age Bracket ..........................................................................................................35
Figure 4.3: Academic Qualifications .....................................................................................36
Figure 4.4: Current Occupation .............................................................................................36
Figure 4.5: Normality Curve ...................................................................................................50
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE</td>
<td>Entrepreneurship Education</td>
</tr>
<tr>
<td>EFA</td>
<td>Exploratory Factor Analysis</td>
</tr>
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<td>EO</td>
<td>Entrepreneurship Orientation</td>
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<tr>
<td>IEO</td>
<td>Individual Entrepreneurial Orientation</td>
</tr>
<tr>
<td>IN</td>
<td>Innovativeness</td>
</tr>
<tr>
<td>PA</td>
<td>Pro-activeness</td>
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<tr>
<td>RT</td>
<td>Risk Taking</td>
</tr>
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<td>SPSS</td>
<td>Statistical Package for Social Studies</td>
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<td>USIU-A</td>
<td>United States International University – Africa</td>
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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Study
Entrepreneurship education (EE) has grown to be one of the most significant educational curriculums across all levels of education (Mwatsika & Sankhulani, 2016). Entrepreneurship is a means of managing that entails pursuing business opportunities in spite of the resources being under control by one (Sahlman & Stevenson, 1991). Entrepreneurship is also considered as a process by which entrepreneurs build, cultivate and grow business using a reasonable degree of creativity and skills essential for transforming ideas into enterprises which derive personal fulfilment and financial rewards and independence (Ezeani & Ugwu, 2013).

An entrepreneur is thought as a person who innovates and initiates societal change in a macro-economic perception (Wyness, Jones, & Klapper, 2015). Through their knowledge and skills they set up enterprises to fulfil their personal goals and create wealth. The attitude towards being an entrepreneur highly depends on the expectations of the individual’s impacts of outcome that result from the behaviour. Social norms also have a role to play since it looks at the perceptions held by the people that are closest to the individual. Perceived self-efficacy also affects the choice of either being an entrepreneur or not since it is an attribute of setbacks which are referred to as learning experiences and not failure (Kautonen, Van Gelderen & Tornikoski, 2013).

Entrepreneurs are born naturally while others are developed in training through entrepreneurship education. Entrepreneurship education involves teaching entrepreneurial skills to students; it involves educating these students to instil in them enterprising behaviours, knowledge and characters as well as enhance their knowledge and understanding of undertaking business (Njenga, 2015). Entrepreneurs are viewed as the promoters of development both socially and economically; so therefore, with proper entrepreneurship education, a student can become self-sufficient by creating his own economic venture that can sustain their financial needs and better yet help to solve social problems.

According to Hynes (1996), entrepreneurial ventures enhances shifting towards self-employment which is an important aspect of economic growth. Nonetheless these ventures
need to be sustainable. It is therefore critical to ensure that the correct infrastructure is put in place so as to facilitate and ensure growth, development and sustainability of entrepreneurial ventures. He considers one of the most crucial aspects of infrastructure to be enterprise culture and its core component is entrepreneurship education which sparks interest in practice of entrepreneurship.

Entrepreneurship is taught in Higher Institutions of Learning through incorporating entrepreneurship courses into the main curricula of study in university programs. Being part of the curricula, entrepreneurship education is meant to enable graduates to harness their entrepreneurial potentials and also act as a means to job creation and self-reliance (Ejedafiru & Oghenevwogaga, 2015). It is supposed to prepare a student to become a successful entrepreneur and be more oriented towards entrepreneurship. The entrepreneurship education curriculum’s main aim should be to develop entrepreneurs who are self-aware, confident, creative, seek for opportunities, take initiatives, carry out things independently, take risks and solve problems on their way, committed to their work, are able to cope in an uncertainty and are motivated and ready to commit and persevere to attain success (Njenga, 2015).

Higher Institutions of Learning use both formal and informal ways of delivery (Kobia & Sikalieh, 2010). The formal aspect of delivery entails the provision of theories and concepts that form the framework of Social entrepreneurship. The methods that are used for delivery include lectures and proposed studies. The instructor is viewed as an expert and they facilitate as well as give instructions throughout the entire learning process. There is also an assessment that is conducted for the purpose of testing the individuals acquired knowledge. Informal aspects of entrepreneurship education incorporates the formal aspects and puts more focus on developing skills, building attributes and enhancing behavioural change. The methods used include; analysis of cases, group projects, visiting various organizations, critical thinking and brainstorming. It reflects whether or not a student is capable of applying the theories learnt through formal means (Ozuem et al. 2013).

Through proper entrepreneurship education, a culture and spirit of entrepreneurship is cultivated among students (Othman & Nasrudin, 2016). Students who undergo through entrepreneurship training are empowered and given a strong mind set, they become adaptable to change and can rely on themselves. This also helps to remove the problem of
unemployment from the state, since these students can be self-employed and also create more employment opportunities (Ezeani & Ugwu, 2013). Entrepreneurship education will harness students’ interest and their potential, and this will prevent wastage of human resources and be able to complement the insufficient structured-employment in the developing countries such Kenya. Entrepreneurship education offers students with skills and attitudes that motivate students to explore their immediate environment for prospective initiatives (Ezeani & Ugwu, 2013).

Entrepreneurship education develops these skills through academic entrepreneurship programs, incubation and university spin offs. Academic entrepreneurship is an institutional transfer of research, development or technology to start innovations or ventures. It may also be called “intellectual enterprise” in which universities cooperate with local communities to create new values and ideas. Incubation is the unique and flexible combination of processes in business development, infrastructure and people brought together to look after new and small businesses by helping them survive and grow through the early vulnerable stages. Spin offs are the final product of a large project. In this case, it is a new venture in form of an independent company (Villani & Antonietti, 2013).

A country’s economy also stands to benefit from entrepreneurship education through enhanced entrepreneurial activities and nurturing the economic ability of individuals and the society as a whole. It is critical for the success of any country that intents to grow a high-income economy (Othman & Nasrudin, 2016). According to Edoho (2016), the level of entrepreneurial activity in a country has a statistically significant relationship with ensuing economic growth level. No country that has high level of entrepreneurship has a poor growth of its economy. National government should thus strive to improve the level of entrepreneurial activity within the public so as to foster positive economic growth. Having entrepreneurship education incorporated in students’ curricula is a sure way of enhancing entrepreneurial activity, since students are motivated to become entrepreneurs. Edoho (2016) argues that the current experience of Asian state is linked to the sustained high levels of unrelenting entrepreneurial activities.

Entrepreneurship education was introduced in students’ curricula in order to influence student after graduating to take up entrepreneurship. The teaching is meant to help students to become aggressively competitive, autonomous, innovative, risk takers and be proactive
in their livelihood, which orients them towards entrepreneurship. According to the European Commission (2012), the purpose of teaching entrepreneurship in higher education institution is to enhance the entrepreneurship mentality of students for them to become more creative and self-assured in their undertaking. Entrepreneurship education also has an objective of inspiring innovative business start-ups in careers as well as enhancing the student role in the society and the economy of the country. Brooks et al. (2007) observed that a culture of education animated by entrepreneurial principles improves research innovation as well as develop an ample academic environment for students. This enhances their creativity and innovation and places them in a better position of creating more value in their profession. This study therefore purposes to investigate three dimensions underlying entrepreneurship orientation towards entrepreneurship; innovativeness, risk taking and proactiveness, in university students in Kenya, as affected by entrepreneurship education (Fillis & Rentschler, 2010).

Competitive aggressiveness is an element of business orientation that mostly relates to a company’s qualities and the challenges posed by their competitors in order to enter the market or improve its position in the market (Li Zheng, 2011). It captures the distinct idea of beating competitors to the punch. A firm aims to gain competitive advantage by ensuring that their goal is to surpass rather than decimate their competitors. Yuli Zhang (2011) suggested that a company that wants to be successful has to be aggressively competitive. This can be accomplished by setting goals and taking bold steps in order to achieve them. The manifestation of high aggressiveness can be gained through; price competition, market entry and constant adaptive changes to undermine their competitors. This is an easy recipe of success in form of profitability and having a large market share.

Innovativeness as a personal trait is the willingness and interest of one to seek out for original ways of doing things. It enables one to recognize valuable opportunities and look for new techniques of performing tasks (Lukeš, 2013). A person who is innovative is inclined to creativity and experimentation of new ideas. They strive for originality in their endeavours and are likely to try out new things. According to Rauch and Frese (2007), innovativeness is positively correlated to ones choice of establishing a business; it also has a direct correlation with the success of a business. Imparting the behaviour of innovativeness among students at the university is thus one of the ways that lead these students to entrepreneurship. Okpara (2007) carried out a study in Ethiopia, to investigate
the value of creativity and innovation in entrepreneurship; he observed that innovation is the key to entrepreneurship. He noted that innovativeness is driven by creativity, which is manifested in the ability of creating, bringing into life, inventing new form, producing through imaginative skills and bringing into existence something new. Having these qualities can make one a successful entrepreneur.

Risk taking behaviour is the willingness of one to commit substantial resources to opportunities that are deliberated to thrive (Fillis & Rentschler, 2010). According to Anastasia (2015), entrepreneurship is built on the courage and capacity of one to take new risks. She observes that one needs to be patient to observe successful outcome of an idea, which takes much time and effort right from the idea conception to implementation. The time and effort taken here is the risk that is taken in entrepreneurship. Risk taking behaviour has an impact on the decision to venture out into entrepreneurship; it also bears on the failure and success rates of entrepreneurship (Caliendo, Fossen, & Kritikos, 2010). Caliendo et al. (2010) carried out a study to examine the effect of risk taking behaviour on entrepreneurial survival, according to their findings; risk taking behaviour is a defining characteristic of entrepreneurship. Further, they observed that the risk taking behaviour has a positive correlation with business creation which is one of the goals of entrepreneurship.

Proactiveness behaviour is described as personal initiative and future oriented action focused at changing and enhancing ones situation (Parker, Williams, & Turner, 2006). Fillis and Rentschler (2010) were of the opinion that proactiveness is all about making things happen through persistence, flexibility and going against the norms. According to Rauch et al. (2009), proactiveness is characterized with opportunity-seeking behaviour and forward-looking view. A proactive character has a high awareness of outside happenings and acts in anticipation. Instilling in students this character can make them more prepared for entrepreneurship, instead of sitting by and waiting for the hard to find jobs, graduating students can initiate their own economic activities. According to Kaijage, Wheeler, & Newbery (2013), entrepreneurship education offers learning of skills that empower students to strategize, start and manage their own enterprise in either formal or informal sector. This study evaluated the effects of entrepreneurship education on students’ orientation towards entrepreneurship, through imparting the dimensions of innovativeness, risk taking and proactiveness in university students.
1.2 Statement of the Problem

Entrepreneurship education is taught in schools especially in universities so as to orient students towards entrepreneurship. Its aim is to improve the entrepreneurship mentality of students so as to make students grow to be more creative and self-assurred in their undertaking (European Commission, 2012). According to Othman and Nasrudin (2016) proper entrepreneurship education cultivate a culture and spirit of entrepreneurship in students. Consequently students become entrepreneurs and are able to develop business ventures for their livelihood and minimize or eradicate the problem of unemployment. Ezeani and Ugwu, (2013) argued that entrepreneurship education helps to develop students for self-employment and job creators and hence helps in eradicating the problem of unemployment from the state.

Despite the promises of entrepreneurship education and its potential in developing entrepreneurial students, there is still a high rate of unemployment in the country. According to a report on the economy of Kenya by the World Bank (2016), there is still a high rate of youth unemployment in the country. According to this report the growing population in Kenya, which is made up of the youth graduating from colleges is not being put in productive use. This clearly shows that the students graduating from colleges are not well oriented to entrepreneurship, to start up business and create employment opportunities for themselves and others.

Failure of entrepreneurship education to orient graduate students to entrepreneurship has had consequences to the society and the state. According to Omolo (2010), the creation of enough, productive and sustainable employment remains to be a big economic challenge for Kenya. Further, it is argued that unemployment in Kenya is as a result of a number of factors key among them is lack of proper skills and skills mismatch (Omolo, 2010). They are considering the introduction of entrepreneurship curriculum into the system as a means of improving the entrepreneurial culture in the country but also to help as an important source of national competitiveness and national economic growth. This study argues that with proper entrepreneurship education students will be oriented to entrepreneurship and become job creators. The entrepreneurship education can achieve this through imparting innovativeness, risk taking and pro-activeness behaviours on students. This study therefore examined the effect of innovativeness, risk taking and pro-activeness behaviours on students’ orientation towards entrepreneurship.
1.3 General Objective
The main objective of this study was to examine the effects of entrepreneurship education on university students’ orientation towards entrepreneurship.

1.4 Specific Objectives
1.4.1 To establish the effect of innovativeness on students orientation towards entrepreneurship
1.4.2 To find out the effect of risk taking on students’ orientation towards entrepreneurship
1.4.3 To establish the effect of proactiveness on students’ orientation towards entrepreneurship

1.5 Significance of the Study

1.5.1 Curricula Developers
The findings of this study will inform the coordinators of entrepreneurship education on how to continuously improve the curriculum as well as make future plans that will enhance actualization of entrepreneurial intentions of students.

1.5.2 Researchers
This study will be significant to researchers by providing findings on effects of entrepreneurship education on students’ orientation. This will also raise awareness on the gaps and therefore encourage further research in the same topic or to evaluate changes on the program’s execution as informed by this study.

1.5.3 University Students
The findings of this research will be of importance to the students since it will help them understand how entrepreneurship education programs improve their competencies and instills in them entrepreneurial skills. It will also help students to manage their expectations from the program as well as properly plan their entrepreneurial intention as output after or during the program.

1.5.4 Government
This study raises the importance of entrepreneurship education and its potential of minimizing unemployment problem. This awareness can inform the government to
introduce entrepreneurship training programs to tertiary institution that helps to create entrepreneurs who can be self-employed.

1.5.5 Economy

This study helps to highlight the potential of entrepreneurship in growing an economy through innovations, creation of employment opportunities and other socio-economic benefits. It will help economies to know how to be self-reliant by offering opportunities through introduction of entrepreneurship education programs.

