# EFFECT OF ENTREPRENEURSHIP EDUCATION ON STUDENTS' SELF-EMPLOYMENT, JOB CREATION AND JOB SEEKING INTENTIONS IN NATIONAL POLYTECHNICS IN WESTERN KENYA

BY

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# THESIS SUBMITTED TO THE SCHOOL OF EDUCATION IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF EDUCATION (M.ED) IN EDUCATIONAL COMMUNICATION AND TECHNOLOGY

MOI UNIVERSITY

2022

## DECLARATION

## **Declaration by Candidate**

I declare that this thesis is my original work and has not been submitted and approved for the award of a degree in this or any other university. No part of this thesis may be reproduced without the prior written permission of the author or Moi University.

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## **DEDICATION**

I dedicate this work to my lovely wife Mildred, my daughters Nekesa and Namisi, my son Joe Biden, my mother Dinah, my father Patrick, and my siblings

#### ACKNOWLEDGEMENT

I would like to express my appreciation to the Almighty God for his protection, wisdom and strength even at the most difficult times of my study.

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#### ABSTRACT

In Kenya youth entrepreneurship education was and is being emphasized as the best way of empowering youth with entrepreneurship skills for self-employment and job creation. Despite these emphases, many youths leaving higher learning institutions in Kenya have no stable source of earning a living and unemployment among them is the song of the day. This study hence sought to investigate the effect of entrepreneurship education on self-employment, job creation and job seeking intentions of entrepreneurship education students in their final year of study in National Polytechnics in western Kenya. Objectives of the study included: To establish the relationship between students' characteristics ( age and gender) and self-employment, job creation and job seeking intentions; to determine the influence teaching of methods have on selfemployment, job creation and job seeking intentions; to establish perception of students towards entrepreneurship education for self-employment, job creation and job seeking intentions and to find out the influence of students' family entrepreneurial background on their self-employment, job creation and job seeking intentions. The study was guided by the Theory of Planned Behavior by Ajzen (1991). All the 5 National Polytechnics in Western Kenya were targeted, with only 2 being selected using simple random sampling technique. The study targeted 273 students from the selected polytechnics all being purposively selected. The research adopted descriptive survey research design. Data was collected using questionnaires. The data collected were analyzed using descriptive statistics of (percentages and frequencies) and inferential statistics (Chi-square and Freeman Halton Tests [FH] to test the relationships between independent and dependent variables. The findings revealed that age influenced job seeking intentions (FH, p < .001) but did not influence students' self-employment (FH, p = .32) and job creation (FH, p = .79) intentions; gender influenced job seeking intentions X<sup>2</sup>(2)=12.219,p=.002) but did not influence students' self-employment (FH, p = .269) and job creation intention ( $\chi^2(2) = 5.409$ , p = .067); Passive methods of learning like lecture were frequently used and they did not influence job creation intention of students (FH, p = .6097) but influenced self-employment (FH, p = .0137) and job seeking (FH, p = .002); whereas, active methods like field trip were less used making students not being ready for self-employment (FH, p = .2998) and job creation (FH, p = .048) leaving a significant majority of them preparing to seek employment (  $\chi^2(2) = 15.922, p = .003$ ) after study. Students had positive perception towards entrepreneurship education and they agreed that it influenced their self-employment and job creation intentions and family entrepreneurial background of students influenced their job creation intentions (FH, p = .0002). This study concluded that students were not well prepared to be self-employed and create jobs upon graduation since passive teaching methods were frequently used as opposed to active teaching methods that could trigger students towards self-employment and job creation hence majority of the students being left for job seeking intentions. The study recommends that entrepreneurship education tutors should use active methods that foster entrepreneurial culture among students. Kenya institute of curriculum development should work closely with curriculum implementers to review entrepreneurship education curriculum to make it more practical oriented.

## TABLE OF CONTENTS

DECLARATION	ii
DEDICATION	. iii
ACKNOWLEDGEMENT	iv
ABSTRACT	v
TABLE OF CONTENTS	vi
LIST OF TABLES	xi
LIST OF FIGURES	xiii
ABBREVIATIONS AND ACRONYMS	xiv
CHAPTER ONE	1
INTRODUCTION TO THE STUDY	1
1.1 Introduction	1
1.2 Background of the Study	1
1.3 Statement of the Problem	5
1.4 Purpose of the Study	7
1.5 Objectives of the Study	7
1.6 Research hypotheses	8
1.7 Justification of the Study	8
1.8 Significance of the Study	9
1.9 Scope of the Study	9
1.10 Limitations of the Study	.10
1.11 Assumptions of the Study	.10
1.12 Theoretical Framework	.11
1.13 Conceptual Framework	.12
1.14 Definition of Operational Terms	.12
1.15 Summary of Chapter One	.15
CHAPTER TWO	.16
LITERATURE REVIEW	.16
2.1 Introduction	.16
2.2 Students Characteristics (Age and Gender)	.16
2.3 Teaching Methods in Entrepreneurship Education	.20
2.4 Students Perceptions (Attitude) Towards Entrepreneurship Education for Self-	
Employment, Job Creation and Job Seeking Intentions	.27

2.5 Influence of Students' Family Entrepreneurial Background on their Self-
Employment, Job Creation and Job Seeking Intentions
2.6 Summary of Chapter Two35
CHAPTER THREE
RESEARCH DESIGN AND METHODOLOGY
3.1 Introduction
3.2 Research Design
3.3 Research Area
3.4 Target Population
3.5 The Sample and Sampling Procedure
3.6 Instruments of Data Collection
3.7 Pilot Study
3.8 Validity and Reliability of Research Instruments40
3.8.1 Validity of instruments40
3.8.2 Reliability41
3.9 Data Collection Procedures41
3.10 Data Analysis
3.11 Data presentation
3.12 Ethical and Legal Considerations
3.13 Summary of Chapter Three
CHAPTER FOUR
DATA ANALYSIS, PRESENTATION, INTERPRETATION AND
DISCUSSION
4.1 Introduction
4.2 Return Rate
4.3 Demographic Data
4.3.1 Distribution of students by gender45
4.3.2 Distribution of students by age45
4.4 Students' Characteristics
4.4.1 Research objective one: To establish the relationship between students'
characteristics (age and gender) and self-employment, job creation and job
seeking intentions46
4.4.1.1 Hypothesis H0 <sub>1.1</sub> : There is no significant relationship between age of the
students and self-employment, job creation and job seeking intentions46

4.4.1.2: Hypothesis $HO_{1.2}$ . There is no significant relationship between gender of
the students and self-employment, job creation and job seeking intentions.
4.5 Discussion of findings of research objective one: To establish the relationship
between students' characteristics (age and gender) and self-employment, job
creation and job seeking intentions
4.6 Teaching Methods in Entrepreneurship Education
4.6.1 Hypothesis H0 <sub>2.1</sub> : There is no statistically significant difference in self-
employment, job creation and job seeking intentions based on the frequency
of use of lecture method. Self-employment and Lecture Method58
4.6.2 Hypothesis HO <sub>2.2</sub> : There is no statistically significant difference between
demonstration and modeling and self-employment, job creation and job
seeking intentions of students
4.6.3 Hypothesis H0 <sub>2.3</sub> : There is no statistically significant difference between
problem-based learning method and self-employment, job creation and job
seeking intentions of students
4.6.4 Hypothesis HO <sub>2.4</sub> : There is no statistically significant difference between ICT
method and self-employment, job creation and job seeking intentions of
students69
4.6.5 Hypothesis HO <sub>2.5</sub> .: There is no statistically significant difference between field
trip method and self-employment, job creation and job seeking intentions of
students73
4.6.6 Hypothesis H02.6: There is no statistically significant difference between
group discussion method and self-employment, job creation and job seeking
intentions of students76
4.6.7 Hypothesis H0 <sub>2.7</sub> : There is no statistically significant difference between
brainstorming method and self-employment, job creation and job seeking
intentions of students
4.6.8 Hypothesis HO <sub>2.8</sub> : There is no statistically significant difference between use
of resource person method and self-employment, job creation and job seeking
intentions of students
4.6.9 Hypothesis HO <sub>2.9</sub> : There is no statistically significant difference between
question-and-answer method and self-employment, job creation and job
seeking intentions of students

4.7 Discussion of objective two: To establish the influence selected teaching methods
have on self-employment, job creation and job seeking intentions of students93
4.8 Perception of students towards Entrepreneurship education for self-employment,
job creation and job seeking intentions108
4.8.1 Hypothesis HO <sub>3.1</sub> : There is no statistically significant difference between
choice to study entrepreneurship education and self-employment intentions of
students
4.8.2 Hypothesis HO <sub>3.2</sub> : There is no statistically significant difference between
choice to study entrepreneurship education and job creation intentions of
students110
4.8.3 Hypothesis HO <sub>3.3</sub> : There is no statistically significant difference between
choice to study entrepreneurship education and job seeking intentions of
students111
4.9 Discussion of objective three: To establish perception of students towards
entrepreneurship education for self-employment, job creation and job seeking
intentions115
4.9.1 Hypothesis H <sub>03</sub> : There is no significant relationship between student's
perception towards entrepreneurship education and self-employment, job
creation and job seeking intentions116
4.10 Influence of students' family entrepreneurial background on self-employment,
job creation and job seeking intentions122
4.10.1 To establish the influence of family entrepreneurial background of students
on self-employment intentions122
4.10.1.1 Hypothesis H0 <sub>4.1</sub> : There is no statistically significant difference between
students 'family entrepreneurial background and self-employment
intentions123
4.10.1.2 To establish the influence of family entrepreneurial background of
students on job creation intentions124
4.10.1.3 Hypothesis H0 <sub>4.2</sub> : There is no statistically significant difference between
students 'family entrepreneurial background and job creation intentions.
4.10.1.4 To establish the influence of family entrepreneurial background of
students on job seeking intentions125

4.10.1.4 Hypothesis H0 <sub>4.3</sub> : There is no statistically significant difference between					
students 'family entrepreneurial background and job seeking intentions.					
	5				
4.11 Discussion of objective four: To establish the influence of students' family					
entrepreneurial background on their self-employment, job creation and job					
seeking intentions128	3				
4.11.1 Hypothesis H 04: Students' family entrepreneurial background does not have					
significant influence on their self-employment, job creation and job seeking					
intentions128	3				
CHAPTER FIVE138	5				
SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS					
	\$				
5.1 Introduction138	;;				
5.2 Summary of Findings138	;;				
5.3 Conclusion	)				
5.4 Recommendations142	2				
5.5 Suggested Areas for Further Study144	ŀ				
REFERENCES145	5				
APPENDICES151	-				
Appendix 1: Research Questionnaire for students151	-				
Appendix 2: Research Authorization from County Commission Uasin Gishu155	,				
Appendix 3: Research authorization from Ministry of Education, Uasin Gishu					
County156	5				
Appendix 4: Research Letter from the University157	7				
Appendix 5: Research Authorization from NACOSTI158	;;				
Appendix 6: Research Certificate from NACOSTI	)				

## LIST OF TABLES

Table 1: Reliability Statistics   41
Table 2: Analysis of the relationship between age of the students and self-
employment, job creation and job seeking intentions
Table 3: Analysis of the relationship between gender of the students and self-
employment, job creation and job seeking intentions
Table 4: Analysis of the difference in self-employment, job creation and job seeking
intentions based on the frequency of use of lecture method61
Table 5: Analysis of the difference in self-employment, job creation and job seeking
intentions based on the frequency of use of Demonstration and Modeling
method65
Table 6: Analysis of the difference in self-employment, job creation and job seeking
intentions based on the frequency of use of Problem-Based Learning
method69
Table 7: Analysis of the difference in self-employment, job creation and job seeking
intentions based on the frequency of use of ICT method72
Table 8: Analysis of the difference in self-employment, job creation and job seeking
intentions based on the frequency of use of field trip method75
Table 9: Analysis of the difference in self-employment, job creation and job seeking
intentions based on the frequency of use of Group Discussion method78
Table 10: Analysis of the difference in self-employment, job creation and job seeking
intentions based on the frequency of use of Brainstorming method82
Table 11: Analysis of the difference in self-employment, job creation and job seeking
intentions based on the frequency of use of Resource Person method86
Table 12: Analysis of the difference in self-employment, job creation and job seeking
intentions based on the frequency of use of Question and Answer method 89
Table 13: Descriptive analysis for presence of business centers in the polytechnics.91
Table 14: Descriptive analysis showing interaction of students and successful
entrepreneurs
Table 15: Descriptive analysis for students' engagement in business activities while
schooling
Table 16: Analysis for students' choice to do entrepreneurship education and its
influence on self-employment intentions109

Table 17: Analysis for students' choice to do entrepreneurship education and its
influence on job creation intentions110
Table 18: Analysis for students' choice to do entrepreneurship education and its
influence on job seeking intentions111
Table 19: Descriptive statistics showing whether students gave EE the first priority or
not112
Table 20: Descriptive statistics showing how students felt after being admitted to
study EE113
Table 21: Descriptive statistics showing the necessity of studying EE
Table 22: Descriptive statistics showing choice of EE based on its availability114
Table 23: Descriptive statistics showing students' choice of EE and peer pressure .115
Table 24: Descriptive statistics on students' choice to do EE because it was easy115
Table 25: Analysis for influence of family entrepreneurial background of students on
self-employment intentions
Table 26: Analysis for influence of family entrepreneurial background of students on
job creation intentions124
Table 27: Analysis for influence of family entrepreneurial background of students on
job seeking intentions125

## LIST OF FIGURES

Figure 1. Relationship between independent and dependent variables	Figure 1. Relationship	between inde	pendent and der	pendent variables	12
--	------------------------	--------------	-----------------	-------------------	----

## ABBREVIATIONS AND ACRONYMS

- **D/M** : Demonstration/Modeling
- **EE** : Entrepreneurship Education
- FEB : Family Entrepreneurial Background
- **ICT** : Information communication and technology
- KCSE : Kenya Certificate of Secondary Education
- **KICD** : Kenya Institute of Curriculum Development
- **KIE** : Kenya Institute of Education
- **KLB** : Kenya Literature Bureau
- **KNBS :** Kenya National Bureau of Statistics
- KNEC: Kenya National Examination Council
- NACOSTI: National Commission for Science, Technology and Innovation
- NGO : Non-Governmental Organization
- Q/A : Question and Answer
- **TPB** : Theory of Planned Behavior
- **TVET :** Technical and Vocational Education and Training

#### **CHAPTER ONE**

#### **INTRODUCTION TO THE STUDY**

#### **1.1 Introduction**

This research study intended to find out the effect of entrepreneurship education on self-employment, job creation and job seeking intentions of polytechnic students in Kenya. This chapter comprised the following areas: The background of the study; statement of the problem; objectives of the study; research hypothesis; significance of the study; scope and limitations of the study; assumptions of the study; conceptual framework and theoretical framework; definitions of key terms and summary of the study.

#### **1.2 Background of the Study**

In Kenya youth entrepreneurship education was and is being emphasized since many youths leaving higher learning institutions in Kenya have no stable source of earning a living and unemployment among them is the song of the day. The 2019 Kenya National population census that is always conducted by Kenya National Bureau of Statistics after every 10 years was almost being disturbed by the youth who claimed to have education but jobless. In all functions in Kenya, the phrase 'unemployment among the youth' cannot be forgotten to be mentioned be it in church functions, institutions functions, state functions, on the streets and the list is endless.

Any time one switch on television stations and radio stations in Kenya, youth unemployment is always the main topic being discussed. This is being supported by Citizen Television Nipashe news of 7:00 pm on 28<sup>th</sup> September 2019 which highlighted that approximately one million two hundred thousand (1, 200,000) graduates are released yearly from universities, colleges and polytechnics with a mindset of looking

for jobs which are not available because of closure of some industries or companies led by high operation costs and corruption.

This is also being supported by (Kenya National Bureau of Statistics Economic Survey 2017, 2018 and 2019) which state that higher learning institutions in Kenya every year produces thousands of graduates on the job market despite weak economic growth leading to overwhelming unemployment rate among graduates. Kenya National Bureau of Statistics economic survey (2017, 2018 and 2019) further stated that as at academic year 2019/2020, the enrolment in the Kenyan universities was 509,493 and in Polytechnics and other Technical Colleges was 430,598. This population is too high compared to job opportunities available. The question is "where will this population be absorbed?" Given that majority of them are after seeking employment.

According to International Labour Organization (2017), the rate of Kenyan youth unemployment stands at 26.21% being too high compared to her neighbor countries like Tanzania standing at 24%, Ethiopia standing at 21.6% and Uganda at 18.1%. This is being led by millions of graduates being released from the higher learning institutions with a mindset of white color jobs instead of creating jobs.

To solve this menace of unemployment among school leavers, the government of Kenya through the Ministry of Education saw the need of introducing entrepreneurship education across all departments in post-secondary learning institutions. A study conducted in Kenya by Murithi (2013) disclosed that the government of Kenya through the Ministry of Education introduced entrepreneurship education in Kenyan higher learning institutions to enable learners to get entrepreneurial skills that will make them to be self-reliant, create jobs for others, become innovative, creative and industrious. According to me, this was one of the best ways of empowering the youth with entrepreneurial skills for job creation and self-employment. Njati (2015) citing MPET

1997-2010 revealed out some of the objectives of Technical and Vocational Education Training institutions in Kenya and among them is inculcating the vocational and entrepreneurial skills necessary for self-employment and job creation. It is being insisted that Entrepreneurship Education should be a key for self-employment and job creation among graduates and this may end up solving the unemployment problems we have currently in our country Kenya.

According to Chuma, Peal and Chizoba (2013) concluded that entrepreneurship education is very useful in increasing the innovativeness, creativity, boosting entrepreneurial spirit among learners, learners become industrious, self-reliant and a spirit of self-employment is built in them hence reducing unemployment among themselves. This was also supported by another study on Entrepreneurship Education in Kenya that was carried out by Lidovo (2016) who reported that Entrepreneurship Education is the main source of employment, economic growth, innovation, promoting productivity and service quality, competition and economic flexibility.

The relationship between entrepreneurship education and entrepreneurial intentions among students in higher learning institution has received a great deal of attention on the globe. Most of the studies on this topic insist that entrepreneurship education and entrepreneurial activities are positively related whereby, a student from an entrepreneurship class should be confident in venturing in entrepreneurship activities creating jobs for others and as well as being self-employed. A study carried out by Ondigi (2012) in Kenya on Entrepreneurship indicated that Entrepreneurship Education seeks to provide students with the knowledge, skills and motivation to encourage entrepreneurial success in a variety of settings. Entrepreneurship Education has a positive relationship with fresh graduates' business start-up intention. Also, entrepreneurship is well known for sustainable economic growth and development and source of job creation (Faloye & Olatunji, 2018). Moreover, a study carried out in Nigeria on entrepreneurship education by Oluseye, Adebayo, Olulamu, Adesola, and Omonike (2017) concluded that Entrepreneurship education is a pillar for self-employment initiatives among graduates in Nigeria and it is also a source of economic growth and development.

It is well seen from the above literature that entrepreneurship is a source of employment, it is also a pillar for economic growth and development, makes one to be self-reliant and sufficient in the provision of his or her daily needs, improve the living standards of people and makes them to be creative, innovative and risk takers. According to the American Entrepreneurship Education Association, the purpose of entrepreneurship Education is to develop four types of abilities in potential entrepreneurs, as listed below; opportunity recognition, creating new ideas and getting necessary resources to explore the opportunity, establishing and running new enterprises, thinking creatively and critically (Wang, Yaohuizhang, & Wen, 2018). In addition, Wang, Yaohuizhang, & Wen (2018) concluded that European Union believed that Entrepreneurship Education nurtures peoples' creative and innovative thinking and improves their ability of risk taking, which enables them to develop their ability of planning and program managing to achieve their objectives.

His Excellency the Deputy President of Kenya in his speech during Meru National Polytechnic graduation ceremony on 8<sup>th</sup> November 2019 emphasized the importance of entrepreneurship education. He said that entrepreneurship education is very useful to economic growth and development of a given Nation. That it instills entrepreneurial culture and behavior among students enabling them to be innovative, creative, risk takers, job creators instead of being job seekers by starting their own businesses after graduating and the government is committed in improving the standards of polytechnics status to enable them produce graduates who are ready to create jobs for others hence solving the current high rate of unemployment in the country.

Despite the importance of entrepreneurship education highlighted in the studies above and the billions of money being channeled by the Kenyan Government to polytechnic institutions in Kenya with an aim to improve their standards of teaching and learning with high hopes of graduates from such institutions to have entrepreneurial culture enabling them to be self-employed and create jobs for others, the problem of unemployment is still a big issue in the country. This leaves the researcher wanting to know why unemployment rate among graduates from polytechnics is high despite being in an entrepreneurship class.

This is a big concern for the researcher to find out the effect of entrepreneurship education on self-employment, job creation and job seeking intentions of polytechnic students in Kenya by investigating whether students characteristics ( age and gender) influence self-employment, job creation and job seeking intentions of students; how entrepreneurship education is being taught in Kenyan polytechnics and if this has influence on self-employment, job creation and self-employment intentions of students; to establish perception of students towards entrepreneurship education for selfemployment, job creation and job seeking and to find out the extent to which family entrepreneurial background of students influence their self-employment, job creation and job seeking intentions.

### **1.3 Statement of the Problem**

A study by Malongo and Iravo (2016) reported that the government of Kenya through the Ministry of Education realized the usefulness of entrepreneurship as a pillar of economic growth and development and recommended the teaching of entrepreneurship education in post- secondary institutions in Kenya since 1990 with an aim of making graduates from these institutions more competent and full of entrepreneurial minds. This would enable them become self-employed enabling them to create jobs for others.

Polytechnics in Kenya are under Technical and Vocational Education Training and according to Technical and Vocational Education Training Authority strategic plan (2018-2022), the impact of TVET in Kenya is to continuously improve on their systems which deliver graduates that create employment and entrepreneurship opportunities that contribute to sustainable economic, social and environmental development for Kenya within regional and global context. The strategic plan further states that TVET delivery systems are well placed to train the skilled and entrepreneurial workforce that Kenya needs to create wealth and attain vision 2030.

The irony is that graduates from these TVET Institutes are not ready to engage in entrepreneurial activities enabling them to be self-employed and creating jobs for others. This was supported by another study on entrepreneurship education in Kenya by Murithi (2013) who concluded that youth polytechnic graduates are still suffering unemployment and under-employment despite massive investment by the government. Further a new survey carried out by KNBS (2018) as Dominic reports in Standard media. Co.ke on 23<sup>rd</sup> March 2018 supported that youth unemployment is still high leading to young men and women being lured to drugs, prostitution and terrorism.

This created many questions to be answered as to why these students from entrepreneurship class in Kenyan polytechnics not venturing into entrepreneurship activities for self-employment and job creation. Is this because of students' characteristics (age and gender) being admitted to take this course? Is entrepreneurship teaching and learning processes in Kenyan polytechnics taking place as required? Does this to do with perception of students towards entrepreneurship education for selfemployment, job creation and job seeking intentions? Do students' family entrepreneurial backgrounds influence their self-employment, job creation and job seeking intentions? It is therefore based on this background that this study investigated the effect of entrepreneurship education on self-employment, job creation and job seeking intentions of final year entrepreneurship polytechnic students in Kenya especially in selected National polytechnics in western Kenya to find answers as to why majority of students from entrepreneurship class are not ready to venture into entrepreneurial activities to create jobs for others as well as being self-employed.

### 1.4 Purpose of the Study

The purpose of this study was to find out the effect of entrepreneurship education on self-employment, job creation and job seeking intentions of final year entrepreneurship students.

### 1.5 Objectives of the Study

The objectives of the study were as follows

- i. To establish the relationship between student's characteristics (age and gender) and self-employment, job creation and job seeking intentions
- **ii.** To establish the influence teaching methods, have on self-employment, job creation and job seeking intentions
- iii. To establish perception of students towards entrepreneurship education for selfemployment, job creation and job seeking intentions
- **iv.** To establish influence of students' family entrepreneurial background on selfemployment, job creation and job seeking intentions.

#### **1.6 Research hypotheses**

The study was guided by the following null hypotheses

- i. Hypothesis H<sub>01</sub>: There is no significant relationship between student's characteristics (age and gender) and self-employment, job creation and job seeking intentions
- ii. Hypothesis H<sub>02</sub>: Selected teaching methods do not have significant influence on self-employment, job creation and job seeking intentions of students
- iii. Hypothesis H<sub>03</sub>: There is no significant relationship between student's perception towards entrepreneurship education and self-employment, job creation and job seeking intentions
- iv. Hypothesis H<sub>04</sub>: Students' family entrepreneurial background does not have significant influence on their self-employment, job creation and job seeking intentions

## **1.7 Justification of the Study**

Despite the efforts being put in place by the government insisting on entrepreneurship education for job creation, polytechnic graduates who are categorized as youth, are still suffering unemployment. it was important for the researcher to find answers as to why unemployment rate is high among graduates from these polytechnics. Also, not much research has been done on the effect of entrepreneurship education on self-employment, job creation and job seeking intentions of polytechnic students in Kenya. This warranted the researcher to find out the effect of entrepreneurship education on selfemployment, job creation and job seeking intentions of Kenyan polytechnics students.

#### **1.8 Significance of the Study**

The study will provide useful information to:

The Kenyan government both National and County governments to have a better understanding of how entrepreneurship is impacting on self-employment, job creation and job seeking intentions of polytechnic students in Kenya and to be in a better position to come up with more supportive policies towards promoting entrepreneurial culture in Kenyan polytechnics with an aim of reducing unemployment rate among the youths.

Non-Governmental Organizations (NGOs) through Ministry of Education will also be in a better position to understand the effects of entrepreneurship education on selfemployment, job creation and job seeking intentions of Kenyan polytechnic students. The findings will assist them to come up with ways of assisting Kenyan polytechnics to boost entrepreneurial culture of their students. Also, Kenya Institute of Curriculum Development (KICD) will use the recommendations of this research to discover whether they are singing the same song with curriculum implementers at polytechnic level in Kenya.

In addition, tutors of polytechnics in Kenya will use the findings of this study to improve the way they deliver entrepreneurship content to polytechnic students boosting their intention of being entrepreneurs after graduation. This research work will act as a source of literature to be reviewed by others in their studies. The study will contribute to scholarship as it will advance the work of other researchers in this field and make recommendations on areas that other researchers can focus on.

#### **1.9 Scope of the Study**

This study was restricted to selected two National polytechnics in Western Kenya. National polytechnics were preferred because they admit students from all over the country and this was to enable National generalization of the findings of this study. Only final year students taking entrepreneurship studies were involved. Final year students were preferred because they have been in school for fairly long time and have been sufficiently exposed to entrepreneurship education and since they were on the exit, they must have made up their mind on what to involve in after graduating. The study was restricted to finding the relationship between entrepreneurship education and selfemployment, job creation and job seeking intentions of polytechnic students.

The study was restricted to self-employment, job creation and job seeking intentions of final year entrepreneurship students as dependent variables while students' characteristics (gender, age), teaching methods, perception of students towards entrepreneurship education, and students' family entrepreneurial background formed independent variables.

#### 1.10 Limitations of the Study

Data was collected when the institutions were preparing their students for Kenya National Examination Council (KNEC) final exam. Both students and tutors were so busy and held up in the preparations. The researcher had to practice patience. Some of the questionnaires were hurriedly filled. Some of the respondents did not give accurate information. The researcher assured the respondents that the information they gave would be handled confidentially.

#### 1.11 Assumptions of the Study

The country was to be economically stable and peaceful to allow time frame for data collection to be as stipulated. Tutors always make their students aware of the expected entrepreneurship goals and objectives. The study assumed that respondents interviewed were to be cooperative. Another assumption was that the respondents were to answer

accurately and were to have adequate information on the subject of entrepreneurship education and lastly the researcher was to be granted permission from relevant officers any time he sought one.

#### **1.12 Theoretical Framework**

A study by Mugenda and Mugenda (1999) defined a theory as a set of concepts or constructs and interrelations that are assumed to exist among those concepts and it provides the basis for establishing the hypotheses to be tested in a theory. This section defines how independent and dependent variables relate. As stated above, the dependent variables for this study were self-employment, job creation and job seeking intentions among polytechnic students in Kenya and independent variables were: Students' characteristics (gender and age), teaching methods, and perception of students towards entrepreneurship education and family entrepreneurial background of students.

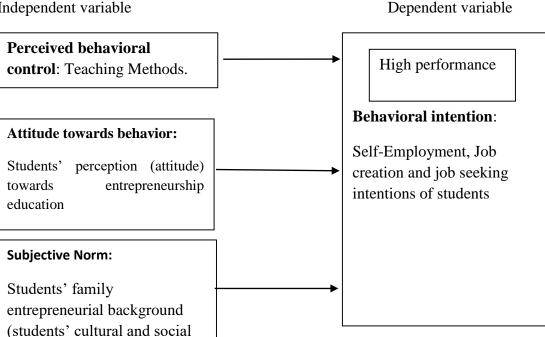
The study employed the Theory of Planned Behavior by Icek (1991). This theory links one's belief and behavior. The theory also predicts an individual's intention to engage in a behavior at a specific time and place. The theory further states that the stronger the intention to engage in a behavior, the more likely should its performance. Any planned behavior is best predicted by observing intentions towards that behavior. Intentions predict behavior, while in turn certain specific attitudes predict intentions (Vaziri, Hosseini, & Jafari, 2014). Individual behavior is driven by behavior intentions, where behavior intentions are a function of three determinants: an individual's attitude towards behavior, subjective norms and perceived behavioral control (Icek, 1991).

According to Ajzen (1991) attitude is defined as the degree to which a person has positive or negative feelings of the behavior of interest. Subjective norm is also defined as the belief about whether significant others think one will perform the behavior. Subjective norm relates to a person's perception of the social environment surrounding the behavior on the other hand perceived behavioral control refers to individual's perception of the extent to which performance of the behavior is easy or difficult.

Basing on the argument above, this theory was suitable to guide this study because as proposed in the title, entrepreneurship education was the independent variable which when taught as per the curriculum planners' guidelines was expected to impact on students' intention of becoming self-employed, creating jobs for others or seeking employment. This was further conceptualized in the conceptual framework as shown.

### **1.13 Conceptual Framework**

Independent variable



## Figure 1. Relationship between independent and dependent variables.

Source: Author (Maliro John)

## **1.14 Definition of Operational Terms**

Entrepreneur: Is a person who identifies business opportunities and gets the necessary resources in order to start and run a business. He or she has business ideas, owns a business, takes all business risks, has creativity skills or contributes ideas towards making a given business better.

**Job creation intention-** is a plan by an individual to create jobs for others. In this study those students with businesses and already have one or two workers will be said to have job creation intention.

**Job seeking intention-** is a plan by an individual to look for employment in various institutions across the globe. In this study, those students who are not ready to be self-employed and create jobs for others will be taken as having job seeking intention.

Students' characteristics. In this study, students' characteristics will mean age and gender of the students

**Entrepreneurship:** Is a process of identifying business opportunities and gathering the necessary resources to start and run a business. Students under this study should be in position to identify business opportunities within or outside the school while on or after school.

**Entrepreneurship Education:** In this study it will mean education that seeks to provide students with the knowledge, skills and motivation to encourage entrepreneurial success in a society for self-employment and job creation. Students in this study to be said to have entrepreneurship education, he or she should be able to identify business opportunities and exploit them using resources at their disposal.

**Entrepreneurial intentions**: This term in this study will mean a course of action or a plan to engage in business activities or any business activity to generate income. In this study, students already involving in any business activity to generate income will be

having entrepreneurial intentions. It will also be taken to mean intentions of creating jobs for others and being self-employed.

**Subjective norms**: The term in this study will mean the belief about whether significant others think one will perform a given behavior. What the surrounding society belief about someone performing a given behavior.

**Perceived behavioral control**: In this study it will refers to the individual's perception of the extent to which performance of the behavior is easy or difficult.

**Self-employment intention-** is a plan by an individual to be self-employed. In this study, if students or majority of them will be operating businesses or an enterprise or having entrepreneurial ideas at hand, then these students will be preparing to be self-employed.

**Perception**- In this study it will mean a negative or positive thought, belief or opinion towards entrepreneurship education for self-employment, job creation and job seeking intentions held by students and based on appearance.

An entrepreneur can also be defined as anyone who spots an opportunity and decides to pursue it regardless of the resources currently at their disposal. Students under this study should be owning or operating an enterprise or having business

**Entrepreneurial background-** In this study means an individual family entrepreneurial history or involvement, entrepreneurial role models, relatives, friends, government policies, capital and the entrepreneurship environment surrounding an individual in general. If majority of students are originating from families where parents, siblings or relatives' own businesses, then such a student is from well-established entrepreneurial background idea(s) to run after completing their studies.

#### 1.15 Summary of Chapter One

In this chapter the background of the study, statement of the problem, objectives of the study, research hypotheses, significance of the study, scope and limitations, assumptions, theoretical and conceptual framework and definition of operational terms were presented.

Under the Background of the study involved the genesis of the study where entrepreneurship education was seen as the main pillar for economic growth and development in many countries since students gain skills on how to become an entrepreneur hence becoming self-employed as they create jobs for others.

While the statement of the problem showed the problem under investigation where by the researcher so a need of investigating why there is still high rate of students graduating from entrepreneurship class having job seeking minds and yet they have entrepreneurial skills to able them own businesses making them to be self-employed hence creating jobs for others.

Four objectives, four research hypotheses, two limitations and five assumptions were given to guide the study and a list of parties to benefit from the findings listed.

The research was done in Uasin Gishu and Trans Nzoia counties involving final year entrepreneurship education students. The research was done within the framework of Theory of planned behavior. The independent and dependent variables were identified and their relationship shown in a diagram.

The next chapter focuses on literature review.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### **2.1 Introduction**

Literature review is a careful and systematic identification and analysis of documents containing information related to the research problem being investigated. It involves reading materials of what other researchers did in the area or topic under study. The researcher reviewed scholarly work on entrepreneurship education and its effects on self-employment, job creation and job seeking intentions of students both in tertiary institutions and universities. The review was classified in terms of regions and these were: international, regional and local literature review. The literature review was guided by the following study areas.

Students' characteristics (age and gender) towards entrepreneurship education for selfemployment, job creation and job seeking intentions, teaching methods of entrepreneurship education that properly instill entrepreneurial skills to learners for self-employment, job creation and job seeking intentions. Also, the researcher studied perception of learners towards entrepreneurship education for self-employment, job creation and job seeking intentions. Lastly, family entrepreneurial background and their influence on self-employment, job creation and job seeking intentions were looked at.

### 2.2 Students Characteristics (Age and Gender)

Students have various characteristics but gender and age were studied to establish their relationship with entrepreneurial activities (job creation and self-employment) and job seeking intentions.

Many researchers defined gender as either being male or female and age as the total number of years from the time one was born up to the present time in terms of years. Some previous research confirms a contradicting relationship between students' characteristics (age and gender) and entrepreneurial activities. Some confirm that there is no significant relationship between students' characteristics (age and gender) and entrepreneurial intentions and others confirm that there exists a significant relationship although male gender dominate entrepreneurship careers than female gender. In terms of age, most of the previous studies confirm that age and entrepreneurship activities are not related.

For instance, Alexandros, Apostolos and Lampros (2012) while examining the role gender plays in the formation of entrepreneurial intentions and its effect on personal attraction to entrepreneurship, it was revealed that there was a significant indirect effect of gender on entrepreneurial intentions. A study carried out by Ndofirepi, Rambe and Dzansi (2018) on selected entrepreneurship students in a South African University of Technology to establish whether gender influences students' intentions to participate in entrepreneurship, it was found that gender influence entrepreneurial intentions among students although male were influenced more than female students. In most cases, female gender has many domestic roles to perform than male gender. This enables male to have a lot of time to thrive in entrepreneurship activities than female. Female also are believed to be less risk takers compared to male gender and most of entrepreneurship activities involve taking risks. This makes most of female gender not being interested in entrepreneurship activities.

Further Sanchez and Orazio (2012) in their study titled 'Gender Differences and Attitudes in Entrepreneurial Intentions: The Role of Career Choice' concluded that gender influenced entrepreneurial intentions of an individual in that men were more influenced compared to women. Men felt themselves more efficient and oriented to create a new venture than women. Choitung, Hongyi and Kris (2012) for example, comparing the entrepreneurial intentions between female and male engineering students in Hong Kong, supported that male students had more intentions of being entrepreneurs than female students. Another study by Long and Quan (2018) titled 'Do Gender and age make a difference in entrepreneurial intention of Vietnamese Adults?' concluded that gender significantly influenced entrepreneurial intentions of Vietnamese adults although these differences were small. The study also established no significant difference in the entrepreneurial intentions among different age groups.

Venkatapathy and Pretheaba (2014) carried out a study on postgraduate students in an Indian University. The study used the Theory of Planned Behavior (TPB) in which intentions were regarded as resulting from attitudes, perceived behavioral control and subjective norms. The study used stratified random sampling method. The sample size of the study was 176 students comprising of 92 males and 84 female students. The study revealed that there was statistically significant correlation between gender and entrepreneurial intentions of students. Brownson (2014) contradicted these findings by looking at age, gender, social norm and education as determinants of entrepreneurial behavior in Southern Nigeria and found that age and social norm determined entrepreneurial behavior among individuals while gender did not.

On the other hand, this study was interested to establish whether age influence entrepreneurial intentions of students. The relationship between age and entrepreneurship activities has received a great deal of attention in African countries and outside world. Many literatures on entrepreneurship education as a vehicle for selfemployment and job creation support that age does not have effect on entrepreneurial intentions (job creation and self-employment intentions of students). In other words, age of the students does not affect their intentions of becoming self -employed as well as creating jobs for others. For instance, Chaudhary (2017) being cited by (Cuong, 2018) confirmed that there was insufficient statistical evidence to support that age is inversely related to entrepreneurial intentions which was defined in terms of self-employment and job creation. This means that there was lack of evidence to proof that age was directly or indirectly related to entrepreneurial intentions of students.

These findings also concur with that of Cuong (2018) who investigated demographic factors, family background and prior self-employment on entrepreneurial intentions and it was found that age showed practically no impact on entrepreneurial intentions of students. According to Ayale & Zeleke (2018) established that age had no impact on self-employment intentions of students in their study titled "Modeling the impact of entrepreneurial attitude on self-employment intention among engineering students in Ethiopia" Based on the findings of Muhammad & Mazhar (2018) who carried out a study on entrepreneurial intentions among university students in Italy and established that age had a negative relationship with entrepreneurial intentions which was defined in terms of self-employment and job creation.

Gielmik, Zacher and Wang, (2018) contradicted these findings. In their study it was concluded that age influence entrepreneurial intention of an individual where by older people have greater prior entrepreneurial experience than young people which makes it more likely for older people to transition from forming entrepreneurial intentions to engaging in entrepreneurial activity. Accordingly, the literature above gender influences entrepreneurial intentions of students although not all of them. Some have contradicting information about students' characteristics and entrepreneurship activities in that gender do not influence entrepreneurial activities among students. Those who supported argue that male students were greatly influenced towards venturing in entrepreneurship activities than their female counterparts because of domestic undertakings. On the other hand, age did not influence entrepreneurial intentions of students as in the literature above although a few studies support that age influence entrepreneurial intentions of students when they are old. This is because, older people have greater prior entrepreneurial experience than young people which makes it more likely for older people to transition from forming entrepreneurial intentions to engaging in entrepreneurial activity.

Most of the materials read originate from outside African countries. Most of them are from developed countries. In Africa specifically Kenya, we have very little literature on students' characteristics (age and gender) and entrepreneurship activities. Therefore, studying the relationship between students' characteristics and entrepreneurial intentions among Kenyan polytechnic students is much important since it will add to the existing literature on the globe.

#### 2.3 Teaching Methods in Entrepreneurship Education

Otunga, Odero and Barasa (2011) in their study defined teaching pedagogies as the process that facilitates acquisition of knowledge, skills, attitude and values. They further stated that teaching is a process that facilitates learning and it is also called pedagogy, a process of instructing young people. According to them, it is from approaches that methods are derived. They highlighted approaches of teaching as: Teacher- centered, learner centered, practical integrated, and resource based. They also

stated lecture, lecture -discussion, demonstration/ modeling, case studies, panel of experts, discussion, discovery learning, brainstorming, cooperative learning, role play, small group discussion, problem- solving, and heuristic methods as the types of teaching methods.

Many scholars who have researched on the relationship between entrepreneurship education and entrepreneurial intention of students for self-employment, job creation and job seeking intentions in higher learning intuitions world wide support practical, learner-centered, experiential learning and resource-based as the best approaches of teaching entrepreneurship education. Role modeling, use of resource persons, integration of ICT in learning and field trips/side visit have been emphasized by many researchers as one of the best methods that facilitate the teaching and learning of entrepreneurship education for self-employment and job creation.

For instance, Rahman and Day (2014) studied the involvement of the Entrepreneurial Role Models as a way of developing Entrepreneurship Education and found out that the involvement of a role model(s) in entrepreneurship teaching and learning give a positive influence to entrepreneurial intentions of students and also motivate students to become entrepreneurs in future. Role models being mentioned here are Parents, entrepreneurs and lecturers/ teachers. They further stated that lecturers/ teachers can take on major task as the facilitators to encourage students to seek the appropriate knowledge about entrepreneurship. Parents and entrepreneurs can take on their major role to act as sources of informal entrepreneurial learning through social and active learning. Entrepreneurs can act as business fathers or mothers to whom students can establish a longer informal relationship.

This was also supported by another study on entrepreneurship education by Oduor, Bancy, and Masese (2018) who reported that role models who have succeeded after vocational training should be identified and individuals' case studies and success stories should be used in demonstrating the value of vocational education.

A study carried in Kenya by Ondigi (2012) supported that teachers should ensure instructional practices that incorporate life skills, social skills and skills in selfadvocacy throughout the curriculum. That teaching and learning method chosen should be the one that match the learning needs and styles of the student. For instance, Integration of ICT in teaching and learning entrepreneurship education makes learning to be attractive. It allows tutors to design useful learning environments that emphasize learning in the context of real-world activities (Njati, 2015). Supporting this argument, Balanskat, et al (2006) observed that ICT increases motivational levels of learners, improve their skills performance of, and enhance abilities in independent learning as well as increase abilities for team work. Entrepreneurship education is said to be a key to economic growth and development only and only if TVET programmes are adequately funded to provide for the necessary practical experience required in the training of learners for self-employment and job creation.

According to Oduor, Bancy, and Masese (2018) in their study observed that quality service at tertiary level of learning is the most important factor for motivating students. There is therefore need to ensure that the quality in services offered to students in TVET institutions is maintained. This requires putting in place deliberate measures to tackle the challenges of quality, knowledge, skills and motivation of vocational teachers and trainers. There is need for continued quality assurance in the Sub Sector and the empowerment of Quality Assurance Officers to carry out their mandate to ensure quality education in the sub- sector including those in the devolved units. Service

providers in youth polytechnics should also be given service quality training that promotes friendly and caring services. Better trained instructors are able to deliver high quality education and industry standard training and education. Where possible institutions should partner with relevant industries and invite lecturers from relevant industries for practical exposure. The Government should recruit adequate qualified staff and ensure that all staff receives continuous training and development on course delivery using modern methods, teaching methodologies and practical knowledge among others. The Government should also provide youth polytechnics with adequate, modern and quality materials for practical lessons such as smart boards, projectors, and computers to improve the quality of learning. Emphasis should be placed on assessing quality service in youth polytechnics with the objective of ensuring quality education and fostering students' satisfaction.