1.6 Scope of the Study

This study was carried out among university students concentrating in entrepreneurship, a representative sample were well selected to ensure impartiality. This study focused on the effects that entrepreneurship education has on the innovativeness, risk taking and proactiveness behavior among the student, and the influence that these behaviors carry on the students’ orientation towards entrepreneurship. This study was carried out from January to April 2018. The challenges experienced in this study included, difficulty in recruiting participants due to their busy schedule and they lacked sufficient time to respond to the questionnaire. Data collected could be faulty due to respondents deliberately or undeliberately giving misleading information. The study recruited participants on a voluntary basis while data collected was inspected to ensure they are not misleading.

1.7 Definition of Terms

1.7.1 Entrepreneurship

Entrepreneurship is a means of managing that entails pursuing business opportunities in spite of the resources under control (Sahlman & Stevenson, 1991).

1.7.2 Entrepreneur

An entrepreneur is a person who innovates and initiates societal change in a macro-economic perception (Wyness, Jones, & Klapper, 2015).

1.7.3 Innovativeness

Innovativeness as a personal trait is the willingness and interest of one to seek out for original ways of doing things (Lukeš, 2013).
1.7.4 Risk Taking

Risk taking behaviour is the willingness of one to commit substantial resources to opportunities that are deliberated to thrive (Fillis & Rentschler, 2010).

1.7.5 Proactiveness

Proactiveness behaviour is described as personal initiative and future oriented action focused at changing and enhancing ones situation (Parker, Williams, & Turner, 2006).

1.8 Chapter Summary

The chapter has provided the background to the study regarding the entrepreneurship education, as well as the statement of the problem. Other sub-sections provided include research objectives, as well as significance and scope of the study, and finally definition of terms. In chapter two, literature is reviewed based on the research objectives. Chapter three present a detailed account of the research design and methodology. Chapter four will cover results and findings and chapter five will cover discussions, conclusions and recommendations.
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction
This chapter presents literature on previous studies that are in line with the research problem. Literature is arranged in line with the objective under study that include: to establish the effect of innovativeness on students’ orientation towards entrepreneurship; to find out the effect of risk taking on students’ orientation towards entrepreneurship and to establish the effect of proactiveness on students’ orientation towards entrepreneurship.

2.2 Entrepreneurship Education and Innovativeness
There are five dimensions of entrepreneurial orientation which are autonomy, innovativeness, risk taking, proactiveness and competitive aggressiveness (Robinson & Stubberud, 2014). This paper looks at three of these dimensions which are innovativeness, risk taking and proactiveness.

2.2.1 Entrepreneurship Orientation Dimensions
Entrepreneurship orientation refers to the strategic alignment, taking the degree of tendency to be innovative, risk taker, aggressive competitor and to be autonomous and proactive (DeepaBabu & Manalel, 2016). Entrepreneurship orientation can be perceived in individual as their characteristic that can be evaluated through observing the individual traits in decision making and their practices in life. It is considered that people who are oriented towards entrepreneurship will demonstrate traits of being independent/autonomous, innovative, risk takers, aggressiveness and proactive. With these behaviours one can be drawn into entrepreneurship and successful develop business ventures. People who are oriented towards entrepreneurship will remain proactive in their environment with the intention of finding value for their lives and that of others. Further, entrepreneurial individuals are creative and innovative and do not shy away from taking calculated risks that promises high returns.

Innovativeness is the degree of an individual openness to newness, it includes having a strong intention to stimulate and encourage administrative and product-market innovations, stimulate experimentation and creativity (Marcati, Guido, & Peluso, 2008). It also involves the development of initiatives that are hard for competitors to imitate successfully.
Moreover, it leads to innovative routine processes and process technologies (Farashah, 2013). The process also involves actively seeking innovative ideas and encouraging innovation. According to Saral (2017), innovativeness is comprised of the broad knowledge base, specific expertise, and skills that are reliant on an individual experiential learning. An innovative person is entrepreneurial and will often create something new that has value addition to themselves or the society. An individual innovativeness plays a critical role in the implementation of innovations in an enterprise (Marcati, Guido, & Peluso, 2008).

Risk taking in entrepreneurship is the willingness of one to commit substantial resources to opportunities that are deliberated to thrive (Fillis & Rentschler, 2010). Entrepreneurs must take calculated risks when they decide to venture into new investments to reduce the chances of loss. Taking such risks involves collecting the relevant information to enable them to make informed decisions. According to Manimala and Thomas (2017), risk taking is the tendency of taking bold actions such as committing a large portion of resources to investments with an uncertain outcome, taking bold actions, or venturing into a new market. Risks are associated with factors such as unsupportive policies, political instability that may impede the realization of the objectives set.

Proactiveness refers to the behaviour of seeking opportunity and a forward-looking perspective that involves the introduction of new services or products ahead of competitors or acting in anticipation of future demand to shape or change the environment (Robinson & Stubberud, 2014). According to Rauch (2009), proactiveness is the individual character directed to an idea and is inclined to mobilizing resources and gaining commitment for value creation. Proactiveness behaviour tends to support disruptive innovations leading to a proactive approach in identifying gaps in the market and responding to fill them with innovations. Pro-activeness aids in response to address unattended market opportunities and the unarticulated needs of the customers to gain a competitive edge over rivals.

Autonomy includes having the independence and autonomy to make own decisions of how to go about doing one’s work. In this way, one can allow others make changes in the way tasks are performed. Aggressiveness is the driver to face the intense competition from the rivals, which entails being alert and responding aggressively to rivals to maintain the competitive position. The process involves aggressive product development, customer service systems and adaptable product process that make it possible to win the market
Competitive aggressiveness is an element of business orientation that mostly relates to a company’s qualities and the challenges posed by their competitors in order to enter the market or improve its position in the market (Li Zheng, 2011). Yuli Zhang (2011) suggested that a company that wants to be successful has to be aggressively competitive. This can be accomplished by setting goals and taking bold steps in order to achieve them. This is an easy recipe of success in form of profitability and having a large market share. Aggressiveness in a person or a company is mainly demonstrated with setting out to look for available opportunities in the environment in which one operates. The opportunity is seized and efforts are directed towards making the opportunity lucrative to the business or the person or even the people’s society.

2.2.2 Entrepreneurship Education and Innovativeness

Entrepreneurship is very crucial to any nation’s social, technological and economic development given that entrepreneurs are the agents of growth in organizational environments. Entrepreneurship education entails focusing more on the specific context of becoming self-employed and setting up ventures (Küttim et al., 2014). It is important to encourage individuals to engage in the activities that are entrepreneurial to promote development in a country. The competitive market that exists today requires solutions such as entrepreneurship to deal with challenges such as unemployment (Koe, 2016). Tertiary institutions and governments continue to put efforts that aim to promote entrepreneurship among the young adults.

Most of the young people do not have the interest to become entrepreneurs. Farashah (2013) argues that the promotion of entrepreneurship activities requires support schemes to be initiated such as physical infrastructure, business advisory and even funding. The understanding of what propels an individual to become an entrepreneur is crucial when it comes to mentoring and teaching others. Entrepreneurship is a planned and intentional behaviour which involves entrepreneurial actions and cognition (Koe, 2016). It is important to scrutinize the entrepreneurial intention in young adults to determine the right type of education to offer them to in a bid to make them entrepreneurs in the future. The strategy of infusing entrepreneurship in education has spurred enthusiasm in the past years due to
the perceived benefits. Some of the benefits that result from this include job creation, economic growth and an increase in the societal resilience as well as improved equality and school engagement (Bell, 2015). Promoting this education is faced with challenges such as lack of teachers and resources, impeding educational structures and lack of definitional clarity. Moreover, it is also crucial to identify the basic tenets of entrepreneurship in education as it is relevant to the society (Lomberg et al., 2016).

It is argued that entrepreneurship entails more than just starting a business, but rather includes other aspects such as making students proactive and innovative, creative and opportunity oriented. Yurtkoru, Acar and Teraman (2014) opine that it is important to train students to gain the ability and willingness to create value for others as it is a competency that all citizens need to have regardless of their careers. The relevance of entrepreneurship education continues to be viewed from an economic point of view, but it has made it difficult when infusing it into primary and secondary education for all students.

Entrepreneurship has a crucial impact on students as it improves their level of motivation and engagement and can trigger deep learning. Students who are introduced to entrepreneurial education have the possibility of becoming highly motivated and engaged by creating value for other people based on the knowledge that they acquire (Lee & Lee, 2015). The knowledge helps them to fuel deep learning and illustrates the relevancy of having such skills. Robinson and Stubberud (2014) argue that students who have strong aptitude and interest in value creation should be assisted to undertake programs and courses that focus on how to organize processes that can help in building new organizations.

The infusion of entrepreneurship education in the curriculum should start at an early age by embedding it or all students in preschool and primary school. The education system should then be complemented with a voluntary practice which adopts a business-focused approach which adopts a more narrowed definition of entrepreneurship (Colakoğlu & Gözükar, 2016). Embedding the entrepreneurial activities in the education helps in the development of initiatives that are focused on business start-ups. Introduction of entrepreneurial activities can help to nurture innovativeness in students, thus helping to promote entrepreneurial activities that help to create value for others. The role of entrepreneurship education has been identified as one of the essential factors in the development of entrepreneurial intention.
According to Ferreira et al. (2012), entrepreneurship education is necessary for building a student personal entrepreneurial skills and equipping one with the required competencies which include risk-taking and innovativeness. The education focuses broadly on personal development skills, mindset, and abilities. Being entrepreneurial can mean many things to various people, but a common conception involves creating innovative organizations that grow and create value for the purpose of making profits (Hartelina, 2016).

However, entrepreneurship does not have to comprise of the creation of new organizations, but it can also occur in existing ones. It does not get limited to the entrepreneurial individual, but also to the various opportunities and the relationship between an individual and these opportunities. The process involves pursuing opportunities without regard to the resources that one controls (Palalic & Busatlic, 2015). Entrepreneurship education is viewed as a process through which budding entrepreneurs can attain the requisite skills and knowledge that will assist them in developing innovativeness.

Entrepreneurial education allows students to go through an actual entrepreneurial learning process. The approach can be integrated into other subjects to connect entrepreneurial characteristics experiences and processes to the core subject thus building innovativeness (Ferreira et al. 2012). Entrepreneurial education is categorized into three approaches that include teaching about entrepreneurship itself by adopting a content-laden and theoretical approach aimed at giving a general understanding. It is the common approach that is adopted in most institutions of higher learning. The teaching means adopting an occupational-oriented approach that seeks to equip budding entrepreneurs with the right skills and knowledge (Hendarman & Friedrich-Schiller-Universität, 2017). Teaching through means adopting a process-based and experiential approach that often leans on the wider definition of entrepreneurship and which can be integrated into various core subjects. According to Bell (2015), Entrepreneurial education helps to citizens with increased entrepreneurial competencies which are viable for alleviating the deficits in new and innovative value creation activities. Infusing the value creation experiences in education is crucial in contributing to individual innovativeness among entrepreneurs in the future.

The concept of individual entrepreneurship orientation that is involved with innovativeness as a competency has not been scrutinized fully in the study of entrepreneurship. It is possible to determine whether the students who have attended entrepreneurship courses
have the entrepreneurial intention and whether the elements of individual entrepreneurial orientation (IEO) influence their intention (Karimi et al. 2011). Identifying the influence of IEO on entrepreneurship intention is important in determining how to impart entrepreneurial skills in students.

Innovation is a practice an idea or object that is considered to be new by an individual or another unit of adoption. Individual innovativeness is defined as adopting, developing or implementing an innovation. Koe (2016) notes that entrepreneurship education can help to equip students with the right skills that promote individual innovativeness as well as influence their entrepreneurial intention. Under the individual innovativeness theory, it is important to note that there is always new information within the social systems which is new and is usually processed by the adopters (Robinson & Stubberud, 2014). Highly innovative people are usually interested in developing new things, and this can be fostered through entrepreneurship education.

Evaluating, understanding and promoting individual innovativeness is a crucial step in cultivating entrepreneurial leaders of the future. Entrepreneurial education is crucial in enhancing the student’s insight about innovation across the programs. Le Roux and Bengesi (2014) opine that the need to define and measure individual innovativeness behaviour is increasing due to the constant drive for innovation in the economy and the increased need for innovative graduate students who will contribute to the society. Some of the important attributes that help in the development of innovativeness in students include personal attributes, processes, skills as well as the right environment (Farashah, 2013).

Entrepreneurship education can help to measure individual innovativeness by considering both the external and internal perspectives. Some of these characteristics comprise who they are and their external characteristics. Internal attributes such as knowledge, intelligence, skills, and motivation are the ones that determine an individual’s natural strengths and weaknesses (Menold et al., 2014). Education helps to determine the actions which are defined as the behaviours of an individual that lead to innovative output. It is clear that entrepreneurial education can help to impart innovativeness in a person or influence their entrepreneurial intention (Küttim et al., 2014). It is through nurturing of the individual behaviour that one can expect to have innovative output irrespective of whether they are the characteristics of an individual.
Innovativeness is described as the general personality trait that can be defined as a predisposition to accept innovations. It is clear that innovativeness is related to personality and is centred on the acceptance of new things. Entrepreneurship education focuses on identifying the traits that specifically aid in the development of innovations (Batra & Vohra, 2014). Moreover, the study aids in the personality research that aid in evaluating individual innovativeness regarding innate characteristics and traits. According to Hendarman and Friedrich-Schiller-Universität (2017), entrepreneurship education focuses on a person's curiosity and appetite to take risks, and it thus helps to measure the willingness to change which is one of the facets of innovativeness. A study of the personality can aid in determining the characteristics of an individual and help in dictating their preferred thinking and problem-solving approaches (Saral, 2017). Individual innovativeness is helpful as it leads to better ways of doing things which are different as a result of applying the inventive and creative thoughts to motivate and develop novel solutions to problems. Such individuals tend to value new ideas and like to improvise.