Vaziri, Hosseini and Jafari (2014) emphasized the use of entrepreneurs as consultants since they have sufficient experience and know about entrepreneurial market. They also Provide useful guidelines and explore the way people conduct business. They further argued that entrepreneurship education should be more practical and less theoretical. This means that the syllabus of entrepreneurship education and the time-table should be designed to emphasize the acquisition of practical skills. Opportunities should also be created for the students to go on excursions, field trips and study visits to successful small-scale businesses, large industrial concerns and sundry businesses owned and to enable the students see entrepreneurship at work. By so doing, students would acquire valuable work-based on-the-job industrial experience, as well as, the motivation to venture into such businesses.

Nnadozie, Akanwa and Nnadozie (2013) gave a great support to role model as the best method of teaching and learning entrepreneurship education by recommending that managers of schools and heads of tertiary institutions in Nigeria should identify people to serve as entrepreneurial role-models for their students. In line with this, successful entrepreneurs, popular industrialists, small and medium scale private sector operatives and established businessmen should be invited at regular intervals to interact and share their success stories and experience with these students.

Ismail (2010) being cited by Murithi (2013) insisted that to complement entrepreneurship courses or classroom modules, the polytechnic department, in collaboration with appropriate bodies, should organize various entrepreneurial activities. Further in order to improve teaching quality, instructors should not only practice appropriate teaching methods but also encourage the application of skills in a practical program or mini business project on campus. This will allow students to be more independent; it will also foster appropriate attitudes and entrepreneurial thinking. Instructors must ensure that students in the program are innovative and competitive, both mentally and physically. Murithi (2013) in her study found that if youth polytechnics are really to equip their trainees with appropriate entrepreneurial skills the ministry of youth affairs should employ instructors with entrepreneurship training background, all the teaching should involve case studies, field attachments, field visits and all other methods that would give trainees hands on experience.

Bwisa (2011) insisted on the following: That a teacher of entrepreneurship education should employ effective entrepreneurship delivery and assessment methods, develop effective entrepreneurship educators, integrate entrepreneurs in curricula design and delivery and also establish university business incubators. Wanjau and Mkala (2013) argue that the impact of entrepreneurship education on students' post-training career choice and practice is influenced by the teaching and assessment methodologies used in delivering entrepreneurship education lessons, teachers' personal interaction with entrepreneurship practitioners, and the availability of training resources. Citing Smith & Paton (2011), they further stated that using traditional methods, such as the lecture and its variant "chalk and talk" to teach entrepreneurship education, merely results in a knowledgeable person as these methods lack initiative for application. They concluded that entrepreneurs require experiential pedagogical interventions.

Faloye and Olatunji (2018) in their study titled Entrepreneurship Education and Self-Employment Intentions among Fresh Graduates in Nigeria opined that coming up with more skills acquisition and innovation centers across Nigeria to equip the young graduates with the skills, knowledge and attitudes required to be self-reliant will assist in making them job creators rather than job seekers and in the long term effect graduates unemployment and criminal activities among Nigerian youths will be reduced.

Ndyali (2016) was interested to know why students from higher learning institutions in Tanzania remain jobless despite having acquired skills to either be self-employed or look for a job. It was confirmed from the study that majority of students learn through lectures and academic textbooks and are academically sound but they have limited opportunities of acquiring practical experience by using machinery, equipment and practical techniques associated with the professions. Also, the study found out that there was lack of consultation with private section which led to teaching of outdated curriculum, outdated resources and outdated teaching methods.

The researcher is in agreement with these findings because traditional teaching methods like lecture method do not impact so much in the acquisition of skills among students. In this study, lecture method was found to be the most common method used by tutors to teach entrepreneurship education. This method is good for covering a lot of work by tutors and also enable students to learn by memorization but is not effective for future application of skills gained by learners. That is why learners continue being jobless after graduation despite being in an entrepreneurship class.

Muofhe and Toit (2011) carried out a study in South African on the relationship between entrepreneurial role models and career choice among students. The study revealed that a positive relationship between entrepreneurship education, role models and entrepreneurial intentions existed.

Wang, Yuohuizhang and Wen (2018) citing Huang and Luo (2018) argued that college entrepreneurship education needs to cover every college student in the school, creating a good internal and external environment for them and connecting institutions inside and outside the school.

Further, Wang, Yuohuizhang and Wen (2018) holds that at the beginning, what the institution should do is to set up an example for those students to form the awareness and motivation for starting a business. These institutions should provide college entrepreneurs with a role model to follow thus being encouraged by those successful entrepreneurial stories, college students could form entrepreneurial awareness and entrepreneurship spirit, which will lead to them to move ahead in a specific direction and then drive them to create business.

From the above literature, it is clearly being revealed that practical and experiential teaching methods that instill entrepreneurial skills among learners for self- employment should be applied. Such methods make learning to be interesting and permanent. This enables learners to apply what they have learned in real life situation.

The researcher was interested to know how the following methods are being used by tutors in the teaching and learning of entrepreneurship education. These methods were: lecture, application of ICT in teaching, use of resource persons, question and answer method, brainstorming, group discussion, project-based learning, field trips and demonstration/ modeling.

The researcher found out that theoretical or traditional teaching methods that lead to cramming and memorization of content for the purposes of passing exams were mostly used. These are lecture and question and answer methods. Practical or experiential methods like field visits, use of resource persons, brainstorming, ICT, demonstration and project-based learning are less used in the polytechnics where research was done. It came out clearly that learners are not exposed to practical work frequently since these polytechnics lacked business incubators where learners would apply what they have learned in class. This means that practical acquisition of entrepreneurial skills is less done in these polytechnics leading to low entrepreneurial skills among learners hence low self-employment and job creation intentions among learners graduating.

### 2.4 Students Perceptions (Attitude) Towards Entrepreneurship Education for Self-Employment, Job Creation and Job Seeking Intentions

Most studies confirm that students have positive perception towards entrepreneurship education. Students from many literatures say entrepreneurship education enables one to create a job hence being employed. Venkatapathy and Pretheaba (2014) carried out a study on postgraduate students in an Indian University. The study used the Theory of Planned Behavior (TPB) in which intentions are regarded as resulting from attitudes, perceived behavioral control and subjective norms. The study used stratified random sampling method. The sample size of the study was 176 students comprising of 92 males and 84 female students. The study revealed that there was a positive statistically significant correlation between attitude towards entrepreneurship, subjective norms and perceived behavioral control with entrepreneurial intention among students. This means that students with positive attitude towards entrepreneurship would prefer being entrepreneurs than anything else.

Joseph and Abel (2013, pp. 69-75) carried out research on Entrepreneurship Education as a key to solving graduate unemployment in Niger- Delta and revealed that entrepreneurship education had gained a wider acceptance in the region as an alternative career option.

Ebewo, Rugimbana, & Shambare (2017) in their study titled "Effects of Entrepreneurship Education on Students Entrepreneurial Intentions: A case of Botswana found out that entrepreneurship education positively influence students' intention to become an entrepreneur by changing their attitude towards entrepreneurship and increasing their entrepreneurial abilities and suggested that the university curriculum should be redesigned in order to stimulate an environment that is conducive for developing positive entrepreneurial attitudes and abilities.

I support the above researchers because in this study, learners had a positive perception towards entrepreneurship education in that it stimulates entrepreneurial spirit among learners. They insisted that if entrepreneurship education is well taught by stimulating methods or active methods, majority of them will venture into business hence creating jobs for others as they become self-employed.

Oluseye, Adebayo, and Olulanu (2017) in their study titled "Effect of Entrepreneurship Education on Self-Employment initiatives among Nigerian Science and Technology Students", it was revealed that entrepreneurship education is a good policy and it has positive effect on self-employment initiatives. This study recommends that students should be encouraged beyond entrepreneurship school training projects to business ventures start-ups at micro and small-levels. Also, the Polytechnic management should collaborate with existing entrepreneurs and business organizations in providing entrepreneurship training to the students. Lastly, the polytechnic management, the government and other stakeholders can give special recognition, awards and sponsorship assistance as motivation to students whose projects are realistically outstanding. This will stimulate self-employment drives among graduates.

Nnadozie, Akanwa and Nnadozie (2013) found out that majority of the graduating students, who were the respondents, perceive entrepreneurship education as useful and innovative and agreed that these courses broadened their knowledge and widened their employment options. Sondari (2014) while wondering whether entrepreneurship education is really needed or not found out that entrepreneurship education is important in stimulating students' intention of starting a business after graduating. The research further revealed that students had a positive attitude towards entrepreneurship education.

Narasmah and Nurzefirah (2018) being interested in Public University Students' Entrepreneurship interest and their career in Malaysia investigated 360 Malaysian college students and found out that Malaysia has worked to cultivate entrepreneurial interest among students so they will pursue entrepreneurship careers after graduation. Further analysis of survey data found that students' entrepreneurship interest was high.

Kristskaya (2015) Carried out research on effect of Entrepreneurship Education on Students' Entrepreneurship Intention in Norway and Russia and confirmed that entrepreneurship education programs are the right and effective tool to enhance entrepreneurial intentions among students. Students had a positive attitude towards entrepreneurship education and they believed that entrepreneurship education enables one to have skills of starting and running a business.

Muofhe and Toit (2011) carried out research in South Africa on entrepreneurial educations and entrepreneurial role models' influence on career choice and it was found that entrepreneurship students had a stronger entrepreneurial intention than non-entrepreneurship students.

Pardie and Akoto (2015) while assessing the objectives of entrepreneurship programme in cape coast Polytechnics of Chana found out that majority of the students accepted that the objective(s) of the entrepreneurship course in the polytechnic was essentially to expose them to concepts in entrepreneurship and also to create awareness about entrepreneurship and its values. In addition, the study revealed that the entrepreneurship course had a positive effect on the entrepreneurial intentions of students who underwent the programme. The study recommended that the entrepreneurship course be sustained since it has the inherent capabilities to reduce youth unemployment and all its attendant social evils. Akpochafo and Alika (2018) while investigating the impact of entrepreneurship education on career development among undergraduates in South-South Universities in Nigeria found out that the students were of the view that entrepreneurship education will provide training that would make undergraduates creative and innovative if the programme is properly implemented.

It is obvious that if someone has a positive attitude or perception towards something, then such a person like that thing. He or she may end up engaging or doing the same thing that he or she like. From this literature, majority of the students who were taking entrepreneurship showed a positive attitude towards entrepreneurship education. That through it, their entrepreneurial intentions will improve. Finding out what Kenyan polytechnic students perceive about entrepreneurship education is very important. Whether they have positive or negative perception towards entrepreneurship education for self-employment and job creation and if it is true that they have positive attitude towards entrepreneurship education, what makes them to practice entrepreneurship after school. Therefore, this study on perception of students in Kenyan polytechnics towards entrepreneurship education will add literature in entrepreneurship education on the globe. The study will show whether this model is applicable in a developing country like Kenya.

### 2.5 Influence of Students' Family Entrepreneurial Background on their Self-Employment, Job Creation and Job Seeking Intentions.

Apart from entrepreneurship education, several entrepreneurship scholars have highlighted entrepreneurial background of students as one of the main factors that influence students from being self-employed despite having acquired entrepreneurial skills. Students' background consists of the students' social environment for example family members, friends, mentors, relatives, government policies governing business activities and financial institutions that lend capital to those in need of starting a business. There is a high likelihood that students' background that support entrepreneurial activities will enhance entrepreneurial culture of students leading to self-employment among students or if a student is from the social environment that support entrepreneurial culture will venture into business after school.

For instance, Georgescu and Herman (2020) investigating the main factors influencing students' entrepreneurial intentions particularly focusing on entrepreneurial family background and entrepreneurship education among Romanian high school students and University students in their final year of study found that students with an entrepreneurial family background had a higher entrepreneurial intention than those

without such a background. Also, the study established that effectiveness of entrepreneurship education and entrepreneurship personality traits affected entrepreneurial intention of students.

Venkatapathy and Pretheaba (2014) carried out a study on postgraduate students in an Indian University. The study used the Theory of Planned Behavior (TPB) in which intentions are regarded as resulting from attitudes, perceived behavioral control and subjective norms. The study used stratified random sampling method. The sample size of the study was 176 students comprising of 92 males and 84 female students. The study revealed that there was statistically significant correlation between a family business background and intention to start a new business in India.

Indira and Prasad (2016) carried a study on the influence of family occupation on the Entrepreneurial Intentions of Management Students from a leading B school in Mumbai. A convenience sample of 130 students was selected at random and data was collected through a self-administered questionnaire. Students selected were from those families with salaried parents and those with parents engaged in business activities (entrepreneurs). The study revealed that there was no difference in entrepreneurial intentions of these students. Here, it means that family occupation did not influence entrepreneurial intentions of students.

Ranwala (2016) studied the impact of family background and entrepreneurship specific education on entrepreneurial knowledge in venture creation and the study revealed that family background and entrepreneurship specific education had an impact on entrepreneurial knowledge in venture creation. In other words, entrepreneurship can be stimulated through family background and the entrepreneurship education.

Faloye and Olatunji (2018) their study showed that ability to take risk, the influence of family, friends and mentors were the major determinants of entrepreneurial intentions of selected participants. I concur with them because, an individual learns very well by observing what others are doing. Inviting successful entrepreneurs to talk to students boost their morale of becoming entrepreneurs. If learners have friends who are entrepreneurs will help them to be entrepreneurs in future because there is a saying that states 'show me your friends and I will tell you who you will be in future'. Proverbs chapter 13:20 says "He who walks with wise men becomes wise". This means that if you want to be wise then walk with wise people. If you want to be an entrepreneur, walk with successful entrepreneurs. If all are entrepreneurs, then this will enhance entrepreneurial culture of students in future.

Faloye and Olatunji (2018) quoting Jinying and Pelagie (2014), Ambad and Darmit (2016), Tarus, Kemba, Kemboi, Okenwa and Otiso (2016), Popesch, Bostan, Robu,Maxim and Diaconu (2016), Cano and Tabares (2017) found out that African economic environment and gender, personal attitude, perceived behavioral control and perceived relational support, social network, the need for achievement and the propensity towards taking risks, influence of family, social environment, personal motivations, cultural factors, part-time work experience, innovativeness, students being exposed to entrepreneurs, experienced network were the main determinant factors for entrepreneurial intentions for self-employment.

Kahando and Mungai (2018) carried out research in Kenyan polytechnics involving influence of cognitive factors on self-employment intentions among students in Kenya and found out that the decision by students to become self-employed after graduation entirely depends on mentorship process from parents and other successful entrepreneurs in the community. That self-employment intention is cultivated through the value added to them by family members and close relatives. This concurs with the findings of this study where by majority of the respondents if not all agreed that learners' background directly affect their entrepreneurial spirit. Learners' background in this study referred to social background of learners to mean the family, friends and close relatives of the learner.

According to Bwisa (2011) support that culture, social and family obligations, and the desire for social status are prime motives for entrepreneurial intentions hence economic success in a given Nation. Self-employment is as a result of outbreak of entrepreneurial activities among young from schools and this is supported by the social variation in which these learners originate from.

Talas, Celik, and Oral (2013) Looking at the influence of demographic factors on entrepreneurship intention among undergraduate students as a career choice, found out that the type of high school and the household income of their family were significant factors influencing the entrepreneurial intention among respondents.

Nandamuri (2016) looking at an analysis of family occupational background as a construct of entrepreneurial orientation among the youth in India established that the family occupational background has a significant impact on the entrepreneurial management capabilities and entrepreneurial orientation of the present-day youth. It is true because family background plays a vital role in upbringing of an individual. Those individuals from families that involve in business activities or they are so much in entrepreneurship are likely to practice the same in future due to entrepreneurial role models.

Ayodele (2014) studied the effects family background has on entrepreneurial intentions of fresh graduates in Nigeria and it was revealed that family background of a student had an impact on entrepreneurial intentions in that the family acts as a source of finance, human resources, social and cultural values and role modeling.

It is coming out clearly from the above literature that students' background like family, relatives, friends and culture of the student dearly influence students from becoming entrepreneurs for self-employment and job creation. It has been shown that students from entrepreneurial social class eventually involve in entrepreneurial activities after graduating. The researcher is in agreement with these findings because majority of the students agreed that students' background positively influence entrepreneurial intention of a learner for self-employment and job creation. In addition, they mentioned government policies governing business activities, insecurity and availability of capital as some of the factors influencing students from becoming self-employed after graduating.

#### 2.6 Summary of Chapter Two

In this chapter, all the literature reviewed by the researcher is highlighted. It is subdivided into headings for purposes of exhaustively understanding what has been written about the various aspects of the subject under review. These are: students' characteristics, entrepreneurship teaching methods, students' perception towards education for self-employment, job creation and job seeking intentions and influence of entrepreneurial background of students on their self-employment, job creation and job seeking intentions. This literature is organized at three levels; international, regional and local where applicable. It was revealed from the literature that learner centered methods of teaching have a big impact on entrepreneurial intentions of students hence making them to be self-reliant in terms of creating jobs for others as they become selfemployed. Also, it came out clearly that students in several studies analyzed had positive perception towards entrepreneurship education. The studies agreed that entrepreneurship education was very essential in terms of enriching entrepreneurial skills in learners making them business owners hence creating jobs for others. It also came out clearly from the literature that family entrepreneurial background was key to students becoming self-employment and creating jobs for others in future. Students from a background where relatives, parents and friends own or operate businesses and have created employment to people positively influence students from such families to be entrepreneurs. In other words, such families acted as role models to their children (students). In Kenya today the rate of unemployment is very high. Establishing why students from entrepreneurship class are not ready to engage in entrepreneurship is quite important especially looking at students' characteristics, entrepreneurship teaching methods, perception of students towards entrepreneurship education and family entrepreneurial background as factors that influence students from engaging in entrepreneurship activities is very important.

In the chapter that follows the researcher explore research design and methodology.

#### **CHAPTER THREE**

#### **RESEARCH DESIGN AND METHODOLOGY**

#### **3.1 Introduction**

This chapter shows the whole process on how the study was carried out in a systematic manner. The chapter gives a description of the methods that were applied in carrying out the study. This is how it was organized: Research design, description of the study area/location of the study, target population, the sample size, sampling procedures, research instruments, pilot study, data collection procedures, data analysis, data presentation and logical and ethical considerations.

#### 3.2 Research Design

The study used descriptive survey research design. A study by Mugenda and Mugenda (1999) stated that this type of research attempts to describe behaviors, attitudes, values and characteristics of the population under study. Creswell (2018) supported that a survey design provides a quantitative description of trends, attitudes and opinions of a population or test for relationships among variables of a population, by studying a sample of that population. The research design chosen was the best for this study since the researcher intended to find out entrepreneurial intention (self-employment intentions, job creation intention), job seeking intentions, attitude, behaviors and characteristics of polytechnics students in Kenya.

#### 3.3 Research Area

The research was carried out in Western Kenya. The study involved National polytechnics in Western Kenya. In this study western Kenya constituted the following counties: Busia, Vihiga, Kakamega, Kisumu, Kisii, Homabay, Siaya, Migori, Bungoma, Trans Nzoia, and Uasin Ngishu counties.

According to KNBS economic survey (2017) Kenya has 13 National polytechnics and two of them were elevated to University status leaving 11 National polytechnics. Western Kenya has five National polytechnics namely: Sigalagala, Kisumu, Kisi, Kitale and Eldoret National polytechnics.

Two polytechnics out of five were randomly selected for this study. The National status enables these polytechnics to get students from different parts of the country. The selection of Western Kenya polytechnics therefore was only for purposes of this study; to investigate the effect of entrepreneurship education on self-employment, job creation and job seeking intentions of polytechnic students in Kenya.

#### **3.4 Target Population**

Mugenda and Mugenda (1999) defined population as a complete set of individuals, cases or objects with some common observable characteristics. From this study target population or unit of analysis for which generalization were to be made were all entrepreneurship students in Kenyan polytechnics.

#### 3.5 The Sample and Sampling Procedure

Mugenda and Mugenda (1999) stated that it is impossible to study the whole of target population and therefore researchers identify and define an experimentally accessible population. According to KNBS economic survey (2017) Western Kenya has five National polytechnics.

Two polytechnics out of possible five were randomly selected by use of simple random sampling procedure to form accessible population. Using simple random sampling was suitable because every member of the total population had an equal chance of being selected and selection of one member did not affect the probability of selecting another member. The researcher used this technique to get two National polytechnics to represent the rest of the polytechnics. The method involved giving a number to every subject or member of the accessible population, placing the numbers in a container and then picking any number at random. The subject corresponding to the numbers picked are included in the sample Mugenda and Mugenda (1999).

The researcher wrote names of all National polytechnics in Western Kenya on a piece of paper folded them, placed them in a container, mixed them and picked the number randomly. The two polytechnics picked had a total population of 273 entrepreneurship students in their final year. Data was collected from all 273 students both from these two selected polytechnics. Final year students taking entrepreneurship studies were chosen because they were expected to have covered enough work of entrepreneurship and were on their exit to mean they had formed mind whether to be entrepreneurs or not.

Mugenda and Mugenda (1999) defined a sample as a smaller group obtained from the accessible population. The researcher employed purposive sampling procedure where by data was collected from all 273 students taking diploma courses in entrepreneurship studies as Mugenda and Mugenda (1999) suggested that it is advisable to take a whole population where the target population is small. Creswell (2018), Mugenda and Mugenda (1999) defined purposive sampling techniques as the sampling technique where the researcher purposively targets a group of people reliable for the study or have the required information with respect to the objectives of his or her study.

#### **3.6 Instruments of Data Collection**

Data was collected from the respondents by the use of a questionnaire which was administered by the researcher himself. Franker (2006) stated that a questionnaire is useful in obtaining objective data because participants are not manipulated in any way by the researcher. The study used both open- ended questionnaire and closed ended questionnaire. Open ended questionnaire involved writing questions to which the respondents were required to write answers individually without being directed by the researcher. Closed –ended questionnaire consisted questions and answers where the respondents were required to choose answers from the choices given. The questionnaire was sub-divided into four sections. The first section sought demographic information about the respondents while the next sections sought answers for the four objectives. The researcher used a 5-point Likert type of scale ranging from 1-5 to determine each of the variables.

#### **3.7 Pilot Study**

This is a trial of a larger or actual study that is conducted in preparation for the study. It can involve pre-testing or trying out a research tool such as a questionnaire. In this study piloting was done to ascertain whether the instruments proposed could be used to collect sufficient, adequate and relevant data, identify any problem that is likely to occur at the time of actual data collection. It was done in a National polytechnic in Western Kenya and this polytechnic was not part of those polytechnics where the final study was conducted. The items in the questionnaires were moderated by the help of supervisors assigned to me. The results were used to test the validity and reliability of the research instruments.

#### **3.8 Validity and Reliability of Research Instruments**

#### **3.8.1 Validity of instruments**

Validity refers to the adequacy of the measurement tool being used in the study. The instrument needs to have adequate questions in order to collect the required data for analysis. Mugenda and Mugenda (1999) also support this by stating that validity is the degree to which results obtained from the analysis of the data actually represent the

phenomenon under study. There are several types of validity but this study dealt with content and construct validity where the questionnaire was developed by the researcher and handed over to the two supervisors assigned to him by the university. The researcher together with the two supervisors evaluated the measurement tool to establish whether it is representing the interest under study and also whether it covers all relevant parts of the study. They guided and advised the researcher accordingly and their advices were taken with a lot of seriousness.

#### 3.8.2 Reliability

Reliability was carried out in order to find out whether measures of research instrument yield the same results any time such research is repeated. Mugenda and Mugenda (1999) support that reliability of the research instruments are the ability of the instruments to give same response after repeated administration. Pallant (2005) holds that one of the most commonly used indicators of reliability is Cronbach's alpha coefficient. The Cronbach alpha coefficient of a scale should be above 0.7. In this study Cronbach's Alpha was 0.702 as indicated in the table 3 below. This indicated that the instruments used in data collection for this study is reliable.

<b>Table 1: Reliability</b>	<b>Statistics</b>
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Cronbach's Alpha	Number of Items
0.702	26

#### **3.9 Data Collection Procedures**

First, the researcher sought permission from Moi University School of Education as per the guidelines. The researcher was allowed to acquire research permit from National Commission for Science Technology and Innovation which he did. The researcher was directed by NACOSTI authority to get a go ahead from county commission and county director of education where research was to take place.

The researcher was given permission by these authorities. The researcher went ahead to seek permission from the polytechnic administration, heads of departments and tutors to contact research.

#### 3.10 Data Analysis

Data analysis entails the process of examining data which have been collected. In this study the researcher employed both descriptive and inferential statistics. Descriptive statistics involved calculation of percentages and frequencies and inferential statistics involved Chi-Square Test of independence and Freeman-Halton Test an extension of Fisher's Exact Test where possible. The Exact Tests provide a powerful means for obtaining accurate results when your data set is small, contains many ties, your tables are sparse or unbalanced, the data are not normally distributed, or the data fail to meet any of the underlying assumptions necessary for reliable results using the standard asymptotic method (Mehta and Patel, 1989,2012).

Fisher's Exact test was used in case of a  $2 \times 2$  contingency table with cells that had expected frequencies less than 5. Freeman – Halton test was applied in case of a contingency table with either row or column being greater than 2 and had cells with expected frequencies less than 5 and if the cells of the contingency table had expected frequencies greater than or equal to 5, then a chi-square of independence was used.

For quicker and easier analysis of data collected, the researcher employed statistical packages for social scientists (SPSS VERSION 21) and Fisher's Test for Exact Count Data Calculator, with follow-up Chi-Squared test generated from https://astatsa.com/FisherTest/.

#### **3.11 Data presentation**

After analyzing data, the researcher presented data accurately to allow easy visibility and understanding by the final user. The researcher used tables and percentages for data presentation.

#### **3.12 Ethical and Legal Considerations**

The researcher observed all rules and regulations in carrying out research in Kenya. The researcher ensured that confidentiality, honesty and openness were considered throughout the study. The researcher also respected the rights of the respondents. The researcher's intentions were communicated clearly to the respondents to minimize possible misunderstanding. In the field, the researcher was welcomed very well by the institution management. In each polytechnic the researcher visited, was given a lecturer by the head of department who gave the researcher direction while collecting data. After being given an ok to collect data, the researcher distributed questionnaires to students in class to fill. After filling, the researcher collected the questionnaires from students and thanked them so much.

#### 3.13 Summary of Chapter Three

The chapter has presented the methodology used in the study. It has explained the research design, the target population, the sample size, and sampling procedures and research instruments. It has also shown how the validity and reliability of the instruments used were tested. Lastly it has presented the data collection procedures, data analysis, techniques used and how ethical issues were dealt with. As this chapter come to an end, it is ushering in the next chapter that focuses on data analysis, presentation, interpretation and discussion.

#### **CHAPTER FOUR**

# DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION

#### **4.1 Introduction**

This chapter discusses the data analysis, data interpretation, data presentations and discussion of the findings of the study. Data analysis was done per objective and the study was guided by four objectives listed below:

- i. To establish the relationship between students' characteristics (age and gender) and self-employment, job creation and job seeking intentions.
- ii. To establish the influence teaching methods, have on self-employment, job creation and job seeking intentions of students
- iii. To establish perception of students towards entrepreneurship education for selfemployment, job creation and job seeking intentions
- iv. To establish the influence of students' family entrepreneurial background on their self-employment, job creation and job seeking intentions

The questionnaire used in this study was carefully analyzed to ensure that the data collected was presented clearly with the aid of tables, percentages and frequencies. The overall aim of this study was to determine the effect entrepreneurship education has on self-employment, job creation and job seeking intentions of polytechnic students in Kenya. Data was collected from **273** entrepreneurship students from the two polytechnics. Data was collected using questionnaires which contained both closed and open-ended questions. The questionnaire was administered by the researcher himself between the month of September and October 2019.Data Collected was analyzed using Pearson Chi-square Test of independence and Freeman Holton Test (an extension of

Fisher's Exact Test) where applicable by using SPSS version 21. The p-value less than **0.05** was considered as significance.

#### 4.2 Return Rate

Out of **273** questionnaires that were distributed by the researcher, **267** were returned and **6** questionnaires were not returned. The returning rate was **97.8%**. This returning rate was considered adequate according to Dilliman, (2000)

#### 4.3 Demographic Data

The section has analyzed gender and age of the respondents. The sampling of the study was made up of **273** diploma students studying entrepreneurship education in their final year of study (3<sup>rd</sup> year).

#### 4.3.1 Distribution of students by gender

Looking at the demographic characteristics of these students, it was found that 157(58.8%) of the participants were male students and 110 (**41.2%**) were female students.

#### **4.3.2** Distribution of students by age

Looking at the demographic characteristics of these students, it was found that 85 (**31.8%**) of the participants were of age below 20 years, 176 (**65.9%**) were of age between 20-30 years and 6 (**2.2%**) were of age above 30 years. Majority of the students were of age 20-30 years, followed by age below 20 years and lastly those of age above 30 years.

#### 4.4 Students' Characteristics

4.4.1 Research objective one: To establish the relationship between students' characteristics (age and gender) and self-employment, job creation and job seeking intentions.

From this objective, the following hypothesis arose:

## **4.4.1.1** Hypothesis H0<sub>1.1</sub>: There is no significant relationship between age of the students and self-employment, job creation and job seeking intentions.

This hypothesis was subsequently broken down into three, each hypothesis handled age as independent variable and self-employment, job creation and job seeking intentions as dependent variables.

The item was on a five-point Likert scale "strongly agree, agree, neutral, disagree and strongly disagree". The scale was further collapsed to; positive perception (agree and strongly agree); negative perception (disagree and strongly disagree) and "undecided" as Neutral. They were to respond to the statement "I'm studying entrepreneurship because I want to be self-employed, create jobs and seek jobs". From objective one, the following hypotheses were handled.

# Hypothesis H0<sub>1.1.1</sub>: There is no significant relationship between age of the students and self-employment intentions.

In general, **239** (**89.8%**) of respondents had positive perception of being self-employed after school. On the other hand, **10** (**3.8%**) had negative perception of being self-employed after school. **17** (**6.4%**) of the respondents were undecided whether to be self –employed or not as in the table **2**.

To test the relationship between age of students and self-employment intentions, Freeman-Halton test was performed and the results indicated that age and selfemployment intentions of students have no statistical significant relationship as being indicated by a p-value (p=.3192). Therefore, hypothesis H0<sub>1.1.1</sub> was accepted as indicated in table 2

## Hypothesis H0<sub>1.1.2</sub>: There is no significant relationship between age of the students and job creation intentions.

In general, **217** (**81.6%**) of respondents had positive perception of creating jobs. On the other hand, **15** (**5.6%**) had negative perception of creating. **34** (**12.8%**) of the respondents were undecided whether to create jobs or not as shown in the table 2.

To test the relationship between age of students and job creation intentions, Freeman-Halton test was performed and the results indicated that age and job creation intentions of students have no statistical significant relationship as being indicated by a p-value (p=.7900). Therefore, hypothesis H0<sub>1.1.2</sub> was accepted as indicated in table 2.

### Hypothesis H0 1.1.3: There is no significant relationship between age of the students and job seeking intentions

Students were to respond to the statement "I'm studying entrepreneurship because I want to look for jobs in different companies". The analysis showed that either (81, 30.5%) of students were undecided or they had a negative perception towards seeking jobs after school (89, 33.5%). Although some (96, 36.1%) had positive perception of seeking jobs after school. In general, there was a small difference in the number of students who had intentions to seek jobs after school and those who intentions not to seek jobs after school as being shown in the table 2.

To test the relationship between age of students and job seeking intentions, Freeman-Halton test was performed and the results indicated that age and job seeking intentions of students have statistical significant relationship as being indicated by a p-value (p=.0001). Therefore, hypothesis H01.1.3 was rejected as indicated in table 2.

Table 2:	Analysis	of th	e relationship	between	age	of	the	students	and	self-
employment, job creation and job seeking intentions.										

Hypothesis. H0 1.1	Descriptive statistics	Method of analysis	P-value less than 0.05 considered significance	Null hypothesis accepted or rejected	Variable relationship
Age and Self- employment	Negative Perception - 10 Neutral-17 Positive Perception - 239	Freeman- Haltom Test	0.3192	Accepted	Age and Self- employment intentions of students are not related.
Age and Job creation	Negative Perception - 15 Neutral -34 Positive Perception- 217	Freeman- Haltom Test	0.7900	Accepted	Age and job creation intentions of students are not related.
Age and Job seeking	Negative Perception - 89 Neutral- 81 Positive Perception - 96	Freeman- Haltom Test	0.0001	Rejected	Age and job seeking intentions of students are related.

#### 4.4.1.2: Hypothesis H0<sub>1.2.</sub> There is no significant relationship between gender of

#### the students and self-employment, job creation and job seeking intentions.

This hypothesis was subsequently broken down into three, each hypothesis handled gender as independent variable and self-employment, job creation and job seeking intentions as dependent variables. The items were on a five-point Likert scale "strongly agree, agree, neutral, disagree and strongly disagree". The scale was further collapsed to; positive perception (agree and strongly agree); negative perception (disagree and strongly disagree) and "undecided" as Neutral. They were to respond to the statement "I'm studying entrepreneurship because I want to be self-employed, create jobs and seek jobs". From this objective, the following hypotheses were handled.

### Hypothesis H0<sub>1.2:1</sub>: There is no statistically significant difference in selfemployment intentions between male and female students.

The item was on a five-point Likert scale "strongly agree, agree, neutral, disagree and strongly disagree". The scale was further collapsed to; positive perception (agree and strongly agree); negative perception (disagree and strongly disagree) and "undecided" as Neutral.

**239** (**89.8%**) of respondents had positive perception of being self-employed after school. On the other hand, **10** (**3.8%**) had negative perception of being self-employed after school as indicated in table 3.

To test the relationship between gender of students and self-employment intentions, Freeman Halton independence test was performed and the results indicated that gender and self-employment intentions of students have no statistical significant relationship as being indicated by a p-value (p=.269). Therefore, hypothesis H0<sub>1.2.1</sub> was accepted as indicated in table 3.

## Hypothesis H0<sub>1.2.2</sub> There is no statistically significant difference in job creation intentions between male and female students.

**217** (**81.5%**) of respondents had positive perception of creating jobs for others after school. On the other hand, **15** (**5.6%**) had negative perception of creating jobs for others after school as indicated in table 3.

To test the relationship between gender of students and job creation intentions, a chisquare of independence test was performed and the results indicated that gender and job creation intentions of students have no statistical significant relationship as being indicated by a p-value of  $X^2(2) = 5.409$ , p=.067). Therefore, hypothesis H0<sub>1.2.2</sub> was accepted as being shown in table 3.

## Hypothesis H0<sub>1.2.3</sub>: There is no statistically significant difference in job seeking intentions between male and female students.

They were to respond to the statement "I'm studying entrepreneurship because I want to look for jobs in different companies around the globe". Majority of female students, **53** (**48.1%**) confirm that it is true that they will be looking for jobs in different companies around the globe after school. Only **28** (**25.5%**) of female students do not confirm that they will be looking for jobs in different companies around the globe after school. Only **28** (**25.5%**) of female students do not confirm that they will be looking for jobs in different companies around the globe after school. **29**(**26.4%**) of female students were undecided whether to seek jobs in different companies around the globe or not. Also, majority of male students, **61** (**39.1%**) do not confirm that they will be looking for jobs in different companies around the globe after school. Only **43** (**27.6%**) of male students confirm that it is true that they will be looking for jobs in different companies around the globe after school. **52** (**33.3** %) of male students were undecided whether to seek jobs in different companies or not. To sum up, the analysis showed that either (**81, 30.5%**) of students were undecided or they had a negative

perception towards seeking jobs after school (89, 33.5%). Although some (96, 36.1%) had positive perception of seeking jobs after school. In general, there was a small difference in the number of students who had intentions to seek jobs after school and those who intentions not to seek jobs after school as being shown in the table 3.

To test the relationship between gender of students and job seeking intentions, a chisquare of independence test was performed and the results indicated that gender and job seeking intentions of students have statistical significant relationship as being indicated by a p-value  $X^2$  (2) =12.219, **p=.002**). Therefore, hypothesis **H0**<sub>1.2.3</sub> was rejected as indicated in table 3.

Hypothesis. H0 1.2	Descriptive statistics	Method of analysis	P-value less than 0.05 considered significance Relation R		Variable relationship	
Gender and Self- employment	Negative Perception 10 Neutral 17 Positive Perception 239	Freeman Halton	0.269	Accepted	Gender and Self- employment intentions of students are not related.	
Gender and Job creation	Negative Perception 15 Neutral 34 Positive Perception 217	Chi-Square of Independence	X <sup>2</sup> (2) =5.409, p=.067).	Accepted	Gender and job creation intentions of students are not related.	
Gender and Job seeking	Negative Perception 89 Neutral 81 Positive Perception 96	Chi-Square of Independence	X <sup>2</sup> (2) =12.219, <b>p=.002</b> )	Rejected	Gender and job seeking intentions of students are related.	

 Table 3: Analysis of the relationship between gender of the students and self 

 employment, job creation and job seeking intentions.

### 4.5 Discussion of findings of research objective one: To establish the relationship between students' characteristics (age and gender) and self-employment, job creation and job seeking intentions.

The purpose of this objective was to find out the relationship between students' characteristics and self-employment, job creation and job seeking intentions. Students' characteristics were defined in terms of age and gender.

#### Age and entrepreneurial activities/intentions

The study found that there was no statistical significant difference between age of the students and self-employment since Freeman-Halton test (p=.392) was more than p=.005 which was considered to be significant. The study also found that there was no statistical significant difference between students' age and job creation since Freeman-Halton test (p=.7900) was more than the value considered to be significant. The study further found that there was statistical significant relationship between age of the students and job seeking intentions as it was indicated by Freeman-Halton test of (p=.0001).

From the findings it was shown statistically that students of all ages were not ready to be self-employed and create jobs for others after school. They intend to engage in job seeking being their first choice rather than to start their own businesses. This might be caused by the theoretical way of teaching entrepreneurship education that did not effectively impart enough entrepreneurial skills to students to make them to start venturing in business enabling them to create jobs and be self-employed. The relationship between age and entrepreneurship activities has received a great deal of attention in African countries and outside world. Many literatures on entrepreneurship education as a vehicle for self-employment and job creation support that age does not have effect on entrepreneurial intentions (job creation and self-employment intentions of students). In other words, age of the students does not affect their intentions of becoming self -employed as well as creating jobs for others

These findings are consistent with the findings of Chaudhary (2017) being cited by (Cuong, 2018) that there was insufficient statistical evidence to support that age is inversely related to entrepreneurial intention which was defined in terms of self-employment and job creation. This means that there was lack of evidence to proof that age was directly or indirectly related to entrepreneurial intentions of students. Supporting this finding, Cuong (2018) who investigated demographic factors, family background and prior self-employment on entrepreneurial intention found that age showed practically no impact on entrepreneurial intentions of students.

A study by Ayale and Zeleke (2018) established that age had no impact on selfemployment intentions of students in their study titled "Modeling the impact of entrepreneurial attitude on self-employment intention among engineering students in Ethiopia". Muhammad and Mazhar (2018) carried out a study on entrepreneurial intentions among university students in Italy and established that age had a negative relationship with entrepreneurial intentions which was defined in terms of selfemployment and job creation.

On the other hand, Gielmik, Zacher and Wang, (2018) contradicted these findings. In their study it was concluded that age influence entrepreneurial intention of an individual where by older people have greater prior entrepreneurial experience than young people which makes it more likely for older people to transition from forming entrepreneurial intentions to engaging in entrepreneurial activity.

#### Gender and entrepreneurial activities/intention

The study established that there was no statistical significant difference between gender of the students and self-employment since Chi- square of independence test (p=.269) was more than p=.005 which was considered to be significant. The study also found that there was no statistical significant difference between students' gender and job creation since Chi- square test of independence (p=.067) was more than the value considered to be significant. The study further found that there was statistical significant relationship between gender of the students and job seeking intentions as it was indicated by Chi- square test of independence (p=.002) was less than the value considered to be significant.

It is being shown statistically from the analysis that male and female students are not ready to be self-employed and create jobs for others after school. They intend to engage in job seeking being their first choice rather than to start their own businesses. This might be caused by the theoretical way of teaching entrepreneurship education that did not effectively impart enough entrepreneurial skills to students to make them to start venturing in business enabling them to create jobs and be self-employed.

These findings are consistent with the findings of Faloye and Olatunji (2018) citing Ahamed et al. (2010) it was observed that demographical characteristics such as gender were insignificant with the intentions to become entrepreneur in Pakistan. Also, these findings are similar to that of Ayale and Zeleke (2018) who established that gender had no impact on self-employment intentions of students in their study titled "Modeling the impact of entrepreneurial attitude on self-employment intention among engineering students in Ethiopia". Brownson (2014) who studied age, gender, social norm and education as determinants of entrepreneurial behavior in Southern Nigeria and found that gender did not influence entrepreneurial intentions Other researchers in their study established that gender and entrepreneurial intentions of students were directly related to mean gender had an influence on students' entrepreneurial intention. Their findings contradicted the findings of this study and findings of other related studies.

For instance, Muhammad and Mazhar (2018) who carried out a study on entrepreneurial intentions among university students in Italy and established that gender had a positive relationship with entrepreneurial intentions which was defined in terms of self-employment and job creation. Furthermore, Cuong (2018) who investigated demographic factors, family background and prior self-employment on entrepreneurial intentions.

A study by Alexandros, Apostolos and Lampros (2012) while examining the role gender plays in the formation of entrepreneurial intention and its effect on personal attraction to entrepreneurship; it was revealed that there was a significant indirect effect of gender on entrepreneurial intention. A study carried out by Ndofirepi, Rambe and Dzansi (2018) on selected entrepreneurship students in a South African University of Technology to establish whether gender influences students' intention to participate in entrepreneurship and it was found that gender influence entrepreneurial intentions among students although male were influenced more than female students.

Further Sanchez and Orazio (2012) in their study titled 'Gender Differences and Attitudes in Entrepreneurial Intentions: The Role of Career Choice' concluded that gender influenced entrepreneurial intentions of an individual in that men were more influenced compared to women. Men felt themselves more efficient and oriented to create a new venture than women. Choitung, Hongyi and Kris (2012) for example, comparing the entrepreneurial intention between female and male engineering students in Hong Kong, supported that male students had more intentions of being entrepreneurs than female students. Another study by Long and Quan (2018) titled 'Do Gender and age make a difference in entrepreneurial intention of Vietnamese Adults?' concluded that gender significantly influenced entrepreneurial intention of Vietnamese adults although these differences were small.

Venkatapathy and Pretheaba (2014) carried out a study on postgraduate students in an Indian University. The study used the Theory of Planned Behavior (TPB) in which intentions were regarded as resulting from attitudes, perceived behavioral control and subjective norms. The study used stratified random sampling method. The sample size of the study was 176 students comprising of 92 males and 84 female students. The study revealed that there was statistically significant correlation between gender and entrepreneurial intention of students.