Innovative individuals prefer solving problems in a revolutionary way that include breaking paradigms and boundaries. While adaptive individuals choose to offer few sound ideas that are relevant and useful, innovative people tend to offer a multitude of ideas that are less dependent on the current precedents and paradigms (Menold et al., 2014). Such individuals are less detailed and cross-cutting as compared to adaptive individuals who are more meticulous and thorough. In order for one to become a successful entrepreneur, it is important for an inventor to disregard the rules when it comes to solving problems (Bell, 2015). The individual innovativeness behaviour makes an individual capable of originality of thought and motivated to develop novel solutions to problems and thus develop new ventures. It is such behaviours that push a person to enjoy taking chances and to willingly expose themselves to situations or activities with uncertain outcomes (Saral, 2017). Such individuals enjoy adventures that have an element of peril and are unconcerned with danger. The behaviour encourages administrative and product innovations that some of the benefits of entrepreneurship education.

Innovativeness is described regarding innovative output that results from the creative potential that is predictive of creative performance. An individual's innovative makeup is composed of the broad knowledge base, specific expertise, and skills that are dependent on a person experiential learning and education (Saral, 2017). Creative processing skills are
crucial and indicative of an individual preferred approach to solving problems when it comes to entrepreneurship. Other factors that come in handy include associative ability, divergent thinking and analogical ability all of which help to depict how an individual prefers to process information (Ferreira et al., 2012). The process also involves actively seeking innovative ideas that lead to the development of new ventures in the long-run. Developing specific traits and individual innovative behaviour is useful in the innovation process of becoming an entrepreneur (Farashah, 2013). The strong intentions of divergent thinking can help to stimulate creativity, experimentation and market innovations. The broad knowledge base and specific expertise possessed by innovators aids in the development of initiatives that are successful and hard to be imitated by the competitors.

Entrepreneurial education activities, content, and methods all aid in the creation of knowledge, experiences, and competencies that are possible to be imitated by those people who want to initiate and participate in entrepreneurial value-creating processes. Yurtkor, Acar and Teraman (2014) opine that the innovative behaviour of an individual is important when it comes to acting upon ideas and opportunities and transforming them into value for others. Koe (2016) notes that the entrepreneurial intention can be nurtured through the adoption of various strategies such as acting on one’s original thoughts to come up with new solutions to existing problems. It is the analogical ability and divergent thinking that leads to the development of entrepreneurial intention that ensures value is created which can either be social, financial or even culturally (Batra & Vohra, 2016). Helping others through creative solutions brings happiness and a feeling of meaningfulness engagement and participation as well as the satisfaction that builds on entrepreneurial competencies.

2.3 Entrepreneurship Education and Risk Taking

Entrepreneurial education has become essential to the economy of countries worldwide due to the various benefits that result from its adoption. Other than just contributing to the creation of business start-ups and social enterprises, entrepreneurship education makes young people to become enjoyable and entrepreneurial in their private and public sectors (Boutillier & Uzunidis, 2014). Students who are introduced to this type of education are likely to start a business at some point in their life as compared to those who do not receive an entrepreneurial education. Wanjiru (2016) notes that entrepreneurship does not necessarily involve a specific subject, rather it requires a way of teaching where the main role is played by experiential learning. The role of teachers is not to provide students with
answers, but instead, they should help them research and identify the right questions and find answers. Students must be inspired to develop an enterprising attitude and a range of competencies related to creativity and entrepreneurship (Oluseye et al., 2017). The environment should encourage creativity and risk taking among students while valuing mistakes as they provide an opportunity to learn new things.

Investing in entrepreneurship education and training helps to increase the productivity of the nation. Creative and innovative entrepreneurs who are flexible and resilient are required to utilize their skills and key competencies in creating new ventures. Entrepreneurship education has been identified as a tool that can support young people to become entrepreneurial (Zhang, Duysters, & Cloodt, 2013). Through education, an individual can develop a set of competencies applicable to all walks of life as compared to just running an enterprise. The process should include all forms of education, learning, and training to contribute to the entrepreneurial behaviour, spirit, and competence. Individuals can learn and develop transversal skills such as the ability to think critically, solve problems, take the initiative and work collaboratively with others (Ortiz-Walters, 2011).

Young people need to be exposed to entrepreneurial experiences so that they can benefit from the knowledge acquired. Real world experiences can be embedded in the various levels of education to give students problem based learning on entrepreneurship. According to Mondal and Jimenez (2015), educators should shape the learning processes to help students achieve entrepreneurial learning outcomes such as risk-taking concrete skills, knowledge, and attitudes. Learners can benefit from this type of education to develop risk-taking behaviour at an earlier stage, which will come in handy when they venture into developing new enterprises.

Entrepreneurship education should be taught to ensure continuity of professional development to allow students reach their goals. The entrepreneurial spirit should be promoted in schools through learning and teaching to ensure every learner is exposed to entrepreneurship education. Huber, Sloof and Van Praag (2014) opine that the education concept adopted should teach based on the world of tomorrow to enable learners to be willing to embrace change positively. Institutions offering entrepreneurial education needs to be committed to nurturing creative, transversal and entrepreneurial skills to learners and young people to enable them to perform well in the society.
Entrepreneurial teachers should reward individual initiative, risk-taking and responsibility taking to create an entrepreneurial spark (Din, Annual, & Usman, 2016). Accepting failure is one of the integral parts of the learning process when it comes to entrepreneurship as it allows an individual to learn how to manage risks. Entrepreneurship students can be taught to use a variety of creative methods enabling them to acknowledge not only the solution but also the process of achieving goals (Macko & Tyszka, 2016). Learning requires the key competencies such as creativity when it comes to dealing with risks that can affect the development of new enterprises.

The effectiveness of entrepreneurship education in ensuring students is equipped with the right skills is dependent on being constructed in a way that students have an active role. The approach should comprise of techniques and collaborative learning to enable the development of entrepreneurial characteristics (Jensen, 2014). The entrepreneurial abilities are necessary to identify and improve the opportunities around an individual. Experiment based learning is effective in developing entrepreneurial attitudes and characteristics. The skills transferred to the students through entrepreneurship education enables students to take risks and start their businesses as a result of the acquired practical skills, communication skills, critical thinking, and problem-solving (Ortiz-Walters, 2011). The skills learned helps the students to determine the risks involved in the market by evaluating the various factors that might affect the success of an enterprise. Critical thinking makes it easy to collect the useful information that can be used during the decision making the process of developing new ventures (Zhang, Duysters, & Cloodt, 2013). Having the right entrepreneurial characteristics is a process that can be achieved by producing probable solutions, identifying the best solutions, and discovering the problems and necessities.

The process of entrepreneurial learning involves some steps that lead an individual to be equipped with the right skills for starting an enterprise. To determine whether a project is worthwhile, it is important to consider the following elements which include observing the environment to identify the needs of the society (Yurtkorus, Acar, & Teraman, 2014). One also must determine whether similar ideas exist in the market. In this process, it is important to describe the target group and make decisions regarding the necessary tools, services, and materials. The information collected helps in determining the number of resources to be committed in a venture to try and reduce losses and guide the process of decision making (Mondal & Jimenez, 2015). The design of the proposed product or service must also be
identified and propounding of the differences with similar products made. Any venture must face various risks which affect the profitability and the existence of such enterprises. Macko and Tyszka (2009) argue that potential risks that are likely to affect the business in the future must be identified and measures put in place to eliminate them. Identification of risks is very crucial when it comes to minimizing losses associated with unforeseen adverse events.

2.3.1 Risk Taking and Entrepreneurial Characteristics

Risk-taking behaviour is among the most attractive entrepreneurial characteristics as it is connected to other factors such as motivation, self-control, decision making, and success request. Before an individual can commit resources to a venture, it is important to consider the opportunities available (Daoud, 2015). The investment to be made must elicit benefits as a result of emerging opportunities created through entrepreneurship. One of the elements of risk-taking is being aware of opportunities and creating other ones from the foundation of entrepreneurship. It is a precondition for entrepreneurs, and it is expected that they should take risks in situations that are likely to yield profits. Mondal and Jimenez (2015) note that educators should encourage their learners to engage in risk-taking activities to nurture their entrepreneurial skills.

Attitude is another factor that is crucial when taking risks as it deals with how decision makers deal with risks, risk perception as the major aspects. Under risk propensity and perception, individuals tend to differ in their tendency to take risks and the way they identify and interpret risks (Tyszka et al., 2011). Affective reaction in perceiving risks is what results in the differences when perceiving risks among various individuals. Risk perception is crucial to entrepreneurs as it affects the business outcomes and its overall success. High-risk perception leads to less risky decision making by an entrepreneur when making decisions relating to issues that affect an enterprise.

Risk perception refers to the decision maker’s assessment of the risk that is inherent in a situation. It is a factor that affects the outcomes of many enterprises through overestimation or underestimation of risks. The term relates to how entrepreneurs perceive opportunities as compared to how the opportunity matters (Ortiz-Walters, 2011). Where an entrepreneur frames the situation of the business as too positive, then it may lead to low risk perception. However, such a situation could lead to failure to put measures to mitigate such risks. The
differences in risk perception among entrepreneurs have a strong impact on the outcomes of a business (Vereshchagina & Hopenhayn, 2009). Entrepreneurs who tend to evaluate business situations more positively can focus on the opportunities of a situation as compared to focusing on threats and weaknesses. Risk perception is one of the factors that affect entrepreneur risk-taking behaviour as well as the decisions that one makes (Yurtkoru, Acar, & Teraman, 2014). Being overconfident when taking business risks can affect the performance of a firm. Risk perception is an essential moderator for overconfidence as it helps to make positive contributions to entrepreneurial results.

Entrepreneurs who are considered to be on the low levels tend to take greater risks. Students without any entrepreneurial education have been found to be timid and insufficiently able to build new things by assuming responsibilities and risks, even though they seem to be to consider opportunities and take risks (Din, Anuar, & Usman, 2016). The findings show that people with less experience and knowledge about entrepreneurship behave bravely and have the tendency to take risks unconsciously. However, people with experience and knowledge concerning entrepreneurship exhibit more conscious and stable risk were taking. An example is students who participate in entrepreneurship competitions who end up making plans for taking more risk in the future (Boutillier & Uzunidis, 2014).

Entrepreneurship education has been found to positively influence the tendency to take risks for learners. The study shows that it is possible to develop risk-taking characteristics through a formative assessment which is applied frequently when teaching entrepreneurship. According to Daoud (2015), entrepreneurship education helps learners to be less hesitant when needed to produce new ideas take a risk or believe in themselves. The education also helps to improve the confidence to m produces innovative things. The education also made it possible to accept negative critics, respect the views of others, and exhibit the greater tendency of capitalizing on the opportunities that wait to be explored.

Entrepreneurs are identified as contributors to the society’s economic value which is achieved by fulfilling an entrepreneurial function within the economic system that one is involved in. An entrepreneur is expected to have certain alertness and be looking forward to discovering future business opportunities successfully (Zhang, Duysters, & Cloodt, 2013). The entrepreneurial education is expected to guide entrepreneurs in making judgments to avoid paying the price that comes with making wrong decisions. Taking
calculated risks is essential to avoid losses that are encountered when starting new ventures. Ortiz-Walters (2011) asserts that an entrepreneur must have training and adequate entrepreneurship skills and abilities that include the power to forecast, knowledge of the trade, undertaking risks and identifying where opportunities exist. An entrepreneur must be willing to undertake risks in their line of work. Entrepreneurship education helps to equip the entrepreneur with the general abilities necessary for their success (Macko & Tyszka, 2009). Other than risk-taking, an individual is expected to be a natural leader to be able to run an enterprise effectively.

Entrepreneurs tend to take actions and engage in persistent and vigorous efforts in a bid to convert their visions and ideas into operating and profitable firms. Such individuals are born with certain abilities and skills that are specific to the creation of organizations. Boutillier & Uzunidis (2014) notes that risks reflect the potential losses and the degree of uncertainty with outcomes which follows asset of behaviours. A risk is constructed on potential losses and their significance. The identification of these risks requires skills which can be acquired through entrepreneurship education. Entrepreneurs face various risks that are associated with setting up new ventures such as personal risk, management risk and financial risks (Huber, Sloof, & Van Praag, 2014). Pursuing the establishment of new and independent ventures is a process that involves various risks. However, entrepreneurship education makes it easy to measure the risks and the likelihood of hazards. Macko and Tyszka (2009) argue that entrepreneurs need to carefully analyse the risks associated with certain businesses proposals to determine if it is worth pursuing them or not. The decision to start the business venture is based on the perception of the risk involved.

The trait approach requires all entrepreneurs to have the ability to take risks. Risk-taking along with flexibility and creativity are some of the best indicators of the likelihood to start a business. An entrepreneur must take the risk to establish a business venture and in the process face various risks such as management, personal and financial risk (Mondal & Jimenez, 2015). The entrepreneurial education equips entrepreneurs with qualities that assist them in establishing new innovative ventures. According to Jensen (2014), the education helps to nurture personal characteristics and traits such as creativity, imagination, and long-term vision. It enables them to perceive risks differently as compared to others, thus allowing them to take higher degrees of risks. Moreover, the experience gained gives entrepreneurs a different perception of risks, enabling them to take more risks for being
confident of their business ventures (Ortiz-Walters, 2011). Although creating a business is a risky endeavour due to the uncertainty involved, entrepreneurship education makes it easy to make decisions that are uncertain about their outcomes.

2.4 Entrepreneurship Education and Proactiveness

Proactiveness involves the element of acting in advance of a future situation such as future needs, problems or even changes. Anticipation and taking control are the two elements that are present in the conceptualization of proactive behaviour. Such kind of behaviour involves self-initiated and future-oriented actions that are meant to improve and change the situation or oneself (Robinson & Stubberud, 2014). The personal initiative usually involves going beyond the assigned tasks and attempting to solve problems that have not yet occurred. Proactivity can include inventing new means and negotiating new ends to take control and be anticipatory (Bindl & Parker, 2010).

The key features of proactive behaviour are anticipatory and involve acting in advance for a future situation as compared to just reacting. Being change oriented is another element of being proactive and involves taking control and causing something to happen. It involves being self-initiated whereby an individual does not need to be asked to take action (De Jong et al., 2015). In entrepreneurship, being proactive refers to having the behaviour to seek opportunities and a forward-looking perspective that involves the introduction of new services or products in anticipation for future needs and demand in the market.