In most cases, female gender has many domestic roles to perform than male gender. This enables male to have a lot of time to thrive in entrepreneurship activities than female. Female also are believed to be less risk takers compared to male gender and most of entrepreneurship activities involve taking risks. This makes most of female gender not being interested in entrepreneurship activities. Also, age influence entrepreneurial intention of an individual where by older people have greater prior entrepreneurial experience than young people which makes it more likely for older people to transition from forming entrepreneurial intentions to engaging in entrepreneurial activity since majority of young people worldwide wish to get employment first so that they can be able to raise capital of starting a business. From the findings of this study, further research is recommended to assess the relationship between students' characteristics (gender and age) and self-employment, job creation and job seeking intentions in Kenyan Polytechnics especially in other parts of the country to establish whether the findings of this study hold using other methods of study apart from what the study has used.

#### 4.6 Teaching Methods in Entrepreneurship Education

It is in this section that objective two of the study was handled. The objective was to establish the teaching methods being used to teach entrepreneurship education and the research question "To what extent do teaching methods influence self-employment, job creation and job seeking intentions of entrepreneurship education students?" was to be answered. The following teaching methods were listed and the researcher wanted to know the frequency in which such methods were used by entrepreneurship tutors to teach entrepreneurship education and whether such methods have influence or not to self-employment, job creation and job seeking intentions of students after school. These methods were; lecture, group discussion, demonstration and modeling, field trip, question and answer method, brainstorming, use of resource person, project-based learning and application of ICT in teaching and learning processes. A 5-point Likert-type scale ranging from "All ways (5), Often (4), Sometime (3), rarely (2) to never" (1) was used. This scale was further collapsed to, frequently used (always + often), sometimes and not frequently used (rarely + never).

To test the effects these methods, have to self-employment, job creation and job seeking intentions of students after school, another five Likert scale was developed and this consisted of strongly agree, agree, neutral, disagree and strongly disagree. The scale was further collapsed to, has influence (strongly agree+ agree), undecided (neutral) and has no influence (strongly disagree + disagree).

The methods were analyzed one at a time and each method yielded three objectives and three hypotheses as follows

### **4.6.1** Hypothesis H0<sub>2.1</sub>: There is no statistically significant difference in selfemployment, job creation and job seeking intentions based on the frequency of use of lecture method. Self-employment and Lecture Method.

This hypothesis yielded other three hypothesis as below.

Hypothesis H0<sub>2.1.1</sub>: There is no statistically significant difference in selfemployment intentions based on the frequency of use of lecture method.

It was found that lecture method is frequently used by entrepreneurship tutors in the learning process of entrepreneurship education. This is because frequently used denoted by **"often + always"** has the highest percentage **229 (86.4%)** as compared to not frequently used which is denoted by **"never + rarely"** having the lowest percentage at **2 (0.8 %)**. It is also sometimes used by tutors, **34 (12.8 %)**. In general, lecture method is frequently used by tutors in the teaching and learning processes of entrepreneurship education.

It is also clearly shown that 238 (89.8 %) of the respondents confirm that lecture method influence self-employment intentions of students while 10 (3.8 %) of the respondents are not in agreement that lecture method influence self-employment intentions of students. Also 17 (6.4%) of the respondents are neutral whether the method influence or it does not influence self-employment intentions of students as indicated in table 4.

To test the relationship between lecture method and self-employment intentions of students, Freeman-Halton test was performed and the results indicated that lecture

method and self-employment intentions of students have statistical significant relationship as being indicated by a p-value (p=.0137). Therefore, hypothesis H0<sub>2.1.1</sub> was rejected. This finding implies that the influence of lecture method on self-employment intentions is dependent on the frequency of lecture method usage although the influence is very small as indicated in table 4

# Hypothesis H0<sub>2.1.2</sub>: There is no statistically significant difference in job creation intentions based on the frequency of use of lecture method.

It was established that lecture method is frequently used and also it influence job creation intention of students. This is because, **216 (81.5 %)** of the respondents confirm that lecture method does influence job creation intentions of students while **15 (5.7 %)** of the respondents are not in agreement that lecture method does influence job creation intentions of students. On the other hand, 34 (12.8%) of the respondents are neutral whether lecture method influence job creation intentions of the students or not as indicated in table 4

To test the relationship between lecture method and job creation intentions of students, Freeman-Halton test was performed and the results indicated that lecture method and job creation intentions of students have no statistical significant relationship as being indicated by a p-value (p=.6097). Therefore, hypothesis  $H0_{2.1.2}$  was accepted. This finding implies that the influence of lecture method on job creation intentions is independent on the frequency of lecture method usage.

## H0<sub>2.1.3</sub>: There is no statistically significant difference in job seeking intentions based on the frequency of use of lecture method.

It was established that the difference between respondents who support that lecture method influence job seeking intention and those respondents who do not support that lecture method influence job seeking intentions of students is very small. As being shown in the table, **95(35.8 %)** of the respondents confirm that lecture method does influence job seeking intentions of students while **89 (33.6 %)** of the respondents are not in agreement that lecture method does influence job seeking intention does influence job seeking intentions of students were undecided whether lecture method does influence job seeking intentions of students or not as indicated in table 4

To test the relationship between lecture method and job seeking intentions of students, Freeman-Halton test was performed and the results indicated that lecture method and job seeking intentions of students have statistical significant relationship as being indicated by a p-value (p=.002). Therefore, hypothesis  $H0_{2.1.3}$  was rejected. This finding implies that the influence of lecture method on job seeking intentions is dependent on the frequency of lecture method usage as indicated in table 4.

Table 4: Analysis of the difference in self-employment, job creation and jobseeking intentions based on the frequency of use of lecture method.

Hypothesis.	Descriptive statistics	Method of analysis	P-value less than 0.05 considered significance	Null hypothesis accepted or rejected	Variable relationship
H0 <sub>2.1</sub> . Lecture and Self- employment	Frequently used 229 (86.4%) Not Frequently used 2 (0.8%) Sometimes used 34 (12.8%)	Freeman- Halton Test	0.0137	Rejected	The frequency of use of lecture is related to students' Self- employment intentions although the relationship is very small.
H0 <sub>2.2</sub> . Lecture and Job creation	Frequently used 229 (86.4%) Not Frequently used 2 (0.8%) Sometimes used 34 (12.8%)	Freeman- Halton Test	0.6097	Accepted	The frequency of use of lecture is not related to students' job creation intentions
H2.3 Lecture and Job seeking	Frequently used 229 (86.4%) Not Frequently used 2 (0.8%) Sometimes used 34 (12.8%)	Freeman- Haltom Test	0.002	Rejected	The frequency of use of lecture is related to students' job seeking intentions

# 4.6.2 Hypothesis H0<sub>2.2</sub>: There is no statistically significant difference between demonstration and modeling and self-employment, job creation and job seeking intentions of students

This hypothesis yielded three other hypotheses

# Hypothesis H0<sub>2.2.1</sub>: There is no statistically significant difference between demonstration and modeling and self-employment intentions of students.

It was established that demonstration and modeling method is not frequently used by entrepreneurship tutors in the learning process of entrepreneurship education. This is because not frequently used denoted by "never + rarely" has the highest percentage **159 (61.9%)** as compared to "frequently used" which is denoted by "often + always" having the lowest percentage at 46 (17.9 %). Demonstration and modeling method is also sometimes used by tutors, **52 (20.2 %)**.

It is also being shown that demonstration and modeling method influence selfemployment intentions of students. This is because, 231(89.9 %) of the respondents confirm that demonstration and modeling method does influence self-employment intentions of students while 10 (3.9 %) of the respondents are not in agreement that demonstration and modeling method does influence self-employment intentions of students. on the other hand, 16 (6.2 %) of the respondents were undecided whether demonstration and modeling method does influence self-employment intention of students or not as in table 5.

To test the relationship between demonstration and modeling method and selfemployment intentions of students, Freeman-Halton test was performed and the results indicated that demonstration and modeling method and self-employment intentions of students have no statistical significant relationship as being indicated by a p-value (p=.2509). Therefore, hypothesis H0<sub>2.2.1</sub> was accepted. This finding implies that the influence of demonstration and modeling method on self-employment intentions is independent on the frequency of demonstration and modeling method usage.

# Hypothesis H0<sub>2.2.2</sub>: There is no statistically significant difference between demonstration and modeling and job creation intentions of students.

Demonstration and modeling method is not frequently used. It is also being shown that demonstration / modeling method influence job creation intentions of students. This is because, **211(82.1 %)** of the respondents confirm that demonstration and modeling method does influence job creation intentions of students while **14 (5.4 %)** of the respondents are not in agreement that demonstration and modeling method does influence job creation intentions of students. On the other hand, **32 (12.5 %)** of the respondents were undecided whether demonstration and modeling method does influence job creation intention of students or not as in table **5**.

To test the relationship between demonstration and modeling method and job creation intentions of students, Freeman-Halton test was performed and the results indicated that demonstration and modeling method and job creation intentions of students have no statistical significant relationship as being indicated by a p-value (p=.2545). Therefore, hypothesis **H0**<sub>2.2.2</sub> was accepted. This finding implies that the influence of demonstration and modeling method on job creation intentions is independent on the frequency of demonstration and modeling method usage as indicated in table 5

# Hypothesis H0<sub>2.2.3</sub>: There is no statistically significant difference between demonstration and modeling and job seeking intentions of students

It was found that the difference between respondents who support that demonstration and modeling method influence job seeking intention and those respondents who do not support that demonstration and modeling method influence job seeking intentions of students is very small. As being shown in the table, **94** (**36.6** %) of the respondents confirm that this method does influence job seeking intentions of students while **83** (**32.3%**) of the respondents are not in agreement that this method does influence job seeking intentions of students. On the other hand, **81**(**30.6%**) of the respondents were undecided whether this method does influence job seeking intentions of students or not as indicated in table **5**.

To test this hypothesis, a chi-square of independence test was performed. This analysis indicated that there was statistically significant difference as shown by the chi-square value ( $x^2 = 22.805$ , p=0.000). Therefore, hypothesis H0<sub>2.2.3</sub> was rejected. This finding implies that job seeking intentions is dependent on frequency of use of demonstration/modeling method as in table 5.

# Table 5: Analysis of the difference in self-employment, job creation and jobseeking intentions based on the frequency of use of Demonstration andModeling method.

Hypothesis.	Descriptive statistics	Method of analysis	P-value less than 0.05 considered significance	Null hypothesis accepted or rejected	Variable relationship
H02.4. Demonstration /Modeling and Self- employment	Frequently used 46 (17.9%) Not Frequently used 159 (61.9%) Sometimes used 52 (20.2%)	Freeman- Halton Test	0.2509	Accepted	The frequency of use of demonstration /modeling is not related to students' Self- employment intentions.
H02.5. Demonstration /Modeling and Job creation	Frequently used 46 (17.9%) Not Frequently used 159 (61.9%) Sometimes used 52 (20.2%)	Freeman- Halton Test	0.2545	Accepted	The frequency of use of demonstration /modeling not is related to students' job creation intentions.
H02.6. Demonstration /Modeling and Job seeking	Frequently used 46 (17.9%) Not Frequently used 159 (61.9%) Sometimes used 52 (20.2%)	Chi-square of independence Test	(x <sup>2</sup> =22.805, p=0.000)	Rejected	The frequency of use of demonstration /modeling is related to students' job seeking intentions.

#### 4.6.3 Hypothesis H0<sub>2.3</sub>: There is no statistically significant difference between problem-based learning method and self-employment, job creation and job seeking intentions of students

This hypothesis yielded other three hypotheses as below

# Hypothesis H0<sub>2.3.1</sub>: There is no statistically significant difference between problem-based learning method and self-employment intentions of students.

It was established that problem-based learning method is not frequently used by entrepreneurship tutors in the learning process of entrepreneurship education. This is because not frequently used denoted by "never + rarely" has the highest percentage **125** (49.4%) as compared to "frequently used" which is denoted by "often + always" having the lowest percentage at 43 (17%). Problem- based learning method is also sometimes used by tutors as shown 85 (33.6%).

It is also being shown that problem- based learning method influence self-employment intentions of students. This is because, **229** (**90.5** %) of the respondents confirm that problem -based learning method does influence self-employment intentions of students while **9** (**3.6**%) of the respondents are not in agreement that problem- based learning method does influence self-employment intentions of students. On the other hand, **15** (**5.9** %) of the respondents were undecided whether problem- based learning method does influence self-employment intention of students or not as indicated in table 6.

To test the relationship between problem-based learning method and self-employment intentions of students, Freeman-Halton test was performed and the results indicated that problem-based learning method and self-employment intentions of students have no statistical significant relationship as being indicated by a p-value (p=.4351). Therefore, hypothesis H0<sub>2.3.1</sub> was accepted. This finding implies that the influence of problem-

based learning method on self-employment intentions is independent on the frequency of problem-based learning method usage as indicated in table 6.

#### Hypothesis H0<sub>2.3.2</sub>: There is no statistically significant difference between problem -based learning method and job creation intentions of students

It is also being shown that problem- based learning method has a positive influence on job creation intentions of students. This is because, **207** (**81.8** %) of the respondents confirm that problem -based learning method does influence job creation intentions of students while **14** (**5.5**%) of the respondents are not in agreement that problem- based learning method does influence job creation intentions of students. On the other hand, **32** (**12.6** %) of the respondents were undecided whether problem -based learning method does influence job creation intention of students or not as per table 6

To test the relationship between problem-based learning method and job creation intentions of students, Freeman-Halton test was performed and the results indicated that problem-based learning method and job creation intentions of students have no statistical significant relationship as being indicated by a p-value (**p=.1003**). Therefore, hypothesis **H0**<sub>2.3.2</sub> was accepted. This finding implies that the influence of problem-based learning method on job creation intentions is independent on the frequency of problem-based learning method usage as in table 6

#### Hypothesis H0<sub>2.9</sub>: There is no statistically significant difference between problem -based learning method and job seeking intentions of students

It was found that the difference between respondents who support that problem -based learning method influence job seeking intention and those respondents who do not support that problem -based learning method influence job seeking intentions of students is very small. As being shown in the table, **92** (**36.4** %) of the respondents confirm that this method does influence job seeking intentions of students while **85** (**33.6**%) of the respondents are not in agreement that this method does influence job seeking intentions of students. On the other hand, **76** (**30.0**%) of the respondents were undecided whether this method does influence job seeking intentions of students or not.

To test the relationship between problem-based learning method and job seeking intentions of students, a Chi-square of independence test was performed and the results indicated that problem-based learning method and job seeking intentions of students have statistical significant relationship as being indicated by a p-value (p=.014). Therefore, hypothesis  $H0_{2,3,3}$  was rejected. This finding implies that the influence of problem-based learning method on job seeking intentions is dependent on the frequency of problem-based learning method usage as per table 6.

# Table 6: Analysis of the difference in self-employment, job creation and job seeking intentions based on the frequency of use of Problem-Based Learning method.

Hypothesis.	Descriptive statistics	Method of analysis	P-value less than 0.05 conside⊤ed significarce	Null hypothesis accepted or rejected	Variable relationship
H02.7 Problem- Based Learning and Self- employment	Frequently used <b>43</b> (17%) Not Frequently used 125 (49.4%) Sometimes used <b>85</b> (33.6%)	Freeman- Halton Test	0.4351	Accepted	The frequency of use of problem- based learning is not related to students' Self- employment intentions.
H02.8 Problem- Based Learning and job creation	Frequently used <b>43</b> (17%) Not Frequently used 125 (49.4%) Sometimes used <b>85</b> (33.6%)	Freeman- Halton Test	0.1003	Accepted	The frequency of use of problem- based learning is not related to students' job creation intentions
H02.9 Problem- Based Learning and job seeking	Frequently used <b>43</b> (17%) Not Frequently used 125 (49.4%) Sometimes used <b>85</b> (33.6%)	Chi-square of independence Test	0.014	Rejected	The frequency of use of problem- based learning is related to students' job seeking intentions.

# 4.6.4 Hypothesis H0<sub>2.4</sub>: There is no statistically significant difference between ICT method and self-employment, job creation and job seeking intentions of students

This hypothesis yielded three other hypotheses below.

# Hypothesis H0<sub>2.4.1</sub>: There is no statistically significant difference between ICT method and self-employment intentions of students

It was found that ICT method is not frequently used by entrepreneurship tutors in the learning process of entrepreneurship education. This is because not frequently used denoted by "never + rarely" has the highest percentage **146** (**56.2%**) as compared to "frequently used" which is denoted by "often + always" having the lowest percentage at **79** (**30.4** %). ICT method is also sometimes used by tutors as indicated by the table, **35** (**13.5%**).

It is also being shown that ICT method influence self-employment intentions of students. This is because, 233 (89.6 %) of the respondents confirm that ICT method does influence self-employment intentions of students while 10 (3.8%) of the respondents are not in agreement that ICT method does influence self-employment intentions of students. On the other hand, 17 (6.5%) of the respondents were undecided whether ICT method does influence self-employment intention of students or not.

To test the relationship between ICT method and self-employment intentions of students, Freeman-Halton test was performed and the results indicated that ICT method and self-employment intentions of students have no statistical significant relationship as being indicated by a p-value (p=.6437). Therefore, hypothesis  $H0_{2.4.1}$  was accepted. This finding implies that the influence of ICT method on self-employment intentions is independent on the frequency of ICT method usage as per table 7.

# Hypothesis H0<sub>2.4.2</sub>: There is no statistically significant difference between ICT method and job creation intentions of students

It was found that ICT method is not frequently used by entrepreneurship tutors and also influence job creation intentions of students since **211** (**81.2** %) of the respondents confirm that ICT method does influence job creation intentions of students while **15** (**5.8**%) of the respondents are not in agreement that ICT method does influence job creation intentions of students. On the other hand, **34**(**13.0**%) of the respondents were undecided whether ICT method does influence job creation intention of students or not.

To test the relationship between ICT method and job creation intentions of students, Freeman-Halton test was performed and the results indicated that ICT method and job creation intentions of students have no statistical significant relationship as being indicated by a p-value (p=.1088). Therefore, hypothesis H02.4.2 was accepted. This finding implies that the influence of ICT method on job creation intentions is independent on the frequency of ICT method usage.

### Hypothesis H0<sub>2.4.3</sub>: There is no statistically significant difference between ICT method and job seeking intentions of students

The findings established that ICT method is not frequently used by tutors in the teaching and learning processes of entrepreneurship education. It is also being shown that ICT method influence job seeking intentions of students. As being indicated in the table below, 92 (**35.4** %) of the respondents confirm that ICT method does influence job seeking intentions of students while **89** (**34.2**%) of the respondents are not in agreement that ICT method does influence job seeking intentions of students. On the other hand, **79** (**30.4**%) of the respondents were undecided whether ICT method does influence job seeking intention of students or not.

To test this hypothesis, a chi-square independence test was performed. This analysis indicated that there was statistically significant difference as shown by the Pearson chi-square value ( $x^2 = 38.540$ , p = .000). This hypothesis was rejected. This finding implies that job seeking intentions is dependent on frequency of use of ICT method.

Hypothesis.	Descriptive statistics	Method of analysis	P-value less than 0.05 considered significance	Null hypothesis accepted or rejected	Variable relationship
H02.10 ICT and Self- employment	Frequently         used       79         (30.4%)	Freeman- Halton Test	0.6437	Accepted	The frequency of use of ICT is not related to students' Self- employment intentions.
H02.11 ICT and Job creation	Frequently         used       79         (30.4%)       Not Frequently         used       146         (56.2%)       Sometimes         used       35         (13.5%)	Freeman- Halton Test	0.1088	Accepted	The frequency of use of ICT is not related to students' job creation intentions.
H02.12 ICT and Job creation	Frequently         used       79         (30.4%)         Not Frequently         used       146         (56.2%)         Sometimes         used       35         (13.5%)	Chi-square of independence Test	(x <sup>2</sup> =38.540, p=0.000)	Rejected	The frequency of use of ICT is related to students' job seeking intentions.

Table 7: Analysis of the difference in self-employment, job creation and jobseeking intentions based on the frequency of use of ICT method

#### 4.6.5 Hypothesis H0<sub>2.5</sub>.: There is no statistically significant difference between field trip method and self-employment, job creation and job seeking intentions of students

This hypothesis yielded three other hypotheses below.

#### Hypothesis H0<sub>2.5.1</sub>: There is no statistically significant difference between field trip method and self-employment intentions of students

It was established that field trip method is not frequently used by entrepreneurship tutors in the learning process of entrepreneurship education. This is because not frequently used denoted by "never + rarely" has the highest percentage **176 (68%)** as compared to "frequently used" which is denoted by "often + always" having the lowest percentage at **32 (12.4 %)** .Field trip method is also sometimes used by tutors as indicated by the table, **51 (19.7%)**. In general, field trip method is not frequently used by tutors in the teaching and learning processes of entrepreneurship education because, **234 (90.3 %)** of the respondents confirm that field trip method does influence self-employment intentions of students while **10 (3.9%)** of the respondents are not in agreement that field trip method does influence self-employment intentions of students were undecided whether field trip method does influence self-employment intention of students or not as per table 8

To test the relationship between field trip method and self-employment intentions of students, Freeman-Halton test was performed and the results indicated that field trip method and self-employment intentions of students have no statistical significant relationship as being indicated by a p-value (p=.2998). Therefore, hypothesis H0<sub>2.5.1</sub> was accepted. This finding implies that the influence of field trip method on self-employment intentions is independent on the frequency of field trip method usage.

#### Hypothesis H0<sub>2.5.2</sub>: There is no statistically significant difference between field trip method and job creation intentions of students

Field trip method is not frequently used by tutors in the teaching and learning processes of entrepreneurship education as per table 8. It is also being shown that field trip method influence job creation intentions of students. This is because, **234** (**90.3** %) of the respondents confirm that field trip method does influence job creation intentions of students are not in agreement that field trip method does influence job creation intentions of students. On the other hand, **15** (**5.8%**) of the respondents were undecided whether field trip method does influence job creation intentions intentions of students.

To test the relationship between field trip method and job creation intentions of students, Freeman-Halton test was performed and the results indicated that field trip method and job creation intentions of students have statistical significant relationship as being indicated by a p-value (p=.0487). Therefore, hypothesis H0<sub>2.5.2</sub> was rejected. This finding implies that the influence of field trip method on job creation intentions is dependent on the frequency of field trip method usage as indicated in table 8.

#### Hypothesis H0<sub>2.5.3</sub>: There is no statistically significant difference between field trip method and job seeking intentions of students

From table 8, it is being indicated that field trip in not frequently used and it has an influence on job seeking intentions of students because, **93** (**35.9** %) of the respondents confirm that field trip method does influence job seeking intentions of students while **85** (**32.8**%) of the respondents are not in agreement that field trip method does influence job seeking intentions of students. On the other hand, **81** (**31.3**%) of the respondents

were undecided whether field trip method does influence job seeking intention of students or not.

To test this hypothesis, a chi-square of independence test was performed. This analysis indicated that there was statistically significant difference as shown by the Pearson chi-square value ( $x^2$  (2) =15.922, p=.003). This hypothesis was rejected. This finding implies that job seeking intentions is dependent on frequency of use of field trip method as indicated in table 8.

Table 8: Analysis of the difference in self-employment, job creation and jobseeking intentions based on the frequency of use of field trip method

Hypothesis.	Descriptive statistics	Method of analysis	P-value less than 0.05 considered significance	Null hypothesis accepted or rejected	Variable relationship
H02.13 Field Trip and Self- employment	Frequently used 32 (12.4%) Not Frequently used 176 (68%) Sometimes used 51 (19.7%)	Freeman- Halton Test	0.2998	Accepted	The frequency of use of Field Trip is not related to students' Self- employment intentions.
H02.14 Field Trip and Job creation	Frequently used 32 (12.4%) Not Frequently used 176 (68%) Sometimes used 51 (19.7%)	Freeman- Halton Test	0.0487	Rejected	The frequency of use of field trip is related to students' job creation intentions although the relationship is small.
H02.15 Field Trip and Job seeking	Frequently used 32 (12.4%) Not Frequently used 176 (68%) Sometimes used 51 (19.7%)	Chi-square of independence Test	(x <sup>2</sup> =15.922, p=0.003)	Rejected	The frequency of use of field trip is related to students' job seeking intentions.

#### 4.6.6 Hypothesis H02.6: There is no statistically significant difference between group discussion method and self-employment, job creation and job seeking intentions of students

This hypothesis yielded three more hypotheses below.

# Hypothesis H0<sub>2.6.1</sub>: There is no statistically significant difference between group discussion method and self-employment intentions of students.

From table 9 it is being shown that group discussion method is frequently used by entrepreneurship tutors in the learning process of entrepreneurship education. This is because frequently used denoted by "often + always" has the highest percentage **95** (**36.1%**) as compared to "not frequently used" which is denoted by "never + rarely" having the lowest percentage at **90** (**34.2** %). Group discursion method is also sometimes used by tutors as indicated by the table, **78** (**29.7%**). It is also being shown that group discussion method influence self-employment intentions of students because, **237** (**90.1** %) of the respondents confirm that group discussion method does influence self-employment intentions of students while **10** (**3.8%**) of the respondents are not in agreement that group discussion method does influence self-employment intentions of students. Also **16** (**6.1%**) of the respondents were undecided whether group discussion method does influence self-employment intention of students or not.

To test this hypothesis, a chi-square of independence test was performed. This analysis indicated that there was statistically significant difference as shown by a p-value ( $x^2 = 10.082$ , p=.029). This hypothesis was rejected. This finding implies that a self-employment intention is dependent on the frequency of use of group discussion method as indicated in table 9

# Hypothesis H0<sub>2.6.2</sub>: There is no statistically significant difference between group discussion method and job creation intentions of students

From table 9, it is being shown that group discussion method is frequently used by entrepreneurship tutors in the learning process of entrepreneurship education and it influence job creation intentions of students as indicated in the table since **215** (**81.7** %) of the respondents confirm that group discussion method does influence job creation intentions of students while **15** (**5.7**%) of the respondents are not in agreement that group discussion method does influence job creation intentions of students were undecided whether group discussion method does influence job creation intentions of students were undecided whether group discussion method does influence job creation intention of students or not.

To test this hypothesis, a chi-square of independence test was performed. This analysis indicated that there was statistically significant difference as shown by the Pearson chi-square value ( $x^2 = 10.431$ , p=.034). This hypothesis was rejected. This finding implies that a job creation intention is dependent on the frequency of use of group discussion method.

# Hypothesis H0<sub>2.6.3</sub>: There is no statistically significant difference between group discussion method and job seeking intentions of students

It was established that group discussion method is frequently used by entrepreneurship tutors in the learning process of entrepreneurship education and also influence job seeking intentions of students as **94** (**35.7** %) of the respondents confirm that group discussion method does influence job seeking intentions of students while **89** (**33.8**%) of the respondents are not in agreement that group discussion method does influence job seeking intentions of students. On the other hand, **80** (**30.4**%) of the respondents

were undecided whether group discussion method does influence job seeking intention of students or not.

To test this hypothesis, a chi-square of independence test was performed. This analysis indicated that there was statistically significant difference as shown by the Pearson chi-square value ( $x^2 = 39.088$ , p=.000). This hypothesis was rejected. This finding implies that job seeking intention is dependent on the frequency of use of group discussion method.

 Table 9: Analysis of the difference in self-employment, job creation and job seeking intentions based on the frequency of use of Group Discussion method

Hypothesis.	Descriptive statistics	Method of analysis	P-value less than 0.05 considered significance	Null hypothesis accepted or rejected	Variable relationship
H02.16 Group Discussion and Self- employment	Frequently         used       95         (36.1%)       90         Not Frequently       90         (34.2%)       50         Sometimes       98         (29.7%)       78	Chi-square of independe nce Test	(x <sup>2</sup> =10.082, p=0.029)	Rejected	The frequency of use of group discussion is related to students' Self- employment intentions.
H02.17 Group Discussion and Job creation	Frequently       95         (36.1%)       90         Not Frequently       90         (34.2%)       Sometimes         used       78         (29.7%)       78	Chi-square of independe nce Test	(x = 10.431, p=0.034)	Rejected	The frequency of use of group discussion is related to students' job creation intentions.
H02.18 Group Discussion and Job seeking	Frequently         used       95         (36.1%)       90         Not Frequently       90         (34.2%)       Sometimes         used       78         (29.7%)       50	Chi-square of independe nce Test	(x <sup>2</sup> =39.088, p=0.000)	Rejected	The frequency of use of group discussion is related to students' job seeking intentions.

#### 4.6.7 Hypothesis H0<sub>2.7</sub>: There is no statistically significant difference between brainstorming method and self-employment, job creation and job seeking intentions of students

This hypothesis yielded three more hypotheses as below.

# Hypothesis H0<sub>2.7.1</sub>: There is no statistically significant difference between brainstorming method and self-employment intentions of students

It was found that brainstorming method is not frequently used by entrepreneurship tutors in the learning process of entrepreneurship education. This is because frequently used denoted by "often + always" has the lowest percentage, **61** (**23.9%**) as compared to "not frequently used" which is denoted by "never + rarely" having the highest percentage at **117** (**45.9 %**). Brainstorming method is also sometimes used by tutors as indicated by the table, **77** (**30.2%**). It is also being shown that brainstorming method influence self-employment intentions of students because, **231** (**90.6 %**) of the respondents confirm that brainstorming method does influence self-employment intentions of students are not in agreement that brainstorming method does influence self-employment intentions of students. On the other hand, 14 (**5.5%**) of the respondents were undecided whether brainstorming method does influence self-employment intention of students or not.

To test the relationship between brainstorming method and self-employment intentions of students, Freeman-Halton test was performed and the results indicated that brainstorming method and self-employment intentions of students have no statistical significant relationship as being indicated by a p-value (p=.0980). Therefore, hypothesis **H0**<sub>2.7.1</sub> was accepted. This finding implies that the influence of

brainstorming method on self-employment intentions is independent on the frequency of brainstorming method usage.

#### Hypothesis H0<sub>2.7.2</sub>: There is no statistically significant difference between brainstorming method and job creation intentions of students

It was found that brainstorming method is not frequently used by entrepreneurship tutors in the learning process of entrepreneurship education and also it influences job creation intentions of students since **209** (**82.0** %) of the respondents confirm that brainstorming method does influence job creation intentions of students while **13** (**5.1**%) of the respondents are not in agreement that brainstorming method does influence job creation intentions of students. On the other hand, **33** (**5.5**%) of the respondents were undecided whether brainstorming method does influence job creation intention of students or not as indicated in table 10.

To test the relationship between brainstorming method and job creation intentions of students, Freeman-Halton test was performed and the results indicated that brainstorming method and job creation intentions of students have statistical significant relationship as being indicated by a p-value (p=.0416). Therefore, hypothesis H0<sub>2.7.2</sub> was rejected. This finding implies that the influence of brainstorming method on job creation intentions is dependent on the frequency of brainstorming method usage as indicated in table 10

# Hypothesis H0<sub>2.2.3</sub>: There is no statistically significant difference between brainstorming method and job seeking intentions of students

From 10, it is being shown that brainstorming method is not frequently used by entrepreneurship tutors in the learning process of entrepreneurship education. It is also being shown that brainstorming method influence job seeking intentions of students since from the table, **91** (**35.7** %) of the respondents confirm that brainstorming method does influence job seeking intentions of students while **85** (**33.3**%) of the respondents are not in agreement that brainstorming method does influence job seeking intentions of students on the other hand, **79** (**31.0**%) of the respondents were undecided whether brainstorming method does influence job seeking intention of students or not.

To test this hypothesis, a chi-square of independence test was performed. This analysis indicated that there was statistically significant difference as shown by the Pearson chi-square value ( $x^2 = 11.727$ , p=.020). This hypothesis was rejected. This finding implies that job seeking intention is dependent on the frequency of use of brainstorming method as indicated in table 10.

Hypothesis.	Descriptive statistics	Method of analysis	P-value less than 0.05 considered significance	Null hypothesis accepted or rejected	Variable relationship
H02.19 Brainstorming and Self- employment	Frequently used <b>61</b> ( <b>23.9%</b> ) Not Frequently used <b>117</b> ( <b>45.9%</b> ) Sometimes used <b>77</b> ( <b>30.2%</b> )	Freeman- Halton Test	0.0980	Accepted	The frequency of use of brainstorming is not related to students' Self- employment intentions.
H02.20 Brainstorming and Job creation	Frequently used <b>61</b> ( <b>23.9%</b> ) Not Frequently used <b>117</b> ( <b>45.9%</b> ) Sometimes used <b>77</b> ( <b>30.2%</b> )	Freeman- Halton Test	0.0416	Rejected	The frequency of use of brainstorming is related to students' job creation intentions although the relationship is small.
H02.21 Brainstorming and Job seeking	Frequently used <b>61</b> ( <b>23.9%</b> ) Not Frequently used <b>117</b> ( <b>45.9%</b> ) Sometimes used <b>77</b> ( <b>30.2%</b> )	Chi-square of independence Test	(x =11.727, p=0.020)	Rejected	The frequency of use of brainstorming is related to students' job seeking intentions.

Table 10: Analysis of the difference in self-employment, job creation and jobseeking intentions based on the frequency of use of Brainstorming method

#### 4.6.8 Hypothesis H0<sub>2.8</sub>: There is no statistically significant difference between use of resource person method and self-employment, job creation and job seeking intentions of students

This hypothesis yielded three hypotheses below.

# Hypothesis H0<sub>2.8.1</sub>: There is no statistically significant difference between use of resource person method and self-employment intentions of students

It was established that use of resource person method is not frequently used by entrepreneurship tutors in the learning process of entrepreneurship education. This is because frequently used denoted by "often + always" has the lowest percentage, **42** (**16.3%**) as compared to "not frequently used" which is denoted by "never + rarely" having the highest percentage at **172** (**66.9** %). Use of resource person method is also sometimes used by tutors as indicated by the table, **43** (**16.7%**). It is also being shown that use of resource person method influence self-employment intentions of students while 10 (3.9%) of the respondents are not in agreement that use of resource person method does influence self-employment intentions of students. On the other hand, **15** (**5.8%**) of the respondents were undecided whether use of resource person method does influence self-employment intentions of students of resource person method does influence self-employment intentions of students.

To test the relationship between use of resource person method and self-employment intentions of students, Freeman-Halton test was performed and the results indicated that use of resource person method and self-employment intentions of students have no statistical significant relationship as being indicated by a p-value (p=.4582). Therefore, hypothesis H0<sub>2.8.1</sub> was accepted. This finding implies that the influence of use of

resource person method on self-employment intentions is independent on the frequency of use of resource person method usage.

# Hypothesis H0<sub>2.8.2</sub>: There is no statistically significant difference between use of resource person method and job creation intentions of students

It was found that use of resource person method is not frequently used by entrepreneurship tutors in the learning process of entrepreneurship education and also this method influence job creation intentions of students since **208** (**80.9** %) of the respondents confirm that use of resource person method does influence job creation intentions of students while **15** (**5.8**%) of the respondents are not in agreement that use of resource person method does influence. On the other hand, **34** (**13.2**%) of the respondents were undecided whether use of resource person method does influence job creation intention of students or not.

To test the relationship between use of resource person method and job creation intentions of students, Freeman-Halton test was performed and the results indicated that use of resource person method and job creation intentions of students have no statistical significant relationship as being indicated by a p-value (p=.0725). Therefore, hypothesis H0<sub>2.8.2</sub> was accepted. This finding implies that the influence of use of resource person method on job creation intentions is independent on the frequency of use of job creation method as shown table 11

# Hypothesis H0<sub>2.8.3</sub>: There is no statistically significant difference between use of resource person method and job seeking intentions of students

It was established that the use of resource person method is not frequently used by entrepreneurship tutors in the learning process of entrepreneurship education and it influence job seeking intentions of students as per the table since **92** (**35.8** %) of the respondents confirm that use of resource person method does influence job seeking intentions of students while **86** (**33.5**%) of the respondents are not in agreement that use of resource person method does influence job seeking intentions of students. On the other hand, **79** (**30.7**%) of the respondents were undecided whether use of resource person method does influence job seeking intention of students or not.

To test this hypothesis, a chi-square of independence test was performed. This analysis indicated that there was statistically significant difference as shown by the Pearson chi-square value ( $x^2 = 31.118$ , p=0.000). This hypothesis was rejected. This finding implies that job seeking intention is dependent on the frequency of use of resource person method as indicated in table 11.

Hypothesis.	Descriptive Statistics	Method Of Analysis	P-Value Less Than 0.05 Considered Significance	Null Hypothesis Accepted or Rejected	Variable Relationship
H02.22 Resource person Self- employment	Frequently used 42 (16.3%) Not Frequently used 172 (66.9%) Sometimes used 43 (16.7%)	Freeman- Halton Test	0.4582	Accepted	The frequency of use of resource person is not related to students' Self- employment intentions.
H02.23 Resource Person and Job creation	Frequently used 42 (16.3%) Not Frequently used 172 (66.9%) Sometimes used 43 (16.7%)	Freeman- Halton Test	0.0725	Accepted	The frequency of use of resource person is not related to students' job creation intentions.
H02.24 Resource Person and Job seeking	Frequently used 42 (16.3%) Not Frequently used 172 (66.9%) Sometimes used 43 (16.7%)	Chi-square of independence Test	(x <sup>2</sup> =31.118, p=0.000)	Rejected	The frequency of use of resource person is related to students' job seeking intentions.

 Table 11: Analysis of the difference in self-employment, job creation and job

 seeking intentions based on the frequency of use of Resource Person method

4.6.9 Hypothesis H0<sub>2.9</sub>: There is no statistically significant difference between question-and-answer method and self-employment, job creation and job seeking intentions of students

This hypothesis yielded three more hypotheses below.

Hypothesis H0<sub>2.9.1</sub>: There is no statistically significant difference between question-and-answer method and self-employment intentions of students

It was found that use of question-and-answer method is frequently used by entrepreneurship tutors in the learning process of entrepreneurship education. This is because frequently used denoted by "often + always" has the highest percentage, **105** (40.5%) as compared to "not frequently used" which is denoted by "never + rarely" having the lowest percentage at **85** (32.8%). Question and answer method is also sometimes used by tutors as indicated by the table, **69** (26.6%).

In general, use of question-and-answer method is frequently used by tutors in the teaching and learning processes of entrepreneurship education.

It is also being shown that use of question-and-answer method influence selfemployment intentions of students since 232 (89.6 %) of the respondents confirm that question and answer method does influence self-employment intentions of students while 10 (3.9%) of the respondents are not in agreement that use of question-andanswer method does influence self-employment intentions of students. On the other hand, 17 (6.7%) of the respondents were undecided whether use of question-andanswer method does influence self-employment intention of students or not.

To test the relationship between use of question-and-answer method and selfemployment intentions of students, Freeman-Halton test was performed and the results indicated that question and answer method and self-employment intentions of students have statistical significant relationship as being indicated by a p-value (**p=.0112**). Therefore, hypothesis **H02.9.1** was rejected. This finding implies that the influence of question-and-answer method on self-employment intentions is dependent on the frequency of use of question-and-answer method

# Hypothesis H0<sub>2.9.2</sub>: There is no statistically significant difference between question-and-answer method and job creation intentions of student

It was found that use of question-and-answer method is frequently used by entrepreneurship tutors in the learning process of entrepreneurship education and also this method influence job creation intentions of students. From the table, **210** (**81.1** %) of the respondents confirm that question and answer method does influence job creation intentions of students while **15** (**5.8**%) of the respondents are not in agreement that use of question-and-answer method does influence job creation intentions of students. On the other hand, **34** (**13.1**%) of the respondents were undecided whether use of question-and-answer method does influence job creation intention of students or not.

To test the relationship between use of question-and-answer method and job creation intentions of students, Freeman-Halton test was performed and the results indicated that question and answer method and job creation intentions of students have statistical significant relationship as being indicated by a p-value (p=.0246). Therefore, hypothesis H02.9.2 was rejected. This finding implies that the influence of question-and-answer method on job creation intentions is dependent on the frequency of use of question-and-answer method.

## Hypothesis H0<sub>2.9.3</sub>: There is no statistically significant difference between question-and-answer method and job seeking intentions of students

It was found that use of question-and-answer method is frequently used by entrepreneurship tutors in the learning process of entrepreneurship education and also influence job seeking intentions of students since 94 (36.3 %) of the respondents confirm that question and answer method does influence job seeking intentions of students while 86 (33.2%) of the respondents are not in agreement that question-and-

answer method does influence job seeking intentions of students. On the other hand, **79** (**30.5%**) of the respondents were undecided whether use of question-and-answer method does influence job seeking intention of students or not.

To test this hypothesis, a chi-square of independence test was performed. This analysis indicated that there was statistically significant difference as shown by the Pearson chi-square value ( $x^2 = 19.248$ , p=.001). This hypothesis was rejected. This finding implies that job seeking intention is dependent of frequency of use question answer method as indicated in table in table 12

Table 12:Ar	nalysis of t	he difference	in se	elf-employment,	job	creation	and	job
seeking inter	ntions based	l on the frequ	ency o	of use of Question	n an	d Answer	met	hod

Hypothesis.	Descriptive Statistics	Method Of Analysis	P-Value Less Than 0.05 Considered Significance	Null Hypothesis Accepted Or Rejected	Variable Relationship
H02.25 Question/ Answer and self- employment	Frequently used 105 (40.5%) Not Frequently used 85(32.8) Sometimes used 69 (26.6%)	Freeman- Halton Test	0.0112	Rejected	The frequency of use of question/answer is related to students' Self- employment intentions.
H02.26 question /answer and job creation	Frequently used 105 (40.5%) Not Frequently used 85(32.8) Sometimes used 69 (26.6%)	Freeman- Halton Test	0.0246	Rejected	The frequency of use of question/answer is related to students' job creation intentions
H02.27 question/ answer and job seeking	Frequently used 105 (40.5%) Not Frequently used 85(32.8) Sometimes used 69 (26.6%)	Chi-square of independence Test	(x =19.248, p=0.001)	Rejected	The frequency of use of question/answer is related to students' job seeking intentions

Based on the above analysis, respondents were in agreement that entrepreneurship education is theoretically taught by entrepreneurship education tutors.

This is because, Practical methods or active methods like project- based learning, demonstration/modeling, use of resource persons, use of ICT in learning, brainstorming and field trips/ visits were not frequently used. Teaching methods like lecture method and question and answer method were frequently used.

Many researchers propose the use of practical methods in the teaching of entrepreneurship education. That learning by doing leave a big impact to learners and they may end up practicing entrepreneurship hence becoming self-employed.

Still on the acquisition of practical skills by students the researcher had to establish whether the polytechnics had business centers or not where students could apply what they had learned in class so that they could gain daily experience or practical skills by carrying out a descriptive statistic consisting of means and percentages. The respondents were either to accept (strongly agree + agree), reject (disagree + strongly disagree) or remain undecided whether polytechnics have business centers where they can acquire entrepreneurship practical skills.

From the table 13 it is clearly being shown that students rejected that the polytechnics in which they study have business enterprises where they can gain entrepreneurial experience in what they learn. This is being confirmed by **173** (**63.3%**) as compared to **58** (**21.9%**) of students who accepted that polytechnics have business centers where they practice what they have learned in class.

Presence of business centers						
	Frequency	Percentage				
Reject	173	63.3				
Undecided	34	12.8				
Accept	58	21.9				
Total	265	100				

 Table 13: Descriptive analysis for presence of business centers in the polytechnics

This shows that students are not exposed to practical entrepreneurial activities due lack of business centers in these institutions.