Proactive means to change things in the intended directions to distinguish one from the rest in the marketplace. An entrepreneur can directly and intentionally change things by creating new circumstances or altering the current ones. Proactive individuals engage in scanning for opportunities of change (Parker & Collins, 2010). It is their behaviour to constantly look for new ways and to develop change oriented goals. The personality of proactive individuals involves having a relatively stable tendency to effect changes in the environment. Such individuals identify opportunities and act on them, take action, show initiative and perseverance until a meaningful change occurs (Presbitero, 2015). Individuals who are not proactive do not identify or seize opportunities to change things. Instead, they are reactive preferring to adapt to circumstances as compared to changing them. Proactive behaviour measures the personal disposition towards an idea and is inclined to mobilizing resources and gaining commitment for value creation (Rauch, 2009). It is this proactiveness
that aids the response to address the unattended market opportunities as well as the unarticulated needs of customers. Through such actions, a firm can gain competitive advantage.

Entrepreneurship education helps an individual to develop a set of competencies applicable to all walks of life as compared to just establishing or running an enterprise. The education that includes all forms of education such as learning and training can contribute to the entrepreneurial behaviour, spirit, and competence. Individuals can learn and develop transversal skills such as the ability to think critically, solve problems, to take initiative and to be proactive (Huber, Sloof & Van Praag, 2014). The skills acquired are crucial in the identification of gaps in the market that should be filled by new and innovative inventions to fulfil needs.

Mondal and Jimenez (2015) notes that nurturing an individual behaviour through entrepreneurship education can help them to become proactive in the long run and develop other useful entrepreneurial skills. The education helps an individual to develop new perspectives when dealing with issues in the surrounding environment. Proactive individuals believe that they control the fate of their business and they are responsible for its success (Robinson & Stubberud, 2014). Thus, they have to take action and make the right decisions to achieve the desired results by creating their path as compared to waiting for others to decide their future for them.

Most individuals do not tend to take proactive measures, but the attitude can be transformed through entrepreneurship education. An individual mind-set is self-created and usually tends to measure how much a person believes and strives to influence their environment (Wu, 2017). Entrepreneurship education allows individuals to control over their mind-set and the attitudes of how they respond to situations. A person develops self-sufficiency in their process of becoming proactive. The education transforms an individual to become action and result oriented as they aim to identify and exploit opportunities (Strauss, Griffin, & Rafferty, 2009). Various opportunities tend to exist in the environment and can be exploited to generate income and improve the welfare of other people in the society. Identifying the gaps in the market is the initial step that an entrepreneur needs to take, but also measures must be put in place on how to innovatively fill them. Utilizing the concepts learned through entrepreneurship education makes it easy to develop the right attitudes to
approach the problems in the market to come up with the best solution (Bindl & Parker, 2010). Entrepreneurs can take pre-emptive action against potential threats and problems before they occur. The actions are undertaken in anticipation of future events or occurrences that are likely to change the environment.

Individual proactiveness behaviour involves taking charge, launching new incentives and generating constructive change. According to Bell (2015), entrepreneurs do not try to maintain status quo or get along with others instead, they tackle issues head-on and work for constructive reforms. To change things, an individual must be proactive to move things in the intended direction. It is these skills that are acquired through entrepreneurship education that help to distinguish individuals from the pack. One can create change that involves the important attributes of adaptability and flexibility towards a future that is uncertain (Boutillier & Uzunidis, 2014). Entrepreneurs must take the initiatives to take actions that bring about change that is positive.

Entrepreneurship education enables people to make conscious decisions as to either enter or leave a situation such as entering a new market or making acquisitions. Skills such as critical thinking acquired through this type of education come in handy when making such entrepreneurial decisions (Robinson & Stubberud, 2014). The proactive behaviour also involves the direct and intentional change of things through the creation of new circumstances or alteration of the existing ones. The proactive behaviour is focused on an accomplishment that brings real impact such as coming up with a new thing that has not yet been discovered.

Anticipating and preventing problems is the other behaviour that is identified with proactive individuals. The process involves immersing oneself in the issue of concern to spot the potential challenges that exist in the environment and fix them even before a problem arises (Robinson & Stubberud, 2014). The identification of the problem makes it easier to come up with the right solution that is innovative and effective. Crucial factors that might affect the business in the future can be easily noted and measures put in place to deal with them to reduce the chances of loss occurring in the future (Din, Anuar, & Usman, 2016).

Instead of hoping for the best, an individual with entrepreneurship education takes the necessary and proactive steps. Such steps might include adopting innovative measures that
are more effective in dealing with the issue of concern to increase the chances of success of the new venture (Wu, 2017). It is through entrepreneurial education that entrepreneurs can develop useful skills that lead to the development of proactive behaviour. The success of a new venture is based on the decision that an entrepreneur makes when dealing with risks and other issues that directly affect the business venture (Rauch, 2009). However, an entrepreneur can only be effective in developing their business if they have the skills such as critical thinking, analogical ability, and divergent thinking.

2.4.1 Proactiveness and Entrepreneurial Characteristics

Doing things differently is the other behaviour associated with proactive people. Entrepreneurs who are successful usually do their things differently from the other people who are in the similar industry or those running similar organizations. Jensen (2016) notes that some people have the willingness to try new methods of doing things but lack the skills and know how to accomplish the task. As an entrepreneur, having the right skills is crucial to the success of the firm that one seeks to establish. Entrepreneurship education equips an individual with the right skills that are crucial in guiding the adoption of a different thinking capability. The knowledge acquired makes it possible to look for new and better ways of doing something as compared to sticking to the traditional ways (Boutillier & Uzunidis, 2014). Some of the approaches to achieve this include developing habits that allow one to pursue the business goals.

The habits adopted to target the possible problems should be effective at tackling them even before they occur. It is also necessary to develop a habit of being precautionary when dealing with issues that directly affect the success of a business venture (Rauch, 2009). One must be organized when it comes to planning by making a list of the tasks that need to be completed in the future and focusing on the steps required to get there.

Entrepreneurs must also develop the behaviour of taking actions. Entrepreneurship is all about taking risks and venturing into new things that one is not sure of the outcome. Believing in one’s ideas is the initial step towards becoming an entrepreneur (Farashah, 2013). One has to make mistakes and learn from them to be successful in the long-run. As such, an individual must be ready to take action and venture into the new ventures even though no one else has done it. It is at this point that entrepreneurial education becomes useful in guiding an individual through the process of developing innovative plans for
establishing new ventures (Tyszka et al., 2011). The process requires one not to hesitate in taking the lead, but instead involves taking the plunge despite the existing uncertainties. Some of the actions to undertake include planning for the unforeseen events that are likely to affect the business venture in the future. The planning helps to ensure that one responds to situations effectively as they arise (Bindl & Parker, 2010). It is also important to put the measures that show how problems will be solved. A possible solution to common problems must be developed to deal with challenges.

Perseverance is one of the behaviours that are expected of entrepreneurs whereby proactive individuals are expected to persist in their actions. They understand that the process of establishing a new venture is full of obstacles, but they do not back off from them or settle for less (Parker & Collins, 2010). Creating a successful firm requires one to persevere despite facing the various challenges. Success should be measured based on the little challenges that one faces on a regular basis all of which are part of the economic landscape of the venture. Perseverance refers to the effort put in place and not necessarily continuing with the same tactics or strategies (Strauss, Griffin, & Rafferty, 2009). However, it is only entrepreneurship education that can provide the insights when coming up with new tactics to deal with issues. A person must be ready to take a new direction where others have reached a dead end by trying different ways. Presbitero (2015) opines that skills learned through entrepreneurship education teach an entrepreneur to have a positive mindset which includes believing in one’s business as well as abilities.

Proactive individuals take time to look for alternatives and assess the potential of the future to make the right decisions. Proactive behaviour also entails achieving results from the various activities undertaken by an entrepreneur. An entrepreneur needs to be result oriented, and change must be achieved by all means possible. Proactiveness calls for accomplishment which is characterized by tangible results (Robinson & Stubberud, 2014). The entrepreneurship education helps an entrepreneur to have a change based impact on their organization and even situations. Proactive individuals tend to attain the greatest personal achievement through meeting challenging deadlines and completing projects within the set budgets (Bindl & Parker, 2010).

Moreover, they are successful agents of change in their organizations which is achieved through their engagement in entrepreneurial activities within their organizations. They also
engage in various activities that are innovative and aimed at helping the lives of other people. Undertaking these activities also helps the entrepreneur to learn about how things work and develop new ways to improve things and become effective in the future (Hendarman & Friedrich-Schiller-Universität, 2017). A response to the gaps in the market must yield the expected results for an enterprise to be successful. However, entrepreneurship education can help to provide the innovative disruptions required to achieve these desired results.

2.5 Chapter Summary
This chapter has presented a review of literature on entrepreneurship education and its influence on student orientation towards entrepreneurship. The chapter has been divided into three major themes in relation to the research objectives, these included entrepreneurship education and innovativeness, risk taking and pro-activeness behaviours. The next chapter will provide the research methodology used in the study.
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction
This chapter presents the methodology that will be used in performing the study to accomplish the research objectives. It offers the research design, study population, sampling design, data collection, research procedure and data analysis. The objectives include, establishing the effect of EE on students’ innovativeness towards entrepreneurship; to find out the effect of EE on students’ level of risk taking towards entrepreneurship and to establish the effect of EE on students’ proactiveness towards entrepreneurship.

3.2 Research Design
A research design is the broad plan of how one will go about answering the research questions of the study or respond to the objectives of the study (Saunders, Lewis, & Thornhill, 2009). A descriptive research design was used in conducting this research. It aims at giving a clear and precise profile of people, events or circumstances (Robson, 2002). Descriptive research is an appropriate design for studying a phenomena, since it helps create a clear knowledge of the subject under study by coming up with information on the relation of the subject and its environment (Ingham-Broomfield, 2015). This design was used in this study to enable the research give a clear indication of the influence of entrepreneurship education on students’ orientation towards entrepreneurship. The independent variable of the study was entrepreneurship and dependent variable dimensions of entrepreneurship orientation.

3.3 Population and Sampling Technique

3.3.1 Population
Population refers to the total number of entities that a study intends to draw conclusion on. According to Norris et al. (2015) study population are the people or subjects affected by the study. This study population was defined as the students in the final year, final semester of study at the Chandaria School of Business in USIU-A. These students were faced with the prospect of either seeking for formal employment after their study or taking up entrepreneurship depending on their entrepreneurship orientation. The study examined how
the entrepreneurship education they have gone through in the university has helped influence them towards venturing out to entrepreneurship. According to the information obtained from the office of the registrar in USIU-A, the number of the business students in their final year of study was 1,305 thus the study’s target population was 1,305 respondents.

3.3.2 Sampling Design

3.3.2.1 Sampling Frame
Sampling frame is the list of entities in the population from where the study will acquire the study sample (Brav et al., 2012). This study sample frame was acquired from the Chandaria School of Business in the USIU-A. It contained the names of students in their final year final semester of study. This was used to draw the required sample for the study.

3.3.2.2 Sampling Technique
Sampling technique is the method used to come up with a representative percentage that the researcher will carry out tests on (Cooper & Schindler, 2008). This study used stratified random sampling to select the study sample. In stratified random sampling the study population is broken down into subpopulations called strata, all strata are then represented in the sample, often through proportional allocation (Hinkle, Jurs, & Wiersma, 2009). The study population for this study was students in the entrepreneurship program from the university’s Chandaria School of Business. The students were categorized into graduate and undergraduate students, these two groups formed the strata from which samples were taken proportionally.

3.3.2.3 Sample Size
Sample size is the representative entity of the population in the study, upon which data obtained from this entity is assumed to reflect the perception of the whole population (Sandelowski et al., 2013). Samples are used to facilitate the assumption of characteristics of a large population (Saunders et al., 2008). Kotler et al. (2017) argued that a sample size representing 10% of the study population has a good reliability if well selected. This study took a sample size of 133 students out of 200 students in entrepreneurship programs to participate in the study. This was drawn from entrepreneurship students from the University’s Chandaria School of Business as illustrated in Table 3.1.
\[ n = \frac{N}{1 + N \cdot e^2} \]

n = sample size
N = population size
e = margin of error

\[ n = \frac{200}{1 + 200(0.05)^2} \]
\[ n = \frac{200}{1.5} \]
\[ n = 133 \]

**Table 3.1: Sample Size**

<table>
<thead>
<tr>
<th>Chandaria School of Business</th>
<th>Population Size</th>
<th>Sample Size</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate entrepreneurship students</td>
<td>163</td>
<td>89</td>
<td>67%</td>
</tr>
<tr>
<td>Graduate entrepreneurship students</td>
<td>37</td>
<td>44</td>
<td>33%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>200</strong></td>
<td><strong>133</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

**3.4 Data Collection Methods**

The study essentially used primary data that was collected from USIU’s entrepreneurship students in their final year of study. This study used questionnaire in collecting data from the study subject. A questionnaire is an arrangement of thoughtfully formulated questions used in collecting data (Wong, 1999). The questionnaire was constructed with structured questions that had multiple choices and the respondents were required to mark choices that adequately describe their views. Questionnaires with structured questions are recommended so that respondents may not give wrong answers due to misinterpretation of the questions (Cooper & Schindler, 2014).

Structured questions allowed for the researcher to efficiently carry out data analysis. The questionnaire was designed in three main parts; the first part contained questions on respondents’ demographic characteristics. The second part had questions on the three specific objectives of the study that include innovativeness, proactiveness and risk taking.
behaviour. The third part contained questions on the dependent variable of the study which is students’ orientation towards entrepreneurship. This enabled clarity in the questionnaire and efficient analysis.

A 5-point likert scale was applied, and consisted of a series of statements that express strongly agree to strongly disagree. This was a method of assigning quantitative value to qualitative data by assigning a number to each potential choice. In order to achieve a high response rate, the researcher gave out the questionnaires to the target population and waited for the respondent to complete and collected it back.

### 3.5 Research Procedures

This study started with a pilot study before carrying out the actual study. The research first sought clearance from the dean Chandaria School of Business in order to start carrying out the study. With the clearance from the faculty, the researcher sought permission from the USIU-A, to be allowed to conduct the study in the university. A request was made for the researcher to be given the list of students in their final semester final year of study; from this list the researcher drew the study sample. Ten students were first recruited to participate in the pilot study, the results from the pilots test were used to correct mistakes overlooked in the questionnaire formulation. The researcher also used the responses from the pilot study to investigate any ambiguous questions and reviewed them. This helped ensure the reliability and validity of the questionnaire instrument.