Further on acquisition of practical entrepreneurial skills, the researcher went ahead to find out whether the institutions have a platform where successful entrepreneurs are invited to interact with students to enable them gain practical entrepreneurial skills and be motivated to become entrepreneurs hence becoming self-employed and create jobs for others. The respondents were either to accept (always + often), reject (never + rarely) or remain undecided (sometimes) whether they interact with successful entrepreneurs by responding to the question "How often do successful entrepreneurs come to interact with you as entrepreneurial motivation speakers in the process of learning entrepreneurship education? In this case, a researcher carried out a descriptive statistic (frequency and percentages) as shown in the table 14. From the table 38 it shows that respondents rejected that they do interact with successful entrepreneurs. This is because, **199** (**74.8%**) confirmed that they do not interact with successful entrepreneurs.

Students' interaction with successful entrepreneurs						
	Frequency Percentage					
Reject	199	74.8				
Undecided	45	16.9				
Accept	22	8.3				
Total	266	100				

 Table 14: Descriptive analysis showing interaction of students and successful entrepreneurs

Still on the acquisition of practical skills and practicing the skills already acquired by these students to test whether students are ready to venture into businesses after school, the researcher established whether these students own some businesses or they operate some businesses by asking the students to respond to the question; Do you own or operate any business activities? The researcher carried out a descriptive statistic on this to find out whether students operate or own any business activities. Table 15 shows that **222 (84.4%)** of the students neither operate nor own any business activities while **34** (**15.6%**) of them run some businesses. This shows that students are not ready to venture into business activities so as to create jobs and be self-employed. Due to theoretical way of learning in these polytechnics, students are ready to be employed as opposed to job creation and self-employment.

Students' engagement in business activities while schooling		
	Frequency	Percentage
NO	222	84.4
YES	34	15.6
Total	263	100

 Table 15: Descriptive analysis for students' engagement in business activities

 while schooling

From the analysis above, students are in agreement that passive teaching methods are commonly used by tutors while teaching entrepreneurship education. The most used method in these two polytechnics is lecture method. Active methods that involve the learners are less used. Many scholars agree that lecture method is good when used to cover syllabus within a very short period of time but they disagree that the method has a great impact to learners in terms of involving them during learning processes to aid them acquire practical skills.

#### 4.7 Discussion of objective two: To establish the influence selected teaching methods have on self-employment, job creation and job seeking intentions of students

The aim of this objective was to establish the influence selected entrepreneurship teaching methods have on self-employment, job creation and job seeking intention of the students and also to establish which methods are mostly used by lecturers in the polytechnics where research took place. The researcher used the following hypothesis to establish this relationship.

# Hypothesis H 02: Selected teaching methods do not have significant influence on self-employment, job creation and job seeking intentions of students.

The frequency of use of Lecture method, group discussion, question and answer method, use of resource person, field trip, brainstorming, and problem-based learning, demonstration and modeling and use of ICT were established. The study also established the influence of each selected method on self-employment, job creation and job seeking intentions.

It was found that lecture method was frequently used since 86.4% of respondents confirmed and the method had a statistical significant relationship with self-employment intentions of students as it was indicated by Freeman-Halton test (**p=.0137**) being less than the value considered to be significant.

This finding is inconsistent with many researchers who established that lecture method insignificantly influenced self-employment intentions of students since it was termed as inactive teaching method. For example, Lettmayr (2011) carried out a study titled "Guidance supporting Europe's aspiring entrepreneurs. Policy and practice to harness future potential" and from the study, it was found that inactive methods are mostly used. However, while such methods are common and have an important part to play in information dissemination, they may not necessarily be the most effective methods of engaging students in entrepreneurial learning.

Wanjau and Mkala (2013) argue that the impact of entrepreneurship education on students' post-training career choice and practice is influenced by the teaching and assessment methodologies used in delivering entrepreneurship education lessons, teachers' personal interaction with entrepreneurship practitioners, and the availability of training resources. Citing Smith & Paton (2011), they further stated that using traditional methods, such as the lecture and its variant "chalk and talk" to teach entrepreneurship education, merely results in a knowledgeable person as these methods lack initiative for application. They concluded that entrepreneurs require experiential pedagogical interventions.

Another study by European Commission Enterprise and industry directorate-general (2018), it was found that traditional educational methods like lectures do not correlate well with the development of entrepreneurial thinking for self-employment. Akpan and Etor (2013) carried out a study on University lecturers' perception on entrepreneurship education as an employment strategy for graduate self-employment in South-South Nigeria, found that lecture method does not promote or encourage entrepreneurial behavior.

The researcher recommends another study on influence of lecture method on selfemployment intentions of students in Kenya and the study should take place in other parts of the country apart from where this study took place since this study took place when students and lecturers were busy preparing for final National exam and graduation so data collection was done in a hurry leading to some questionnaires being filled not as expected.

It was also established that the frequency of use of lecture method had no statistical significant relationship with job creation intentions of students as it was indicated by Freeman-Halton test (p=.609) being more than the value considered to be significant. This means that the more lecture method is used, the less students get influenced towards job creation after graduation and if they are not creating jobs then they are likely looking for jobs to work for others. It was also further revealed that there was statistical significant relationship between lecture method and job seeking intentions of students as it was indicated by Freeman-Halton test (p=.002) being less than the value considered to be significant. This implies that the more lecture method is used, the more students get influenced towards job seeking after graduation.

These findings are consistent with that of Ndyali (2016) who was interested to know why students from higher learning institutions in Tanzania remain jobless due job seeking mind set despite having acquired skills to either be self-employed or create jobs for others, it was confirmed from the study that majority of students learn through lectures and academic textbooks and are academically sound but they have limited opportunities of acquiring practical experience by using machinery, equipment and practical techniques associated with the professions. This is also being supported by Ismail (2010) cited by Murithi (2013) who insisted that in order to improve teaching quality, instructors should not only practice appropriate teaching methods but also encourage the application of skills in a practical program or mini business project on campus. This will allow students to be more independent; it will also foster appropriate attitudes and entrepreneurial thinking.

It was revealed from the study that demonstration and modeling method was not frequently used since **61.9%** of the respondents confirmed and the method had no statistical significant relationship with self-employment intentions of students as it was indicated by Freeman-Halton test (**p=.2509**) being more than the value considered to be significant. Also, the frequency of use of demonstration and modeling method had no statistical significant relationship with job creation intentions of students as it was indicated by Freeman-Halton test (**p=.2545**) being more than the value considered to be significant. It was also established that the frequency of use of demonstration and modeling method had a statistical significant relationship with job seeking intentions of students as it was indicated by Chi-Square of Independence test (**p=.000**).

Demonstration and modeling method is considered by many scholars to be active teaching method whereby if it is used in the teaching and learning process, learners will be involved actively hence making them to understand and apply what was taught.

The book entitled "A handbook for Curriculum and Instruction" by Otunga, Odeo, and Barasa 2011) stated that demonstration and modeling method involves the teacher performing a task or process to show the learners how something should be done. This is also called observational learning. They also stated that this method is useful in passing on practical-oriented information. The teacher has to use actual objects for the purposes of giving learners a hand – on experience. Since demonstration and modeling method was not frequently used in the teaching of entrepreneurship education which was defined in terms of job creation and self-employment among students, students were not influenced towards job creation and self-employment. Students still possessed job seeking minds because of traditional methods like lecture method which was found to be frequently used.

These findings correlate to the findings of Maric, Jarej, and Paulin (2020) in their study "Entrepreneurship as a solution to the unemployment" it was established that countries with better entrepreneurial infrastructure for example universities with business incubators where students can get real life skills through demonstration are open to competition and entrepreneurial activities than others. These findings are also in agreement with another study by Ansah and Poku (2012) which revealed that setting up an enterprise center to support students to encourage more students to recognize selfemployment as a career option is what is needed.

This is also being supported by Ismail (2010) cited by Murithi (2013) who insisted that in order to improve teaching quality, instructors should not only practice appropriate teaching methods but also encourage the application of skills in a practical program or mini business project on campus. This will allow students to be more independent; it will also foster appropriate attitudes and entrepreneurial thinking. Lettmayr (2011) carried out a study titled "Guidance supporting Europe's aspiring entrepreneurs. Policy and practice to harness future potential and from the study, it was found that group projects, case studies and assignments for entrepreneurs, internships, business planning/ ideas competitions and awards help young people pursue their entrepreneurial ideas and ambitions.

It was revealed from the study that problem-based learning method was not frequently used since **49.4%** of the respondents confirmed and the method had no statistical significant relationship with self-employment intentions of students as it was indicated

by Freeman-Halton test ( $\mathbf{p}=.25409$ ) being more than the value considered to be significant. Also, the frequency of use of problem-based learning method had no statistical significant relationship with job creation intentions of students as it was indicated by Freeman-Halton test ( $\mathbf{p}=.1003$ ) being more than the value considered to be significant. It was also established that the frequency of use of problem-based learning method had a statistical significant relationship with job seeking intentions of students as it was indicated by Chi-Square of Independence test ( $\mathbf{p}=.014$ ). Problembased learning method is considered by many scholars to be an active teaching method whereby if it is used in the teaching and learning process, learners will be involved actively hence making them to understand and apply what was taught. In this study, problem-based learning was less used as confirmed by students in the teaching and learning of entrepreneurship education. This hindered creative and innovative minds of creating jobs and being self-employed among students after graduation.

This finding is not in agreement with the study by Mei, Lee, and Xiang (2020) who established that students' self-efficacy sub-scales such as goal setting, self-appraisal, and problem-solving are significantly and positively related to entrepreneurial intentions. Otunga, Odera, & Barasa (2011) outlined that problem-based learning method helps to develop skills of investigation, to show learners that there is often more than one correct method/ answer to any given problem and to develop learners' skills and attitudes for working in groups and allow learners to be creative. According to Garcia & Barac (2020), it was supported that the use of problem-solving methodology made students to acquire entrepreneurship competences.

This finding is supported by Lettmayr (2011) who carried out a study titled "Guidance supporting Europe's aspiring entrepreneurs. Policy and practice to harness future potential and from the study", it was emphasized that traditional education and training

systems in Europe do not support entrepreneurship and self-employment intentions. Fayole and Olatunji (2018) in their study concluded that establishment of more skills acquisition and innovation centres across Nigeria to equip the young graduates with skills, knowledge and attitudes required to be self-reliant will assist in making them job creators rather than job seekers.

It was revealed from the study that ICT method was not frequently used since **56.2%** of the respondents confirmed and the method had no statistical significant relationship with self-employment intentions of students as it was indicated by Freeman-Halton test (**p=.6437**) being more than the value considered to be significant. Also, the frequency of use of ICT method had no statistical significant relationship with job creation intentions of students as it was indicated by Freeman-Halton test (**p=.1088**) being more than the value considered to be significant relationship with job creation intentions of students as it was indicated by Freeman-Halton test (**p=.1088**) being more than the value considered to be significant. It was also established that the frequency of use of ICT method had a statistical significant relationship with job seeking intentions of students as it was indicated by Chi-Square of Independence test (**p=.000**).

This finding is not supported by Njati (2015) who stated that Integration of ICT in teaching and learning entrepreneurship education makes learning to be attractive. It allows tutors to design useful learning environments that emphasize learning in the context of real-world activities. Since it is less used by tutors in the teaching of entrepreneurship education as per this study, it has no scientific relationship with self-employment and job creation intentions of students making students to still possess job seeking minds. ICT increases motivational levels of learners, improve their skills performance of, enhance abilities in independent learning as well as increase abilities for team work.

It was revealed from the study that field trips method was not frequently used since **68%** of the respondents confirmed and the method had no statistical significant relationship with self-employment intentions of students as it was indicated by Freeman-Halton test ( $\mathbf{p}=.2998$ ) being more than the value considered to be significant. Also, the frequency of use of field trip method showed slight statistical significant relationship with job creation intentions of students as it was indicated by Freeman-Halton test ( $\mathbf{p}=.0487$ ) being slightly less than the value considered to be significant. It was also established that the frequency of use of field trip method showed slight statistical significant. It was indicated that the frequency of use of field trip method had a statistical significant relationship with job seeking intentions of students as it was indicated by Chi-Square of Independence test ( $\mathbf{p}=.003$ ).

This finding is inconsistence with the study by Treiblmaler & Lisa (2018) which stated that field trips build students' knowledge, improve their attitudes and increase their behavioral intentions towards the subject under study. Field trips are an effective means for successful knowledge transfer and are suitable to trigger attitudinal and behavioral change. Since it was less used in this study, students were not positively influenced towards self-employment and job creation since entrepreneurial knowledge was not well transferred to students through lecture method which was mostly used but they were influenced towards job seeking intentions due to the use of traditional teaching systems. Tutors of entrepreneurship are encouraged to use active teaching methods like field trips for successful knowledge transfer and behavioral change.

A study by Burhanuddin, Shahwir, Norlina and Juhari (2019) supported that field trips was the method of experiential learning that brings students away from traditional classroom learning into a new mode of learning which visiting to industries or companies. Further, they argued that field trips not only improve student's experiences but also increase knowledge and understanding of the world in which students live. The study also found that consultancy was the best method that able to instill interest of students in entrepreneurship compared to other methods. Oluwaseyi (2017) in their study highlighted some of the best practices that can be used in the university entrepreneurship education pedagogy and among them was field trips.

It was established from the study that group discussion method was slightly frequently used since **36.1%** of the respondents confirmed and the method had statistical significant relationship with self-employment intentions of students as it was indicated by Freeman-Halton test ( $\mathbf{p}=.029$ ) being less than the value considered to be significant. Also, the frequency of use of group discussion method had statistical significant relationship with job creation intentions of students as it was indicated by chi-square test of independence ( $\mathbf{p}=.0416$ ) being slightly less than the value considered to be significant. It was also established that the frequency of use of group discussion method had a statistical significant relationship with job seeking intentions of students as it was indicated by Chi-Square of Independence test ( $\mathbf{p}=.000$ ).

This method is considered to be an active method by many researchers. That it allows interaction amongst learners boosting their skills of solving a given problem in teams hence promoting a sense of togetherness. For example, Otunga, Odera and Barasa (2011) argue that if this method is well organized and conducted, it allows all learners to actively participate in the lesson and thus developing interpersonal skills among learners. This method allows students to solve a given problem and give them a chance of developing responsibility, accountability, co-operation, social and independence skills in the learners. From the study, it is being shown well that group discussion is slightly frequently used in the teaching of entrepreneurship education and its frequent usage let to students positively developing entrepreneurial skills like being influenced towards self-employment and job creation after graduation.

This study is in agreement with that of Li and Wu (2019) who carried out a study entitled "Entrepreneurial education and students' entrepreneurial intention: does team cooperation matter?" and from the findings it was established that team cooperation significantly moderated the relationship between entrepreneurial education and entrepreneurial self-efficacy and the relationship between entrepreneurial education and entrepreneurial passion. In other words, when students perceive a high level of team cooperation, they are more likely to strengthen the effect of entrepreneurial education on entrepreneurial self-efficacy and entrepreneurial passion.

Also, this finding is similar to that of Ndofirepi and Rambe (2018) in their study entitled "A qualitative approach to the entrepreneurial education and intentions nexus: a case of Zimbabwean polytechnic students found out that methodology coupled with group discussion was deemed appropriate for teaching entrepreneurial education for selfemployment and job creation. Arasti, Falavarjani, & Imanipour (2012) also found out that appropriate teaching methods of entrepreneurship education are respectively group projects and problem-solving methods.

It was established from the study that brainstorming method was not frequently used since **45.9%** of the respondents confirmed and the method had no statistical significant relationship with self-employment intentions of students as it was indicated by Freeman-Halton test ( $\mathbf{p}=.0980$ ) being more than the value considered to be significant. Also, the frequency of use of brainstorming method slightly had a statistical significant relationship with job creation intentions of students as it was indicated by chi-square test of independence ( $\mathbf{p}=.0416$ ) being slightly less than the value considered to be significant. It was also established that the frequency of use of brainstorming method had a statistical significant relationship with job seeking intentions of students as it was indicated by Chi-Square of Independence test ( $\mathbf{p}=.020$ ).

This method is considered to be an active and learner-centered method of learning in that when it is applied by teachers, permanent learning takes place. It enhances interaction among learners. Since it is less used, entrepreneurial characteristics of learners were not fully developed hence making them to still hold on job seeking minds after graduation. Otunga, Odera and Barasa (2011) outlined that brainstorming method encourages the learners to develop creative thinking skills which in the long run lead to new and more ideas and also encourages full participation by all learners because all ideas are equally recorded.

The findings of this study are inconsistence with that of Gonul (2019) who supported that idea creation through brainstorming is significant to all disciplines, yet it is more crucial for entrepreneurs since the process of entrepreneurship requires new and novel ideas in all phases. If this method is used in the process of teaching, learners generate a lot of entrepreneurial ideas hence get motivated towards job creation and selfemployment which are components of entrepreneurship. In this study students are attracted towards job seeking because active method like brainstorming is less used.

Norseha & Polin (2015) was not in agreement with the findings of this study since they established that student –centered learning encourages students to take an active role in the learning process. Further, they supported that brainstorming is one of the ways to approach student –centered learning because it is open sharing activity, which is usually conducted in small groups to encourage participation. Entrepreneurship education is suitable to be taught by brainstorming since it requires students to generate entrepreneurial ideas and since it was less used it means that students were not ready to be entrepreneurs creating jobs for others and being self-employment but being attracted towards job seeking mentality after graduation.

It was established from the study that use of resource person method was not frequently used since **66.9%** of the respondents confirmed and the method had no statistical significant relationship with self-employment intentions of students as it was indicated by Freeman-Halton test (**p=.488**) being more than the value considered to be significant. Also, the frequency of use of resource person method had no statistical significant relationship with job creation intentions of students as it was indicated by Freeman-Halton test (**p=.073**) being more than the value considered to be significant. It was also established that the frequency of use of resource person method had a statistical significant relationship with job seeking intentions of students as it was indicated by Chi-Square of Independence test (**p=.000**).

This method is considered to be active and learner-centered methods of learning in that it entails students learn by being motivated by experts in the field being discussed. Successful entrepreneurs or a well knowledgeable person in entrepreneurship is invited to talk to students on how to practically apply knowledge learned in class. These in most cases end up being mentors of students in entrepreneurship. Many scholars are in agreement that this type of method when it is applied by teachers, permanent learning takes place. It enhances interaction among learners. Since it is less used, entrepreneurial characteristics of learners were not fully developed hence making them to still hold on job seeking minds after graduation.

Burhanuddin, Shahwir, Norlina and Juhari (2019) did not support this study in that they found in their study that consultancy was the best method that able to instill interest of students in entrepreneurship compared to other methods. Ionescu, Bercu, Grigorula, & Boldureanu (2020) in their study titled "Entrepreneurship Education through Successful Entrepreneurial models in Higher Education Institutions" found that entrepreneurship education based on successful entrepreneurial role models may positively influence the entrepreneurial attitudes and intentions of students and could lead to higher orientation of students' perception towards social benefits of entrepreneurship (new jobs).

Another study by Rahman and Day (2014) is not consistent with the findings of this study in that in their study that involved studied the Entrepreneurial Role Models as a way of developing Entrepreneurship Education found out that the involvement of a role model(s) in entrepreneurship teaching and learning give a positive influence to entrepreneurial intention of students and also motivate students to become entrepreneurs in future. Role models being mentioned here are Parents, entrepreneurs and lecturers/ teachers.

Oduor, Bancy, and Masese (2018) Argues further that role models who have succeeded after vocational training should be identified and individuals' case studies and success stories should be used in demonstrating the value of vocational education. Vaziri, Hosseini and Jafari (2014) emphasized the use of entrepreneurs as consultants since they have sufficient experience and know about entrepreneurial market. Further, Wang, Yuohuizhang and Wen (2018) holds that at the beginning, what the institution should do is to set up an example for those students to form the awareness and motivation for starting a business. These institutions should provide college entrepreneurial stories, college students could form entrepreneurial awareness and entrepreneurial stories, which will lead to them to more a head in a specific direction and then drive them to create business.

Lastly, it was established from the study that use of question-and-answer method was frequently used since 40.5% of the respondents confirmed and the method had statistical significant relationship with self-employment intentions of students as it was indicated by Freeman-Halton test (**p=.011**) being less than the value considered to be significant. Also, the frequency of use of question-and-answer method had statistical significant relationship with job creation intentions of students as it was indicated by Freeman-Halton test (**p=.025**) being less than the value considered to be significant. It was also established that the frequency of use of question-and-answer method had a statistical significant relationship with job seeking intentions of students as it was indicated by Chi-Square of Independence test (**p=.001**).

This method is considered by many scholars as an old teaching method in that students are mostly subjected to questions to provoke their thinking capacity. It is most suitable when preparing students for an exam. This method leads to cramming of concepts or contents by learners for an exam. It is not suitable for teaching entrepreneurship education that require active teaching methods.

This finding is inconsistent with that of Wanjau and Mkala (2013) who argued that the impact of entrepreneurship education on students' post-training career choice and practice is influenced by the teaching and assessment methodologies used in delivering entrepreneurship education lessons, teachers' personal interaction with entrepreneurship practitioners, and the availability of training resources. Citing Smith & Paton (2011), they further stated that using traditional methods, such as the lecture and its variant "chalk and talk" to teach entrepreneurship education, merely results in a knowledgeable person as these methods lack initiative for application. They concluded that entrepreneurs require experiential pedagogical interventions.