Selected students from the sample frame were approached to be recruited voluntarily to the study. In agreement with the students participants the researcher arranged to administer the questionnaire at the convenience of the students. Students were requested to fill the questionnaire in a brief session of 15 minutes; no student was allowed to go with the questionnaire. This was meant to ensure high response rate and avoid losing questionnaire to respondents who might take the questionnaire and keep instead of filling. The researcher also ensured the research remains ethical by strictly using the data for academic purpose. Respondents’ identities were also kept confidential. This helped the researcher to gain cooperation of the respondents.

### 3.6 Data Analysis Methods

Data collected from the field was first cleaned then coded and entered into SPSS that was used to perform the analysis. Data was analysed quantitatively through descriptive and
inferential statistics. Quantitative data analysis refers to the numerical illustration and calculation of observation in order to provide a vivid description and account of the phenomena that is depicted by the observation (Babbie, 2010). Descriptive statistics was used to investigate the mean distribution and percentage distribution of data. Inferential statistics was used to investigate the relationship between the study variables. Data was presented in tables and figures to give a clear picture of the research findings at a glance, and was analyzed using Statistical Package for Social Sciences (SPSS 20). The effectiveness of the analysis of the data also determined how the interpretation of the results would be accurate.

3.7 Chapter Summary
This chapter contains the research methodology; it incorporates the research design, study population, sampling design which describes the sample frame, sampling technique and the sample size. Again the chapter presents the data collection procedure that explains the research instrument and how it will be administered. The research procedure that describes the steps followed in carrying out the research is also presented. Lastly the chapter discusses the data analysis procedure giving the techniques that will be used. Chapter four that follows will present the findings and results while chapter five will discuss the findings and draw conclusion and provide recommendations.
CHAPTER FOUR

4.0 RESULTS AND FINDINGS

4.1 Introduction
The general objective of this study was to investigate the effect of entrepreneurship education on university students’ orientation towards entrepreneurship. The chapter presents the output of data collected from student’s entrepreneurs. The presentation is in tables and figures based on the research objectives.

4.2 Response Rate
Total of 85 questionnaires were completely filled by the respondents. As indicated on Table 4.1, the total sample size was 133. This gives 64% response rate which was adequate for the study.

Table 4.1: Response Rate

<table>
<thead>
<tr>
<th>Questionnaires</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responded</td>
<td>85</td>
<td>64</td>
</tr>
<tr>
<td>Did not respond</td>
<td>48</td>
<td>36</td>
</tr>
<tr>
<td>Total</td>
<td>133</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

4.3 Demographic Characteristics
Demographic information captured during the study includes: gender, age category, academic qualifications, current occupation and county of residence. The following section outlines the demographic information findings.

4.3.1 Gender of Respondents
As indicated on Figure 4.1, the number of females participated in the study were at 55% and male were at 45% indicating the total number of female in the study were more than male.
4.3.2 Age Bracket

The respondents gave their age based on categories; 18-25, 26-35, 36-40 and 41-45. The highest category aged 18-25 at 61.4%, followed by those aged 26-35 at 33.7% and others were below 10%, 36-40 and 41-45 each at 2.4%. None of the respondents aged above 45 years while 95.1% were between 18-35 years as presented on Figure 4.2.
4.3.3. Academic Qualifications

On the respondents’ level of education, 71.1% were undergraduate while the remaining 28.9% were graduates. This shows the respondents were majorly undergraduates as indicated on Figure 4.3.

![Figure 4.3: Academic Qualifications](image)

4.3.4 Current Occupation

When asked to state their current occupations, 63% of the respondents’ indicated they were students, 21% were involved in business, and lastly 16% were employed at the time of the study. Figure 4.4 shows this.

![Figure 4.4: Current Occupation](image)
4.3.5 County of Residence

The last question on demographic information asked the respondents to indicate their county of residence. While Table 4.1 shows the output, there was confusion on the difference between county and country hence both is presented on the table. Nearly half of the respondents were from Nairobi county (49.4%) followed by Kiambu county at 11.8%. Other respondents country were ranked at below 10% including Busia, Kajiado, Kericho, Kiambu, Kisumu, Laikipia, Machakos, Mombasa, Taita-Taveta, and west pokot. The respondents from Malawi and Tanzania were also at below 10% as outlined on Table 4.2.

Table 4.2: County/Country of Residence

<table>
<thead>
<tr>
<th>County</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Busia</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Kajiado</td>
<td>3</td>
<td>3.5</td>
</tr>
<tr>
<td>Kenya</td>
<td>16</td>
<td>18.8</td>
</tr>
<tr>
<td>Kericho</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Kiambu</td>
<td>10</td>
<td>11.8</td>
</tr>
<tr>
<td>Kisumu</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Laikipia</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Machakos</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Malawi</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Mombasa</td>
<td>4</td>
<td>4.7</td>
</tr>
<tr>
<td>Nairobi</td>
<td>42</td>
<td>49.4</td>
</tr>
<tr>
<td>Taita-Taveta</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Tanzania</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>West Pokot</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>85</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
4.4 Descriptive Analysis of Study Variables

4.4.1 Effect of Innovativeness on Students’ Orientation towards Entrepreneurship

This question had one category of question on innovation. Each question was measured on a scale of 1 to 5: 1 being strongly disagreed (SD), 2 as disagreed (D), 3 as neutral (N), 4 as agree (A) and lastly 5 as strongly agree (SA). In all questions on this category, strongly agree and agree were highly ranked. The response of the questions on the first two highly ranked responses were: ‘EE has installed in me the ability to create value in the society’ Strongly Agree at 40.5% and Agree at 39.3%; ‘I look for new and better ways of doing things as compared to sticking to the traditional ways’ Strongly Agree at 43.4% and Agree at 39.8%; ‘The EE I have received has driven in me more will power for value creation’ Strongly Agree at 39.3% and Agree at 44.0%; ‘I am more motivated and want to be engaged in the knowledge that I acquire’ Strongly Agree at 46.4% and Agree at 33.3%; ‘EE had equipped me with the right skills that has enhanced my innovativeness’ Strongly Agree at 31.3% and Agree at 43.4%; ‘EE has helped me develop ideas that are well dependent on the current patterns and models’ Strongly Agree at 32.1% and Agree at 45.2%; ‘I have more than often disregard the norms in solving problems’ Strongly Agree at 21.7% and Agree at 34.9%; ‘I normally act on my original thoughts to come up with new solutions to existing problems’ Strongly Agree at 23.8% and Agree at 44.0%; and lastly ‘I have developed analogical ability and divergent thinking which have oriented me towards entrepreneurship’ Strongly Agree at 29.8% and Agree at 44.0%. All the response were high as strongly agreed and agreed and were as indicated on Table 4.3.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>IN1</td>
<td>EE has installed in me the ability to create value in the society</td>
<td>1.2</td>
<td>2.4</td>
<td>16.7</td>
<td>39.3</td>
<td>40.5</td>
</tr>
<tr>
<td>IN2</td>
<td>I look for new and better ways of doing things as compared to sticking to the traditional ways</td>
<td>1.2</td>
<td>15.7</td>
<td>39.8</td>
<td>43.4</td>
<td></td>
</tr>
<tr>
<td>IN3</td>
<td>The EE I have received has driven in me more will power for value creation</td>
<td>3.6</td>
<td>13.1</td>
<td>44.0</td>
<td>39.3</td>
<td></td>
</tr>
<tr>
<td>IN4</td>
<td>I am more motivated and want to be engaged in the knowledge that I acquire</td>
<td>1.2</td>
<td>19.0</td>
<td>33.3</td>
<td>46.4</td>
<td></td>
</tr>
<tr>
<td>IN5</td>
<td>EE had equipped me with the right skills that has enhanced my innovativeness</td>
<td>3.6</td>
<td>21.7</td>
<td>43.4</td>
<td>31.3</td>
<td></td>
</tr>
<tr>
<td>IN6</td>
<td>EE has helped me develop ideas that are well dependent on the current patterns and models</td>
<td>2.4</td>
<td>6.0</td>
<td>14.3</td>
<td>45.2</td>
<td>32.1</td>
</tr>
<tr>
<td>IN7</td>
<td>I have more than often disregard the norms in solving problems</td>
<td>3.6</td>
<td>10.8</td>
<td>28.9</td>
<td>34.9</td>
<td>21.7</td>
</tr>
<tr>
<td>IN8</td>
<td>I normally act on my original thoughts to come up with new solutions to existing problems</td>
<td>1.2</td>
<td>4.8</td>
<td>26.2</td>
<td>44.0</td>
<td>23.8</td>
</tr>
<tr>
<td>IN9</td>
<td>I have developed analogical ability and divergent thinking which have oriented me towards entrepreneurship</td>
<td>3.6</td>
<td>22.6</td>
<td>44.0</td>
<td>29.8</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.3: Innovativeness of Students Orientation towards Entrepreneurship.
4.4.2 Risk Taking on Students’ Orientation towards Entrepreneurship.

The description on the risk taking on students’ orientation towards entrepreneurship was also measured on a scale of 1 to 5: 1 being strongly disagreed (SD), 2 as disagreed (D), 3 as neutral (N), 4 as agree (A) and lastly 5 as strongly agree (SA). The questions had one category and similar to questions on innovativeness, most responses were highly ranked as agreed and strongly agreed. However, few were highly ranked as neutral.

The questions that were highly ranked as agreed and strongly agreed were ‘I am always willing to embrace change positively’ Strongly Agree at 36.6% and Agree at 46.3%; ‘EE has motivated me to take risks and start my own businesses’ Strongly Agree at 38.6% and Agree at 33.7%; ‘I am less hesitant when needed to produce new ideas, take risks or behave in myself’ Strongly Agree at 26.8% and Agree at 42.7%; ‘I carefully analyze risks to determine if they are worth taking’ Strongly Agree at 32.1% and Agree at 40.5%; and ‘I have a different perception of risk that has made me take more risks’ Strongly Agree at 29.8% and Agree at 41.7%.

The questions that were highly ranked as agreed and neutral were ‘I am easy at taking chances and exposing myself to situations or activities with uncertain outcome’ Agree at 45.8% and Neutral at 22.9%; ‘I am able to identify potential risk situation early enough and mitigate on them’ Agree at 38.6% and Neutral at 27.7%; and ‘I am more conscious and stable in the risks I take’ Agree at 46.3% and Neutral at 23.2% as indicated on Table 4.4.

Table 4.4: Risk Taking on Students’ Orientation towards Entrepreneurship

40
<table>
<thead>
<tr>
<th>RT</th>
<th>Description</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>RT1</td>
<td>I am easy at taking chances and exposing myself to situations or activities with uncertain outcome</td>
<td>2.4</td>
<td>7.2</td>
<td>22.9</td>
<td>45.8</td>
<td>21.7</td>
</tr>
<tr>
<td>RT2</td>
<td>I am always willing to embrace change positively</td>
<td>1.2</td>
<td>2.4</td>
<td>13.4</td>
<td>46.3</td>
<td>36.6</td>
</tr>
<tr>
<td>RT3</td>
<td>EE has motivated me to take risks and start my own businesses</td>
<td>2.4</td>
<td>4.8</td>
<td>20.5</td>
<td>33.7</td>
<td>38.6</td>
</tr>
<tr>
<td>RT4</td>
<td>I am able to identify potential risk situation early enough and mitigate on them</td>
<td>1.2</td>
<td>6.0</td>
<td>27.7</td>
<td>38.6</td>
<td>26.5</td>
</tr>
<tr>
<td>RT5</td>
<td>I am more conscious and stable in the risks I take</td>
<td>1.2</td>
<td>8.5</td>
<td>23.2</td>
<td>46.3</td>
<td>20.7</td>
</tr>
<tr>
<td>RT6</td>
<td>I am less hesitant when needed to produce new ideas, take risks or behave in myself</td>
<td>2.4</td>
<td>8.5</td>
<td>19.5</td>
<td>42.7</td>
<td>26.8</td>
</tr>
<tr>
<td>RT7</td>
<td>I carefully analyze risks to determine if they are worth taking</td>
<td>3.6</td>
<td>23.8</td>
<td>40.5</td>
<td>32.1</td>
<td></td>
</tr>
<tr>
<td>RT8</td>
<td>I have a different perception of risk that has made me take more risks</td>
<td>1.2</td>
<td>4.8</td>
<td>22.6</td>
<td>41.7</td>
<td>29.8</td>
</tr>
</tbody>
</table>

4.4.3 Pro-activeness on Students Orientation towards Entrepreneurship.
The description on the Pro-activeness on Students Orientation towards Entrepreneurship was also measured on a scale of 1 to 5: 1 being strongly disagreed (SD), 2 as disagreed (D),
3 as neutral (N), 4 as agree (A) and lastly 5 as strongly agree (SA). The questions had one category and similar to questions on innovativeness, all the responses were highly ranked as agreed and strongly agreed except one question that was ranked highly as neutral ‘I always try to identify potential challenges that exists in my environment and fix them before a problem arises’ Agree at 39.0% and Neutral at 29.3%.

Questions highly ranked as agreed and strongly agreed were as follow: ‘I am always scanning for opportunities of change in my environment’ Strongly Agree at 32.1% and Agree at 40.5%; ‘I identify opportunities and act on them for meaningful change’ Strongly Agree at 33.3% and Agree at 46.4%; ‘I believe that I am in control of my situation and responsible for my success’ Strongly Agree at 44.0% and Agree at 34.5%; ‘I consider myself action and result oriented’ Strongly Agree at 43.4% and Agree at 38.6%; ‘I tackle issues head-on and work for constructive reforms’ Strongly Agree at 34.9% and Agree at 39.8%; ‘I am very alert and always look forward discovering future opportunities successfully’ Strongly Agree at 30.5% and Agree at 40.2%; and lastly ‘I have developed transversal skills such as the ability to think critically, solve problems, take the initiative and work collaboratively with others’ Strongly Agree at 43.2% and Agree at 38.3%. All the responses were as indicated on Table 4.5.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PA1</strong></td>
<td>I am always scanning for opportunities of change in my environment</td>
<td>4.8</td>
<td>22.6</td>
<td>40.5</td>
<td>32.1</td>
<td></td>
</tr>
<tr>
<td><strong>PA2</strong></td>
<td>I identify opportunities and act on them for meaningful change</td>
<td>1.2</td>
<td>19.0</td>
<td>46.4</td>
<td>33.3</td>
<td></td>
</tr>
<tr>
<td><strong>PA3</strong></td>
<td>I believe that I am in control of my situation and responsible for my success</td>
<td>1.2</td>
<td>1.2</td>
<td>19.0</td>
<td>34.5</td>
<td>44.0</td>
</tr>
<tr>
<td><strong>PA4</strong></td>
<td>I consider myself action and result oriented</td>
<td>1.2</td>
<td>16.9</td>
<td>38.6</td>
<td>43.4</td>
<td></td>
</tr>
<tr>
<td><strong>PA5</strong></td>
<td>I tackle issues head-on and work for constructive reforms</td>
<td>25.3</td>
<td>39.8</td>
<td>34.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PA6</strong></td>
<td>I always try to identify potential challenges that exists in my environment and fix them before a problem arises</td>
<td>6.1</td>
<td>29.3</td>
<td>39.0</td>
<td>25.6</td>
<td></td>
</tr>
<tr>
<td><strong>PA7</strong></td>
<td>I am very alert and always look forward discovering future opportunities successfully</td>
<td>3.7</td>
<td>25.6</td>
<td>40.2</td>
<td>30.5</td>
<td></td>
</tr>
<tr>
<td><strong>PA8</strong></td>
<td>I have developed transversal skills such as the ability to think critically, solve problems, take the initiative and work collaboratively with others</td>
<td>8.6</td>
<td>9.9</td>
<td>38.3</td>
<td>43.2</td>
<td></td>
</tr>
</tbody>
</table>
4.4.4 Students Orientation towards Entrepreneurship

The dependent variable question was on students’ orientation towards entrepreneurship. The scale of measure was 1 to 5: 1 being strongly disagreed (SD), 2 as disagreed (D), 3 as neutral (N), 4 as agree (A) and lastly 5 as strongly agree (SA). All the questions were highly ranked as agreed and strongly agreed as indicated on table 4.6 were: ‘I own/plan to own business venture’ Strongly Agree at 50.6% and Agree at 24.7%; ‘I have made some great personal achievements’ Strongly Agree at 42.0% and Agree at 35.8%; ‘I am adaptable to change and can rely on myself’ Strongly Agree at 45.7% and Agree at 38.3%; ‘I prefer self-employment to corporate employment’ Strongly Agree at 52.5% and Agree at 27.5%; ‘I would prefer to carry out things independently’ Strongly Agree at 42.0% and Agree at 27.2%; ‘I am willing to commit substantial resources to opportunities that are deliberate to thrive’ Strongly Agree at 48.1% and Agree at 37.0%; and lastly ‘I trust myself to undertake a successful business’ Strongly Agree at 55.6% and Agree at 33.3%.

Table 4.6: Students Orientation towards Entrepreneurship

<table>
<thead>
<tr>
<th>Question</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQ1 I own/plan to own business venture</td>
<td>3.7</td>
<td>21.0</td>
<td>24.7</td>
<td>50.6</td>
<td></td>
</tr>
<tr>
<td>EQ2 I have made some great personal achievements</td>
<td>2.5</td>
<td>4.9</td>
<td>14.8</td>
<td>35.8</td>
<td>42.0</td>
</tr>
<tr>
<td>EQ3 I am adaptable to change and can rely on myself</td>
<td>1.2</td>
<td>1.2</td>
<td>13.6</td>
<td>38.3</td>
<td>45.7</td>
</tr>
<tr>
<td>EQ4 I prefer self-employment to corporate employment</td>
<td>1.3</td>
<td>3.8</td>
<td>15.0</td>
<td>27.5</td>
<td>52.5</td>
</tr>
<tr>
<td>EQ5 I would prefer to carry out things independently</td>
<td>4.9</td>
<td>2.5</td>
<td>23.5</td>
<td>27.2</td>
<td>42.0</td>
</tr>
<tr>
<td>EQ6 I am willing to commit substantial resources to opportunities that are deliberate to thrive</td>
<td>3.7</td>
<td>11.1</td>
<td>37.0</td>
<td>48.1</td>
<td></td>
</tr>
<tr>
<td>EQ7 I trust myself to undertake a successful business</td>
<td>3.7</td>
<td>7.4</td>
<td>33.3</td>
<td>55.6</td>
<td></td>
</tr>
</tbody>
</table>
4.5 Inferential Analysis
Inferential statistical was carried out to understand the data in deeper meaning. Statistical assumptions test were Normality test, and Multi-collinearity tests to determine the regression analysis test to be conducted. Other tests to understand the data were Factor analysis, Cronbach’s alpha, and correlation. Regression model analysis was used to answer the objectives of study.

4.5.1. Factor Analysis
Under factor analysis, three key tests were conducted; exploratory factor analysis (EFA), factor pattern loading and lastly, commonality and rotational method by promax with Kaiser Normalization.

4.5.1.1 Exploratory Factor Analysis
To determine the data factorability, Kaiser Meyer-Olin Measure of Sampling Adequacy, Bartlett’s Test of Sphericity and communalities was done. Questions that did not relate to construct were extracted from the analysis. As indicated on Table 4.7, the factor derived had a strong Kaiser-Meyer result of 0.844 (the closer to 1, the stronger the adequacy). The Bartlett’s test of Sphericity was significant at \(X^2 (496, N=84) = 1194.175, p<.05\). The factor was adequate for extraction of the component since Kaiser-Meyer-Olkin Measure was greater than 0.6 and the Bartlett’s test was significant (\(p<.05\)).

**Table 4.7: KMO and Bartlett’s Test**

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</th>
<th>.844</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approx. Chi-Square</td>
<td>1194.175</td>
</tr>
<tr>
<td>Bartlett’s Test of Sphericity</td>
<td></td>
</tr>
<tr>
<td>Df</td>
<td>496</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

4.5.1.2 Total Variance Explained
As indicated on Table 4.8, only four factors were extracted from the study which represented an accumulation of 55.816% on the sum of square loading. The eigenvalues were greater than 1 with the rotated sun of square loading value of greater than 3. These shows the four factors are strong representation of the variable of the study. The factors
extracted were based on the study objectives; innovativeness (IN), risk taking (RT), Proactiveness (PA) and entrepreneurship orientation (EO).

**Table 4.8: Total Variance Explained**

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
<th>Rotation Sums of Squared Loadings⁴</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
<td>Cumulative</td>
</tr>
<tr>
<td>2</td>
<td>1.821</td>
<td>9.585</td>
<td>41.077</td>
</tr>
<tr>
<td>3</td>
<td>1.461</td>
<td>7.691</td>
<td>48.769</td>
</tr>
<tr>
<td>4</td>
<td>1.339</td>
<td>7.047</td>
<td>55.816</td>
</tr>
<tr>
<td>5</td>
<td>1.155</td>
<td>6.078</td>
<td>61.893</td>
</tr>
<tr>
<td>6</td>
<td>.938</td>
<td>4.936</td>
<td>66.829</td>
</tr>
<tr>
<td>7</td>
<td>.883</td>
<td>4.645</td>
<td>71.475</td>
</tr>
<tr>
<td>8</td>
<td>.743</td>
<td>3.911</td>
<td>75.386</td>
</tr>
<tr>
<td>9</td>
<td>.693</td>
<td>3.646</td>
<td>79.032</td>
</tr>
<tr>
<td>10</td>
<td>.658</td>
<td>3.464</td>
<td>82.496</td>
</tr>
<tr>
<td>11</td>
<td>.508</td>
<td>2.674</td>
<td>85.170</td>
</tr>
<tr>
<td>12</td>
<td>.463</td>
<td>2.439</td>
<td>87.609</td>
</tr>
<tr>
<td>13</td>
<td>.450</td>
<td>2.370</td>
<td>89.979</td>
</tr>
<tr>
<td>14</td>
<td>.428</td>
<td>2.250</td>
<td>92.230</td>
</tr>
<tr>
<td>15</td>
<td>.360</td>
<td>1.893</td>
<td>94.122</td>
</tr>
<tr>
<td>16</td>
<td>.343</td>
<td>1.808</td>
<td>95.930</td>
</tr>
<tr>
<td>17</td>
<td>.311</td>
<td>1.636</td>
<td>97.566</td>
</tr>
<tr>
<td>18</td>
<td>.268</td>
<td>1.409</td>
<td>98.975</td>
</tr>
<tr>
<td>19</td>
<td>.195</td>
<td>1.025</td>
<td>100.000</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.
4.5.1.3 Communality and Pattern Matrix

The pattern matrix indicates the exact variables extracted from each factor identified on the total variance explained matrix. While communality measures the percent of variance in a specified variable and is interpreted as the reliability of the indicator. A low value could indicate that the variable does not fit well with other variables in its component, and it is unwanted. The standard measure is above 0.32 but as shown on Table 4.9, all the values were above 0.5 demonstrating acceptable factorability for all items. The four factors formed based on the pattern matrix were: innovativeness (IN), risk taking (RT), Proactiveness (PA) and entrepreneurship orientation (EO).

Table 4.9: Communalities and Pattern Matrix

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>IN3</td>
<td></td>
<td>.560</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IN5</td>
<td></td>
<td></td>
<td>.634</td>
<td></td>
</tr>
<tr>
<td>IN8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IN9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RT1</td>
<td>.584</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RT4</td>
<td></td>
<td>.778</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RT5</td>
<td></td>
<td>.797</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RT6</td>
<td></td>
<td>.660</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PA1</td>
<td></td>
<td></td>
<td>.557</td>
<td></td>
</tr>
<tr>
<td>PA2</td>
<td></td>
<td></td>
<td>.741</td>
<td></td>
</tr>
<tr>
<td>PA3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PA4</td>
<td></td>
<td></td>
<td></td>
<td>.677</td>
</tr>
<tr>
<td>PA5</td>
<td></td>
<td></td>
<td></td>
<td>.738</td>
</tr>
<tr>
<td>PA6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PA7</td>
<td></td>
<td></td>
<td>.540</td>
<td></td>
</tr>
<tr>
<td>EQ1</td>
<td>.632</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EQ5</td>
<td>.759</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EQ6</td>
<td>.730</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EQ7</td>
<td>.780</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Promax with Kaiser Normalization.
a. Rotation converged in 18 iterations.

4.5.2 Construct Reliability

As indicated on Table 4.10, the construct reliability was assessed by the measure of Cronbach’s alpha. In this study, the Cronbach alpha was .938 which was greater than .7 indicating the variables in the study demonstrated construct reliability.

Table 4.10: Construct Reliability

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>Cronbach's Alpha Based on Standardized Items</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.936</td>
<td>.938</td>
<td>32</td>
</tr>
</tbody>
</table>

4.5.3 Convergent Validity.

To evaluate convergent validity, the variance if item is deleted was used as outlined on Table 4.11. From the table, there is no significant variance on the scale mean if item is deleted; highest mean value of 12.4 and the lowest value of 12.0. On the alpha value if item is deleted had minimal variance on three factors EQQ, INN and PAA but on RTT variable, the item value were higher at .772 compared to other variable. Similarly, RTT had lower value of .447 on the item total correlation indicating greater variance on the comparison based on correlation of the items. However, the correlation value was more than .32 hence not below the expected value. Further measurement on the correlation were indicated and discussed on item 4.5.4.

Table 4.11: Item- Total Statistics.

<table>
<thead>
<tr>
<th></th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Squared Multiple Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQQ</td>
<td>11.9630</td>
<td>2.450</td>
<td>.604</td>
<td>.393</td>
<td>.672</td>
</tr>
<tr>
<td>INN</td>
<td>12.0504</td>
<td>2.927</td>
<td>.617</td>
<td>.396</td>
<td>.684</td>
</tr>
<tr>
<td>RTT</td>
<td>12.3714</td>
<td>2.614</td>
<td>.447</td>
<td>.203</td>
<td>.772</td>
</tr>
<tr>
<td>PAA</td>
<td>12.1615</td>
<td>2.641</td>
<td>.602</td>
<td>.399</td>
<td>.675</td>
</tr>
</tbody>
</table>
4.5.4 Correlation Coefficient.

Correlation analysis was conducted to test the significant association between students entrepreneurial orientation (EQQ) as dependent variable and the three independent variables; INN, RTT, and PAA derived from the factors. As shown on Table 4.12, all the independent variables were positively correlated with the dependent variables significantly. ‘Innovativeness (INN)’ was not correlated with ‘EQQ’ \( r = .531, p > .05 \); ‘Risk taking (RTT)’ \( r = .375, p > .05 \); and ‘Pro-activeness (PAA)’ \( r = .548, p > .05 \). This shows all the variables extracted were positively correlated with the dependent variable.

Table 4.12: Inter-item Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>EQQ</th>
<th>INN</th>
<th>RTT</th>
<th>PAA</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQQ</td>
<td>.531**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INN</td>
<td>.375**</td>
<td>.403**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.001</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>RTT</td>
<td>.548**</td>
<td>.503**</td>
<td>.351**</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.001</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

4.5.5 Normality Test

The skewness and kurtosis statistics used to test the normality indicated all the independent variables were normally distributed but the dependent variable were not normally distributed. The normality test is positive when Skewness and kurtosis statistics range -1.0 and + 1.0. As indicated on Table 4.12, EQQ failed the normality test; skewness of -1.285 and kurtosis of 2.210 while INN, RTT and PAA were normally distributed; the values ranged in -1.0 to +1.0 indicated on Table 4.13.
Table 4.13: Normality Test

<table>
<thead>
<tr>
<th></th>
<th>EQQ</th>
<th>INN</th>
<th>RTT</th>
<th>PAA</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>81</td>
<td>84</td>
<td>84</td>
<td>84</td>
</tr>
<tr>
<td>Missing</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Skewness</td>
<td>-1.285</td>
<td>-0.162</td>
<td>-0.439</td>
<td>-0.608</td>
</tr>
<tr>
<td>Std. Error of Skewness</td>
<td>0.267</td>
<td>0.263</td>
<td>0.263</td>
<td>0.263</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>2.210</td>
<td>-0.225</td>
<td>-0.118</td>
<td>0.262</td>
</tr>
<tr>
<td>Std. Error of Kurtosis</td>
<td>0.529</td>
<td>0.520</td>
<td>0.520</td>
<td>0.520</td>
</tr>
</tbody>
</table>

Further, to the data on the Table 4.12, the below histogram with normality curve indicates the normal curve based on the distribution of data.

**Figure 4.5: Normality Curve.**
4.5.6 Multicollinearity Test

Multicollinearity test was performed to determine if the values of independent variables and dependent variables had higher similarity that can affect the regression analysis. Variance Inflation Factor (VIF) was used to test the multicollinearity value; VIF values of more than 1 and less than 10 were positive. From Table 4.14, the VIF factor was more than 1 and less than 10 hence the factors were not multi-collerated.

Table 4.14: VIF test

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>1</td>
<td>INN</td>
</tr>
<tr>
<td></td>
<td>RTT</td>
</tr>
<tr>
<td></td>
<td>PAA</td>
</tr>
</tbody>
</table>

a. Dependent Variable: EQQ

4.6 Regression Model

Having passed the test of multicolliniearity, and normality tests, linear regression model was adapted to the test research objectives. Further, the correlation test was statistically significant between the dependent and independent variables. The linear regression model determined the relationship, magnitude of the influence and projection of the INN, RTT and PAA on EQQ as dependent variable. The regression weight of the linear regression was used to test the specific research objectives. The regression weight results were indicated on Table 4.14. The research objectives were to establish the effect of Innovativeness on Students’ Orientation towards Entrepreneurship, to establish the effects of Risk taking on Students’ Orientation towards Entrepreneurship and to determine the effect of Pro-activeness on Students Orientation towards Entrepreneurship.

4.6.1. Effect of Innovativeness on Students’ Orientation towards Entrepreneurship

Table 4.14 shows the regression weight coefficients model in this study was statistically significant. The analysis showed innovativeness (INN) of students can influence students orientation towards entrepreneurship ($\beta = .715, t = 5.565, p<.05$). This was statistically
significant which concludes innovativeness of students can influence students’ orientation towards entrepreneurship.

4.6.2 Effects of Risk taking on Students’ Orientation towards Entrepreneurship

Table 4.14 shows the regression weight coefficients model in this study was statistically significant. The analysis showed risk taking (RTT) of students can influence students orientation towards entrepreneurship ($\beta = .349$, $t = 3.592$, $p < .05$). This was statistically significant which concludes risk taking of students can influence students’ orientation towards entrepreneurship.

4.6.3 Effect of Pro-activeness on Students Orientation towards Entrepreneurship

Table 4.14 shows the regression weight coefficients model in this study was significant. The analysis showed pro-activeness (PAA) of students can influence students orientation towards entrepreneurship ($\beta = .607$, $t = 5.818$, $p < .05$. this was statistically significant which concludes pro-activeness of students can influence students orientation towards entrepreneurship.

Table 4.15: Regression weights

<table>
<thead>
<tr>
<th>Dependent</th>
<th>Independent</th>
<th>Unstandardized estimate</th>
<th>Standard Error</th>
<th>Standardized estimate</th>
<th>T value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>EQQ</td>
<td>INN</td>
<td>.715</td>
<td>.128</td>
<td>.531</td>
<td>5.565</td>
<td>.000</td>
</tr>
<tr>
<td>EQQ</td>
<td>RTT</td>
<td>.349</td>
<td>.097</td>
<td>.375</td>
<td>3.592</td>
<td>.001</td>
</tr>
<tr>
<td>EQQ</td>
<td>PAA</td>
<td>.607</td>
<td>.104</td>
<td>.548</td>
<td>5.818</td>
<td>.000</td>
</tr>
</tbody>
</table>

4.7 Predictive Relevance of the Model

The quality of the model was assessed by $R^2$ which shows the variance in the residual variable that is explained by the predictive variables. Based on the results reported on table 4.15, the $R^2$ was .393 indicating Innovativeness, Risk taking and Pro-activeness of students can account for 39.3% of the students’ orientation on entrepreneurship.
### Table 4.16: Model Summary on Relevance of the Model

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>Significance F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R Square Change</td>
<td>F</td>
</tr>
<tr>
<td>1</td>
<td>.627a</td>
<td>.393</td>
<td>.369</td>
<td>.58186</td>
<td>.393</td>
<td>16.594</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), RTT, PAA, INN
b. Dependent Variable: EQQ

### 4.8 Chapter Summary

This chapter presented the analysis findings of the study based on the objectives. The demographic presentation covered gender, age, level of education, current occupation and county of living. The first objectives finding indicated; innovativeness (INN) of students can influence students’ orientation towards entrepreneurship. The second objective indicated risk taking (RTT) of students can influence students’ orientation towards entrepreneurship and the lastly objective indicated pro-activeness (PAA) of students can influence students’ orientation towards entrepreneurship. The next chapter gives the chapter summary, discusses the research findings, recommendations and conclusion of the study.
CHAPTER FIVE

5.0 DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the study, discussion of findings based on the literature and concludes the study based the output of each of the research objectives. Lastly, the recommendations to areas of improvement and recommendations to further studies are presented.

5.2 Summary

The general objective of this study was to examine the effects of entrepreneurship education on universities Students’ Orientation towards Entrepreneurship. The specific objectives were: To establish the effect of Innovativeness on Students’ Orientation towards Entrepreneurship, to establish the effects of Risk taking on Students’ Orientation towards Entrepreneurship, and to determine the effect of Pro-activeness on Students Orientation towards Entrepreneurship. This research was significant to scholars, practitioners and decision makers in the students’ orientation towards entrepreneurship.

Descriptive research design was used to examine the effects of entrepreneurship education on university students’ orientation towards entrepreneurship. The study population was defined as the students in the final year, final semester of study at the university taking entrepreneurship course. Stratified random sampling method was used to select the study sample. A total of 133 students were picked to participate in the study. Structured questionnaires were used to collect data from the study subject. Data was analysed through descriptive and inferential statistics. The results were presented in tables and figures.

The descriptive findings of objective one on innovativeness; all questions were highly ranked as strongly agree and agree. ‘EE has installed in me the ability to create value in the society’ Strongly Agree at 40.5% and Agree at 39.3%; ‘I look for new and better ways of doing things as compared to sticking to the traditional ways’ Strongly Agree at 43.4% and Agree at 39.8%; ‘The EE I have received has driven in me more will power for value creation’ Strongly Agree at 39.3% and Agree at 44.0%; ‘I am more motivated and want to be engaged in the knowledge that I acquire’ Strongly Agree at 46.4% and Agree at 33.3%; ‘EE had equipped me with the right skills that has enhanced my innovativeness’ Strongly Agree at 31.3% and Agree at 43.4%; ‘EE has helped me develop ideas that are well
dependent on the current patterns and models’ Strongly Agree at 32.1% and Agree at 45.2%; ‘I have more than often disregard the norms in solving problems’ Strongly Agree at 21.7% and Agree at 34.9%; ‘I normally act on my original thoughts to come up with new solutions to existing problems’ Strongly Agree at 23.8% and Agree at 44.0%; and lastly ‘I have developed analogical ability and divergent thinking which have oriented me towards entrepreneurship’ Strongly Agree at 29.8% and Agree at 44.0%. On the inferential, the coefficient for the relationship between innovativeness (INN) of students and students orientation towards entrepreneurship was positive and significant at .05 level ($\beta = .715, t = 5.565, p<.05$). This indicates one unit increase in students innovativeness increases students orientation towards entrepreneurship by .715.

For objective two on risk taking, questions ranked as agreed and strongly agreed were; ‘I am always willing to embrace change positively’ Strongly Agree at 36.6% and Agree at 46.3%; ‘EE has motivated me to take risks and start my own businesses’ Strongly Agree at 38.6% and Agree at 33.7%; ‘I am less hesitant when needed to produce new ideas, take risks or behave in myself’ Strongly Agree at 26.8% and Agree at 42.7%; ‘I carefully analyze risks to determine if they are worth taking’ Strongly Agree at 32.1% and Agree at 40.5%; and ‘I have a different perception of risk that has made me take more risks’ Strongly Agree at 29.8% and Agree at 41.7%. While questions that were highly ranked as agreed and neutral were ‘I am easy at taking chances and exposing myself to situations or activities with uncertain outcome’ Agree at 45.8% and Neutral at 22.9%; ‘I am able to identify potential risk situation early enough and mitigate on them’ Agree at 38.6% and Neutral at 27.7%; and ‘I am more conscious and stable in the risks I take’ Agree at 46.3% and Neutral at 23.2%. On the inferential, the coefficient for the relationship between risk taking (RTT) of students and students orientation towards entrepreneurship was positive and significant at .05 level ($\beta = .349, t = 3.592, p<.05$). This indicates one unit increase in student risk taking ability increases students’ orientation towards entrepreneurship by .349.

The last objective on pro-activeness, questions ranked as agreed and highly agreed were: ‘I am always scanning for opportunities of change in my environment’ Strongly Agree at 32.1% and Agree at 40.5%; ‘I identify opportunities and act on them for meaningful change’ Strongly Agree at 33.3% and Agree at 46.4%; ‘I believe that I am in control of my situation and responsible for my success’ Strongly Agree at 44.0% and Agree at 34.5%; ‘I consider myself action and result oriented’ Strongly Agree at 43.4% and Agree at 38.6%;
‘I tackle issues head-on and work for constructive reforms’ Strongly Agree at 34.9% and Agree at 39.8%; ‘I am very alert and always look forward discovering future opportunities successfully’ Strongly Agree at 30.5% and Agree at 40.2%; and lastly ‘I have developed transversal skills such as the ability to think critically, solve problems, take the initiative and work collaboratively with others’ Strongly Agree at 43.2% and Agree at 38.3%. On the inferential, the coefficient for the relationship between pro-activeness (PAA) of students and students orientation towards entrepreneurship was positive and significant at .05 level ($\beta = .607$, $t = 5.818$, $p<.05$). This indicates one unit increase in student reactiveness increases students’ orientation towards entrepreneurship by .607.

5.3. Discussion of the Results

5.3.1. Effect of Innovativeness on Students’ Orientation towards Entrepreneurship

On the inferential, the coefficient for the relationship between innovativeness (INN) of students and students orientation towards entrepreneurship was positive and significant at .05 level ($\beta = .715$, $t = 5.565$, $p<.05$). This indicates one unit increase in students innovativeness increases students orientation towards entrepreneurship by .715. Hence innovativeness is an important factor with significant influence on students’ orientation towards entrepreneurship. According to Saral (2017), individual innovativeness behaviour makes them capable of originality of thought and motivated them to develop novel solutions to problems and thus develop new ventures. Further, the innovative behaviour pushes one to enjoy taking chances and to willingly expose themselves to situations or activities with uncertain outcomes. Similarly, Marcati, Guido and Peluso, (2008) observed that an individual innovativeness plays a critical role in the implementation of innovations in an enterprise.

According to the findings entrepreneurship education was found to have enabled student create value in the society, this is in line with Yurtkoru, Acar and Teraman (2014) who implied that students can be trained to gain the ability and willingness to create value for others. It was established that students looked for new and better ways of doing things as compared to sticking to the traditional ways. Similarly, Boutillier and Uzunidis (2014) argued that the knowledge acquired from entrepreneurship education makes it possible for one to look for new and better ways of doing something as compared to sticking to the traditional ways. Results showed that entrepreneurship education had driven into student
more will power for value creation, this was similarly observed by Lee and Lee (2015) who noted that entrepreneurship education student have the possibility of becoming highly motivated and engaged by creating value.

Further entrepreneurship education had motivated students to be engaged in the knowledge that they acquire. According to Lee and Lee (2015), students introduced to entrepreneurial education have the possibility of becoming highly engaged. Entrepreneurship education was also found to have equipped students with the right skills that enhanced their innovativeness; this is in agreement with Koe (2016) who noted that entrepreneurship education can help to equip students with the right skills that promote individual innovativeness.

Again it was shown that entrepreneurship education helped students develop ideas that are well dependent on the current patterns and models. This corresponds to the argument of Menold et al. (2014) who argued that innovative people tend to offer a multitude of ideas that are less dependent on the current precedents and paradigms. It was also found that students have more than often disregard the norms in solving problems. These findings correspond to the argument of Bell (2015) who noted that successful entrepreneurs need to disregard the rules when it comes to solving problems. According Menold et al. (2014), innovative people tend to offer a multitude of ideas that are less dependent on the current standards and paradigms.

Findings also revealed that entrepreneurship education made students to act on their original thoughts to come up with new solutions to existing problems. This agrees with Koe (2016) who was of the opinion that entrepreneurial intention can be nurtured through the adoption of various strategies such as acting on one’s original thoughts to come up with new solutions to existing problems. Similarly, Yurtkor, Acar and Teraman (2014) opine that the innovative behaviour of an individual is important when it comes to acting upon ideas and opportunities and transforming them into value for others.

Lastly, students were found to have developed analogical ability and divergent thinking which oriented them towards entrepreneurship. According Ferreira et al. (2012), divergent thinking and analogical ability are crucial and indicative of an individual preferred approach to solving problems when it comes to entrepreneurship. Batra & Vohra, (2016)
also observed that it is the analogical ability and divergent thinking that leads to the development of entrepreneurial intention.

5.3.2. Effect of Risk-taking on Students’ Orientation towards Entrepreneurship

On the inferential, the coefficient for the relationship between risk taking (RTT) of students and students orientation towards entrepreneurship was positive and significant at .05 level ($\beta = .349, t = 3.592, p<.05$). This indicates one unit increase in student risk taking ability increases students’ orientation towards entrepreneurship by .349. Though .349 is lower than innovativeness (.715), students risk taking is important factor with significant influence on students’ orientation towards entrepreneurship. According to Manimala and Thomas (2017), risk taking entails taking bold actions like committing a large portion of resources to investments with an uncertain outcome, taking bold actions, or venturing into a new market, which are the features of entrepreneurship. The findings of this study are in line with Anastasia (2015) who observed that entrepreneurship is built on the courage and capacity of one to take new risks. Similarly, Caliendo et al. (2010) study found out a positive correlation between risk taking behaviour and business creation which is an aspect of entrepreneurship. They noted that risk taking behaviour is a defining characteristic of entrepreneurship.

The results showed that students are always willing to embrace change positively, this is in line with Huber, Sloof and Van Praag (2014) who opined that the education concept adopted should taught based on the world of tomorrow to enable learners to be willing to embrace change positively. According to Bell (2015), entrepreneurs do not try to maintain status quo or get along with others instead, they tackle issues head-on and work for constructive changes. Results again showed that entrepreneurship education motivated students to take risks and start their own businesses. This corresponds to Ortiz-Walters (2011) who noted that as a result of the acquired practical skills, communication skills, critical thinking, and problem-solving though entrepreneurship education students are able to take risks and start their businesses. Kaijage, Wheeler and Newbery (2013) also stated that entrepreneurship education offers learning of skills that empower students to strategize, start and manage their own enterprise in either formal or informal sector.

Findings also revealed that students are less hesitant when needed to produce new ideas, take risks or behave in their self. These findings agreed with Daoud (2015) who noted that
entrepreneurship education helps learners to be less hesitant when needed to produce new ideas take a risk or believe in themselves. Findings also demonstrated that students carefully analyzed risks to determine if they are worth taking. This findings support the argument of Macko and Tyszka (2009) who held that entrepreneurs need to carefully analyze the risks associated with certain businesses proposals to determine if it is worth pursuing them or not.

It was also found out that students had different perception of risk that made them take more risks. Jensen (2014) also hold similar thought, he stated that entrepreneurship education helps to nurture personal characteristics and traits such as creativity, imagination, and long-term vision, enabling students to perceive risks differently as compared to others, thus allowing them to take higher degrees of risks. According to Mondal and Jimenez (2015), an entrepreneur must take the risk to establish a business venture and in the process face various risks such as management, personal and financial risk.

It was also observed that students are easy at taking chances and exposing themselves to situations or activities with uncertain outcome. These results agree with Saral (2017) who observed that entrepreneurship education pushes people to enjoy taking chances and be open to exposing themselves to situations or activities with uncertain outcomes. Entrepreneurship education had also ensured that students are able to identify potential risk situation early enough and mitigate on them. According to Macko and Tyszka (2009), potential risks that are likely to affect the business in the future must be identified and measures put in place to eliminate them. This findings also correlates with Robinson and Stubberud (2014) who noted that entrepreneurs can engross themselves in the issue of concern to spot the potential challenges that exist in the environment and fix them even before a problem arises (Robinson & Stubberud, 2014). Lastly findings showed that students are more conscious and stable in the risks they take, this is in agreement with Boutillier and Uzunidis (2014) who noted that people with experience and knowledge concerning entrepreneurship exhibit more conscious and stable risk were taking.

5.3.3. Effect of Pro-activeness on Students’ Orientation towards Entrepreneurship

On the inferential, the coefficient for the relationship between pro-activeness (PAA) of students and students orientation towards entrepreneurship was positive and significant at .05 level ($\beta = .607, t = 5.818, p<.05$). This indicates one unit increase in student pro-
activeness increases students’ orientation towards entrepreneurship by .607. The study concludes student pro-activeness is an important factor with significant influence on students’ orientation towards entrepreneurship. These findings are in agreement with Mondal and Jimenez (2015) who noted that nurturing an individual behaviour through entrepreneurship education can help them to become proactive in the long run and develop other useful entrepreneurial skills. According to Rauch (2009), proactive behaviour is inclined to mobilizing resources and gaining commitment for value creation.

Findings revealed that students are always scanning for opportunities of change in their environment. This was also observed by Parker and Collins (2010) who noted that proactive individuals engage in scanning for opportunities of change in their environment. These findings correspond to Ezeani and Ugwu (2013) who argued that entrepreneurship education offers students with skills and attitudes that motivate them to explore their immediate environment for prospective initiatives. According to Zhang, Duysters and Cloodt (2013), an entrepreneur is expected to have certain alertness and be looking forward to discovering future business opportunities successfully.

The results also showed that student identify opportunities and act on them for meaningful change. According to Parker and Collins (2010), proactive individuals engage in scanning for opportunities of change. This corresponded to the observation of Presbitero (2015) who argued that proactive individuals identify opportunities and act on them, take action, show initiative and perseverance until a meaningful change occurs. It was also shown that students believed that they are in control of their situation and responsible for their success. This corresponds with Robinson and Stubberud (2014) who said that proactive individuals believe that they control the fate of their business and they are responsible for its success.

Students also considered themselves action and result oriented. This was similarly observed by Strauss, Griffin and Rafferty, (2009) they noted that EE transforms an individual to become action and result oriented as they aim to identify and exploit opportunities. According to Presbitero (2015), proactive individuals identify opportunities and act on them, take action, show initiative and perseverance until a meaningful change occurs.

Additionally students were observed to be very alert and always looking forward to discovering future opportunities successfully. These results correspond with Zhang, Duysters and Cloodt (2013) argument, which reasoned that an entrepreneur is expected to
have certain alertness and be looking forward to discovering future business opportunities successfully. Having the right entrepreneurial characteristics is a process that can be achieved by producing probable solutions, identifying the best solutions, and discovering the problems and necessities.

Lastly, findings showed that students developed transversal skills such as the ability to think critically, solve problems, take the initiative and work collaboratively with others. This was the case that was also observed by Huber, Sloof and Van Praag (2014) they noted that individuals can learn and develop transversal skills such as the ability to think critically, solve problems, take the initiative and to be proactive through entrepreneurship education. Similarly, Ortiz-Walters (2011) observed that individuals can learn and develop transversal skills such as the ability to think critically, solve problems, take the initiative and work collaboratively with others. The skills acquired are crucial in the identification of gaps in the market that should be filled by new and innovative inventions to fulfil needs.

5.4. Conclusions

5.4.1. Effect of Innovativeness on Students’ Orientation towards Entrepreneurship

Based on the inferential analysis, the relationship between innovativeness (INN) of students and students’ orientation towards entrepreneurship was positive and significant. This indicates an increase in students innovativeness increases students orientation towards entrepreneurship. Hence innovativeness is an important factor with significant influence on students’ orientation towards entrepreneurship.

5.4.2. Effect of Risk taking on Students’ Orientation towards Entrepreneurship

Based on the inferential statistics, the coefficient for the relationship between risk taking (RTT) of students and students’ orientation towards entrepreneurship was positive and significant. This indicates an increase in student risk taking ability increases students’ orientation towards entrepreneurship. Though statistics indicate it to be lower than innovativeness, students risk taking is important factor with significant influence on students’ orientation towards entrepreneurship.
5.4.3. Effect of Pro-activeness on Students’ Orientation towards Entrepreneurship

Based on the inferential statistics, the coefficient for the relationship between pro-activeness (PAA) of students and students’ orientation towards entrepreneurship was positive and significant. This indicates an increase in student pro-activeness increases students’ orientation towards entrepreneurship. The study concludes student pro-activeness is an important factor with significant influence on students’ orientation towards entrepreneurship.

5.5 Recommendations

5.5.1. Recommendations for Improvement

5.5.1.1 Effect of Innovativeness on Students’ Orientation towards Entrepreneurship

In line with the findings this study recommends that students should be taught on how to be innovative in their career life. This would enable them to be well oriented towards entrepreneurship in their life. The entrepreneurship curriculum developed for students in university should taught student how of create value in the society, look for ways of doing things and drive students will power for value creation.

5.5.1.2 Effect of Risk taking on Students’ Orientation towards Entrepreneurship

This study recommends for entrepreneurship education to greatly focus on enhancing students risk taking behaviour so as to orient them to entrepreneurship. In imparting risk taking behaviour into students, entrepreneurship education will enable them become more oriented to entrepreneurship. Entrepreneurship education should encourage students to take more risk and venture out into creating value for their life.

5.5.1.3 Effect of Pro-activeness on Students’ Orientation towards Entrepreneurship

This study further recommends for EE to impart pro-activeness behaviour that would orient students to entrepreneurship. The students should be taught on how to scan for opportunities in their immediate environment. Students should be taught on transversal skills such as the ability to think critically, solve problems, take the initiative and work collaboratively with others.
5.5.2. Recommendations for Further Research

This study was conducted among entrepreneurship students who study entrepreneurship as their major. This study recommends for further research among students who have not major in entrepreneurship but have been taught entrepreneurship as a complementary subject. Based on the result: study covered INN, PAA, and RTT. Other research should expound on each of the following in details based on the specific area of entrepreneurship.
REFERENCES


Dear Respondent,

RE: **Request for Your Response in My Study**

My name is Ruth Njau a Master of Business Administration (MBA) student at United States University (USIU), Nairobi, Kenya. I am carrying out a research on “The effects of entrepreneurship education on university students’ orientation towards entrepreneurship.” which is a requirement for my Master’s Degree in Business Administration. I would like your assistance in responding to this questionnaire.

Your response will remain anonymous and the information given will be taken with confidentiality.

Thank you in advance for your valued support.

Ruth Njau
Appendix II: Questionnaire

Dear Respondent,

This questionnaire seeks to collect information on Effects of Entrepreneurship Education on Universities Students’ Orientation towards Entrepreneurship. You have been selected objectively to participate in this study, and you are kindly requested to respond to questions on this questionnaire.

The data collected would be exclusively used for academic purposes and analyzed on aggregate basis and the information subsequently treated with confidentiality and no individual names are required.

Thank you in advance.

Yours faithfully,

SECTION A: BACKGROUND INFORMATION

1. Please indicate your gender: i. Male [ ] ii. Female [ ]

2. Please indicate your age by ticking appropriately:
   i. 18 – 25 [ ]
   ii. 26 – 35 [ ]
   iii. 36 – 45 [ ]
   iv. 41 – 45 [ ]
   v. 46 – 55 [ ]
   vi. Over 55 [ ]

3. Kindly, provide your academic qualification by ticking appropriately:
   i. Undergraduate Degree { } ii. Graduate Degree { }

4. Kindly, indicate your current occupation by ticking appropriately:
   i. Employment { } ii. Business { }
   ii. Student { }

5. County of Residence
SECTION B: THE EFFECT OF INNOVATIVENESS ON STUDENTS’ ORIENTATION TOWARDS ENTREPRENEURSHIP

Indicate your responses to the following statements regarding the effect of entrepreneurship education (EE) on your innovativeness. Mark your choice in the appropriate answer box. Where: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree.

**Operations management**

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<tr>
<td>i.</td>
<td>EE has instilled in me the ability to create value in the society</td>
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<td>ii.</td>
<td>I look for new and better ways of doing things as compared to sticking to the traditional ways</td>
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<td>iii.</td>
<td>The EE I have received has driven in me more will power for value creation</td>
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<td>iv.</td>
<td>I am more motivated and want to be engaged the knowledge that I acquire.</td>
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<td>v.</td>
<td>EE has equipped me with the right skills that has enhanced my innovativeness</td>
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<td>vi.</td>
<td>EE has helped me develop ideas that are less dependent on the current patterns and models</td>
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<td>vii.</td>
<td>I have more than often disregard the norms in solving problems</td>
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<td>viii.</td>
<td>I normally act on my original thoughts to come up with new solutions to existing problems.</td>
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<td>ix.</td>
<td>I have developed analogical ability and divergent thinking which have oriented me towards entrepreneurship</td>
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SECTION C: THE EFFECT OF RISK TAKING ON STUDENTS’ ORIENTATION TOWARDS ENTREPRENEURSHIP

Indicate your responses to the following statements regarding the effect of entrepreneurship education (EE) on your risk taking behaviour. Mark your choice in the appropriate answer box. Where: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree.

It is such behaviours that push a person to enjoy taking chances and to willingly expose themselves to situations or activities with uncertain outcomes (Saral, 2017).

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<tr>
<td>i.</td>
<td>I am easy at taking chances and exposing myself to situations or activities with uncertain outcomes</td>
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<td>ii.</td>
<td>I am always willing to embrace change positively</td>
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<td>iii.</td>
<td>EE has motivated me to take risks and start my own businesses</td>
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<td>iv.</td>
<td>I am able to identify potential risk situations early enough and mitigate on them</td>
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<td>v.</td>
<td>I am more conscious and stable in the risks I take</td>
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<td>vi.</td>
<td>I am less hesitant when needed to produce new ideas take a risk or believe in myself</td>
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<td>vii.</td>
<td>I carefully analyze risks to determine if they are worth taking.</td>
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<td>viii.</td>
<td>I have a different perception of risk that has made me take more risks</td>
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SECTION D: THE EFFECT OF PROACTIVE-NESS ON STUDENTS’ ORIENTATION TOWARDS ENTREPRENEURSHIP

Indicate your responses to the following statements regarding the effect of entrepreneurship education (EE) on your proactiveness behaviour. Mark your choice in the appropriate answer box. Where: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree.

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<tr>
<td>i.</td>
<td>I am always scanning for opportunities of change in my environment</td>
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<td>ii.</td>
<td>I identify opportunities and act on them for meaningful change</td>
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<td>iii.</td>
<td>I believe that am in control of my situations and responsible for my success</td>
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<td>iv.</td>
<td>I consider myself action and result oriented</td>
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<td>v.</td>
<td>I always try to identify potential challenges that exist in my environment and fix them even before a problem arises</td>
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<td>vi.</td>
<td>I am very alert and always look forward discovering future opportunities successfully</td>
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<td>vii.</td>
<td>I have developed transversal skills such as the ability to think critically, solve problems, take the initiative and work collaboratively with others</td>
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**SECTION E: STUDENTS’ ORIENTATION TOWARDS ENTREPRENEURSHIP**

Indicate your responses to the following statements regarding your inclination towards entrepreneurship. Mark your choice in the appropriate answer box. Where: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree.

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<tr>
<td>i.</td>
<td>I own/plan to own a business venture.</td>
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<td>ii.</td>
<td>I have made some great personal achievements</td>
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<td>iii.</td>
<td>I am adaptable to change and can rely on myself</td>
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<td>iv.</td>
<td>I prefer self-employment to corporate employment</td>
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<td>v.</td>
<td>I would prefer to carry out things independently</td>
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<td>vi.</td>
<td>I am willing to commit substantial resources to opportunities that are deliberated to thrive</td>
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<td>vii.</td>
<td>I trust myself to undertake a successful business</td>
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