It is being revealed out that theoretical or traditional teaching methods that lead to cramming and memorization of content for the purposes of passing exams were mostly used. These are lecture and question and answer methods. Practical or experiential methods like field visits, use of resource persons, brainstorming, ICT, demonstration and project-based learning are less used in the polytechnics where research was done. It came out clearly that learners are not exposed to practical work frequently since these polytechnics lacked business incubators where learners would apply what they have learned in class. This means that practical acquisition of entrepreneurial skills is less done in these polytechnics leading to low entrepreneurial skills among learners hence low self-employment and job creation intentions among learners graduating. Respondents also were in agreement that there were no business centers or enterprises where they could get skills of running a real business other than skills learned in class. A good number of respondents agreed that currently they do not operate or own any business activities.

This study recommends the use of active and interactive teaching methods to improve entrepreneurial ideas generation among students. This will make them be attracted towards self-employment or job creation as opposed to job seeking minds as the case is. This study was only limited to two National Polytechnics in Western Kenya and it was done when students were preparing to sit for their final exam. The researcher feels that questionnaires were filled hurriedly. The researcher recommends a similar study on influence of interactive teaching methods on entrepreneurial (self-employment and job creation) intentions of students. This study should be carried out in other parts of the country and the scope should be wide. It should also be done when students are not preparing for exam to allow them fill the questionnaire soberly. This will allow countrywide generalization.

#### 4.8 Perception of students towards Entrepreneurship education for selfemployment, job creation and job seeking intentions

It is in this section that objective three of the study was handled. The objective was to establish perception of students towards entrepreneurship education for self-employment, job creation and to be employed. The research question to be answered was "How does perception of students towards entrepreneurship education influence their self-employment intentions, job creation and job seeking intentions?" A 5-point likert-type scale ranging from "Strongly agree (5), Agree (4), Neutral (3), Disagree (2) to strongly disagree" (1) was used. This scale was further collapsed to, has influence (strongly agree + agree), undecided (neutral) and has no influence (disagree + strongly disagree). To establish if students had positive or negative perception towards entrepreneurship education for self-employment, job creation and job seeking intention, the researcher established the following from students:

- 1. Whether it was students' choice to study entrepreneurship education
- 2. Whether they gave entrepreneurship education the first priority during course selection
- 3. How they felt when they got admission to study entrepreneurship education
- 4. Since it was the only choice available
- 5. They chose it because of peer pressure
- 6. They chose it to pass with good grades

The researcher analyzed the above items using either chi- square or frequencies and percentages. Each item yielded three objectives and hypothesis as follows.

# **4.8.1** Hypothesis H0<sub>3.1</sub>: There is no statistically significant difference between choice to study entrepreneurship education and self-employment intentions of students

From the table 16, it is being revealed that it was students' own choice to do entrepreneurship education being shown by **203** (**76.6%**) as compared to those who rejected that it was their own choice to do entrepreneurship education being shown by **40** (**15.1%**). Also **22** (**8.3%**) of the students were undecided whether it was their own choice to do entrepreneurship education or not apart from finding out whether it was students' own choice to do entrepreneurship education, the researcher was interested to know their mind set from the word go if their choice to do entrepreneurship education was to make them be self-employed. From the table 16, it is being clearly shown that students' choice to do entrepreneurship education would influence their self-employment intentions **238** (**89.8%**) compared to **10** (**3.8%**) who denied that it will not influence their self-employment intentions. **17** (**6.4%**) were neutral whether it will influence their self-employment intentions or not.

			Self-employment				
Students' study EE	choice	to	No influence	Neutral	Influence	Total	
Reject			3	4	33	40	
Neutral			0	3	19	22	
Accept			7	10	186	203	
Total			10	17	238	265	

 Table 16: Analysis for students' choice to do entrepreneurship education and its influence on self-employment intentions

To test the relationship between choice of entrepreneurship education and selfemployment intentions of students, Freeman-Halton test was performed and the results indicated that choice to study entrepreneurship education and self-employment intentions of students have no statistical significant relationship as being indicated by a p-value (p=.1328). Therefore, hypothesis H0<sub>3.1</sub> was accepted. This finding implies that the influence of choice to study entrepreneurship education on self-employment intentions is independent.

### 4.8.2 Hypothesis H0<sub>3.2</sub>: There is no statistically significant difference between choice to study entrepreneurship education and job creation intentions of students

Apart from finding out whether it was students' own choice to do entrepreneurship education, the researcher was interested to know their mind set from the word go if they had a positive perception of creating jobs. From the table 17, it is being clearly shown that students had a positive perception that choosing entrepreneurship education will make them to create jobs for others being shown by **216** (**81.5%**) compared to those who rejected that choosing entrepreneurship education will enable them create jobs for others being shown by **15** (**5.7%**).**34** (**12.8%**) of the respondents were neutral whether studying entrepreneurship education will enable them to create jobs for others.

		Job creation	0 <b>n</b>	
Students' choice to study EE	No influence	Neutral	Influence	Total
Reject	5	12	23	40
Neutral	0	5	17	22
Accept	10	17	176	203
Total	15	34	216	265

 Table 17: Analysis for students' choice to do entrepreneurship education and its influence on job creation intentions

To test the relationship between choice of entrepreneurship education and job creation intentions of students, Freeman-Halton test was performed and the results indicated that choice to study entrepreneurship education and job creation intentions of students have statistical significant relationship as being indicated by a p-value (p=.0002). Therefore, hypothesis H0<sub>3.2</sub> was rejected. This finding implies that the influence of choice to study entrepreneurship education on job creation intentions is dependent.

## 4.8.3 Hypothesis H0<sub>3.3</sub>: There is no statistically significant difference between choice to study entrepreneurship education and job seeking intentions of students

Apart from finding out whether it was students' own choice to do entrepreneurship education, the researcher was interested to know their mind set from the word go if they had a positive perception of seeking jobs after. From the table 18, it is being clearly shown that there is a very slightly different between those who accepted that they chose entrepreneurship education to seek jobs in companies **96** (**36.2%**) and those who rejected that they chose entrepreneurship education because they wanted to be employed **89** (**33.6** %). **80** (**30.2%**) were undecided whether entrepreneurship education will make them to seek jobs or not.

		Job seeking			
Students' choice to study EE	No Neutral		Influence	Total	
Reject	17	12	11	40	
Neutral	4	15	3	22	
Accept	68	53	82	203	
Total	89	80	96	265	

 Table 18: Analysis for students' choice to do entrepreneurship education and its influence on job seeking intentions

To test the relationship between choice of entrepreneurship education and job seeking intentions of students, Freeman-Halton test was performed and the results indicated that choice to study entrepreneurship education and job seeking intentions of students have statistical significant relationship as being indicated by a p-value (p=.0017). Therefore,

hypothesis **H0**<sub>3.3</sub> was rejected. This finding implies that the influence of choice to study entrepreneurship education on job seeking intentions is dependent.

Still on the establishing whether it was students' choice to study entrepreneurship education, the researcher went ahead to find out the priority these students gave entrepreneurship education during first course selection by carrying descriptive statistics consisting of frequencies and percentages as shown below. From the analysis in table 19, students gave this course the first priority during course selection (**55.6** %) as opposed to those who did not give this course first priority (**13.2%**) since they had in mind that they will be able to create jobs and be self-employed as opposed to seeking jobs.

	Priority given to EE by students during course selection				
	Frequency	Percentage			
Reject	35	13.2			
Undecided	83	31.2			
Accept	58	55.6			
Total	265	100			

 Table 19: Descriptive statistics showing whether students gave EE the first priority or not.

Still on the perception of students on entrepreneurship education, the researcher was interested to establish students' feelings after obtaining admission to study entrepreneurship education by carrying out descriptive statistics consisting of frequencies and percentages as shown below. From the analysis, students were very happy (**89.5%**) when they got admission to study entrepreneurship education as being indicated by the table 20 showing that they had positive perception towards entrepreneurship education.

Feelings of students after being admitted to study EE				
	Frequency	Percentage		
Not good	3	1.1		
Fair + indifferent	25	9.4		
Good + Very good	238	89.5		
Total	266	100		

 Table 20: Descriptive statistics showing how students felt after being admitted to study EE

Further to establish the perception of students towards entrepreneurship education, they were asked to state whether studying entrepreneurship education is necessary or not by choosing between YES (1) or NO (0). It is being revealed that students accepted that entrepreneurship education is necessary as indicated by **251** (**94** %) being a percentage for those who chose YES compared to those who chose NO, **14** (**5.2** %) as per the table 21.

Whether EE is necessary or notFrequency PercentageNO145.3YES25194.7Total265100

Table 21: Descriptive statistics showing the necessity of studying EE

To show that students agreed that studying entrepreneurship education is necessary. They further explained why entrepreneurship education is necessary and majority had to say the following:

- 1. That it enables students to get entrepreneurial skills for self-employment
- 2. That students are able to get business management skills to enable them ran their businesses smoothly and be in a good position to utilize the available business resources very well.

3. That they are able to gain innovative skills, creative skills, critical thinking skills and problem-solving skills to enable them ran their businesses very well.

Still on the perception of students on entrepreneurship education, the researcher was interested to establish whether students chose entrepreneurship education because it was the only choice available by carrying out descriptive statistics consisting of frequencies and percentages as shown below. From the analysis, students did not choose entrepreneurship education because it was the only choice available as per table 22 where **144** (**55%**) of students confirmed that they did not choose entrepreneurship education because it was the only choice available.

	Choice of EE	Choice of EE based on its availability		
	Frequency	Percentage		
Strongly	144	55.0		
Disagree	144	55.0		
Disagree	50	19.0		
Neutral	27	10.3		
Agree	30	11.5		
Strongly Agree	11	4.2		
Total	262	100		

Table 22: Descriptive statistics showing choice of EE based on its availability

Still on the perception of students on entrepreneurship education, the researcher was interested to establish whether students chose entrepreneurship education because of peer pressure by carrying out descriptive statistic consisting of frequencies and percentages as shown below. From the analysis, students did not choose entrepreneurship education because of peer pressure as per table 23 where **140** (**53.6%**) of students confirmed that they did not choose entrepreneurship education because of peer pressure.

	Choice of EE based on peer pressure		
	Frequency	Percentage	
Strongly Disagree	140	53.6	
Disagree	66	25.3	
Neutral	38	14.6	
Agree	11	4.2	
Strongly Agree	6	2.3	
Total	261	100	

Table 23: Descriptive statistics showing students' choice of EE and peer pressure

The researcher also carried out descriptive statistics to find out if students chose to do entrepreneurship education because it was an easy course to do so as to get good grades and from table 24, students did not choose entrepreneurship education because it was an easy course to pass with good grades as indicated by those who rejected **85.2%** as compared to those who accepted **5.7%** 

	Priority given to EE by students during course selection			
	Frequency	Percentage		
Reject	225	85.2		
Undecided	24	9.1		
Accept	15	5.7		
Total	263	100		

 Table 24: Descriptive statistics on students' choice to do EE because it was easy

From the analysis, it is coming out clearly that students had positive perception towards entrepreneurship education. That if it is taught correctly, it will impart entrepreneurial knowledge that will enable them to practice entrepreneurship after school.

## 4.9 Discussion of objective three: To establish perception of students towards entrepreneurship education for self-employment, job creation and job seeking intentions

The purpose of this objective was to establish students' perception or attitude towards entrepreneurship education whether it is positive or negative. To establish the perception of students towards entrepreneurship education, the researcher used the following research hypothesis.

# **4.9.1** Hypothesis H<sub>03</sub>: There is no significant relationship between student's perception towards entrepreneurship education and self-employment, job creation and job seeking intentions.

The study established that it was students' choice to choose entrepreneurship education since **76.6%** of the respondents confirmed and also, they confirmed that choosing entrepreneurship education will positively influence their self-employment intentions as **89.8%** of the students confirmed. Scientifically, choice to study entrepreneurship education had no statistical significant relationship with self-employment intentions of students as indicated by Freeman- Halton test (**p=.1328**) being more than **0.05** which was considered to be significant.

The study also found that choosing entrepreneurship education will positively influence their self-employment intentions as **81.5%** of the students confirmed. Scientifically, choice to study entrepreneurship education had a statistical significant relationship with job creation intentions of students as indicated by Freeman-Halton test (**p=.0002**) being less than **0.05** which was considered to be significant. This means that students' choice to study entrepreneurship education positively influenced their intentions of creating jobs to others after graduation.

It was also found that 36% of students confirmed that choice to study entrepreneurship education will make them to be job seekers. Scientifically, choice to study entrepreneurship education had a statistical significant relationship with job seeking intentions of students as indicated by Freeman- Halton test (**p=.0017**) being less than **0.05** which was considered to be significant. The study also found that **55.6%** of the students gave entrepreneurship education the first priority during course selection and **89.5%** of the students felt very well when they got admission to study entrepreneurship education. **94%** of the students strongly agreed that studying entrepreneurship education was necessary and they gave the following reasons:

- 1. That it enables students to get entrepreneurial skills for self-employment
- 2. That students are able to get business management skills to enable them ran their businesses smoothly and be in a good position to utilize the available business resources very well.
- 3. That they are able to gain innovative skills, creative skills, critical thinking skills and problem-solving skills to enable them ran their businesses very well.

It was also established that **55%** of the students did not choose entrepreneurship education because it was the only course available. **53.6%** of the students did not choose entrepreneurship education because of peer pressure and **85.2%** of the students confirmed that they did not chose entrepreneurship education because they were after getting passing with good grades since it was seemed to be an easy course.

Most studies confirm that students have positive perception towards entrepreneurship education. Students from many literatures say entrepreneurship education enables one to create a job hence being self-employed.

For instance, Venkatapathy and Pretheaba (2014) carried out a study on postgraduate students in an Indian University. The study used the Theory of Planned Behavior (TPB) in which intentions are regarded as resulting from attitudes, perceived behavioral control and subjective norms. The study used stratified random sampling method. The sample size of the study was 176 students comprising of 92 males and 84 female

students. The study revealed that there was a positive statistically significant correlation between attitude towards entrepreneurship, subjective norms and perceived behavioral control with entrepreneurial intention among students. This means that students with positive attitude towards entrepreneurship would prefer being entrepreneurs than anything else.

Joseph and Abel (2013, pp. 69-75) carried out research on Entrepreneurship Education as a key to solving graduate unemployment in Niger- Delta and revealed that entrepreneurship education had gained a wider acceptance in the region as an alternative career option. In other words, entrepreneurship education was a vehicle to job creation and self-employment. According to Ebewo, Rugimbana, and Shambare (2017) in their study titled "Effects of Entrepreneurship Education on Students Entrepreneurial Intentions: A case of Botswana found out that entrepreneurship education positively influence students' intention to become an entrepreneurial abilities and suggested that the university curriculum should be redesigned in order to stimulate an environment that is conducive for developing positive entrepreneurial attitudes and abilities.

Furthermore, Oluseye, Adebayo, and Olulanu (2017) in their study titled "Effect of Entrepreneurship Education on Self-Employment initiatives among Nigerian Science and Technology Students", it was revealed that entrepreneurship education is a good subject and it has positive effect on self-employment initiatives. This study recommends that students should be encouraged beyond entrepreneurship school training projects to business ventures start-ups at micro and small-levels. Also, the Polytechnic management should collaborate with existing entrepreneurs and business organizations in providing entrepreneurship training to the students. Lastly, the polytechnic management, the government and other stakeholders can give special recognition, awards and sponsorship assistance as motivation to students whose projects are realistically outstanding. This will stimulate self-employment drives among graduates.

Also, a study carried out by Nnadozie, Akanwa and Nnadozie (2013) found out that majority of the graduating students, who were the respondents, perceive entrepreneurship education as useful and innovative and agreed that these courses broadened their knowledge and widened their employment options. According to Sondari (2014) tried to establish whether entrepreneurship education is really needed or not and found out that entrepreneurship education is important in stimulating students' intention of starting a business after graduating. The research further revealed that students had a positive attitude towards entrepreneurship education.

Narasmah and Nurzefirah (2018) did a study on Public University Students' Entrepreneurship interest and their career in Malaysia and investigated 360 Malaysian college students. It was found that Malaysia had worked to cultivate entrepreneurial interest among students so they will pursue entrepreneurship careers after graduation. Further analysis of survey data found that students' entrepreneurship interest was high. The findings from this literature agree with the findings of this study because in this study, learners had a positive perception towards entrepreneurship education in that it stimulates entrepreneurial spirit among learners. They insisted that if entrepreneurship education is well taught by stimulating methods or active methods, majority of them will venture into business hence creating jobs for others as they become self-employed According to Kristskaya (2015) who carried out research on effect of Entrepreneurship Education on Students' Entrepreneurship Intention in Norway and Russia, confirmed that entrepreneurship education programs are the right and effective tool to enhance entrepreneurial intentions among students. Students had a positive attitude towards entrepreneurship education and they believed that entrepreneurship education enables one to have skills of starting and running a business. Supporting these findings, Muofhe and Toit (2011) carried out research in South Africa on entrepreneurial educations and entrepreneurial role models' influence on career choice and it was found that entrepreneurship students had a stronger entrepreneurial intention than nonentrepreneurship students.

Moreover, Pardie and Akoto (2015) while assessing the objectives of entrepreneurship programme in cape coast Polytechnics of Chana found out that majority of the students accepted that the objective(s) of the entrepreneurship course in the polytechnic was essentially to expose them to concepts in entrepreneurship and also to create awareness about entrepreneurship and its values. In addition, the study revealed that the entrepreneurship course had a positive effect on the entrepreneurial intentions of students who underwent the programme. The study recommended that the entrepreneurship course be sustained since it has the inherent capabilities to reduce youth unemployment and all its attendant social evils. Another study by Akpochafo and Alika (2018) while investigating the impact of entrepreneurship education on career development among undergraduates in South- South Universities in Nigeria found out that the students were of the view that entrepreneurship education will provide training that would make undergraduates creative and innovative if the programme is properly implemented. According to Odewale, Hani, Migiro, and Adeyeye (2019) supported that entrepreneurship education influence students view on self-employment. Akipan and Etor (2013) carried out a study titled "University lectures' perception of Entrepreneurship Education as an employment strategy for graduate self-employment in South-South Nigeria". From the study it was established that lecturers were positive in their perception of the relevance of entrepreneurship education as an empowerment strategy for graduate self-employment.

There are high chances that if someone shows positive attitude or perception towards something, then likely such a person can develop positive interest towards the same thing. He or she may end up engaging or doing the same thing that he or she like. From this literature, majority of the students who were taking entrepreneurship showed a positive attitude towards entrepreneurship education. That through it, their entrepreneurial intention will improve. Finding out what Kenyan polytechnic students perceive about entrepreneurship education is very important. Whether they have positive or negative perception towards entrepreneurship education for selfemployment and job creation and if it is true that they have positive attitude towards entrepreneurship education, what makes them not to practice entrepreneurship after school? It is now the responsibility of the tutors or lectures to use appropriate teaching methods which will stimulate the students to become entrepreneurs after school hence become self-employed while creating jobs for others.

Therefore, this study on perception of students in Kenyan polytechnics towards entrepreneurship education was important since its findings will be added to the existing literature in entrepreneurship education on the globe. The study showed that carrying out research on the perception of students towards entrepreneurship education for self-employment, job creation and job seeking intention in Kenya is possible. The study further recommends another study on the perception of students towards entrepreneurship education for self-employment, job creation and job seeking intentions among polytechnic students in another region in Kenya to establish whether these findings are similar across students in polytechnics in Kenya.

#### 4.10 Influence of students' family entrepreneurial background on selfemployment, job creation and job seeking intentions

It is in this section that objective four of the study was handled. The objective was to establish whether family entrepreneurial background of students influence their entrepreneurial behaviors of students and what effects do entrepreneurial behaviors have on self-employment, job creation and job seeking intentions of students.

The research question to be answered was "To what extend does family entrepreneurial background of students' influences their self-employment intentions, job creation intentions and job seeking intentions?" A 5-point Likert-type scale ranging from "Strongly agree (5), Agree (4), Neutral (3), Disagree (2) to strongly disagree" (1) which was further collapsed to, has an influence (strongly agree + agree), undecided (neutral) and has no influence (strongly disagree + disagree). This objective was further divided into three other objectives as follows:

#### 4.10.1 To establish the influence of family entrepreneurial background of students on self-employment intentions

Students were asked whether entrepreneurial background influence their entrepreneurial behaviours and what effects do these entrepreneurial behaviors have on students' self-employment intentions.

From the table 25, students confirmed that family entrepreneurial background has an influence on self-employment of students as indicated by **239** (**89.8%**) students as

compared to those who rejected being **10** (**3.8%**) being lower than those who accepted. **17** (**6.4%**) of respondents were undecided whether family entrepreneurial background of students influence self-employment intentions of students.

		Self-en	nployment		
Family entrepreneurial background	No influence	Neutral	Influence	Total	
Reject	1	5	35	41	
Neutral	0	4	32	36	
Accept	9	8	172	189	
Total	10	17	239	266	

 Table 25: Analysis for influence of family entrepreneurial background of students

 on self-employment intentions

The researcher further went ahead to establish whether students' family entrepreneurial background influence their self-employment intention by testing null hypothesis below.

# 4.10.1.1 Hypothesis H0<sub>4.1</sub>: There is no statistically significant difference between students 'family entrepreneurial background and self-employment intentions.

To test the relationship between students' family entrepreneurial background and selfemployment intentions of students, Freeman-Halton test was performed and the results indicated that students' family entrepreneurial background and self-employment intentions of students have no statistical significant relationship as being indicated by a p-value (p=.1164). Therefore, hypothesis  $H0_{4.1}$  was accepted. This finding implies that the influence of students' family entrepreneurial background on self-employment intentions is independent.

# 4.10.1.2 To establish the influence of family entrepreneurial background of students on job creation intentions

Students were asked whether entrepreneurial background influence their entrepreneurial behaviors and what effects do these entrepreneurial behaviors have on students' job creation intentions. Family entrepreneurial background was defined in terms of parents, relatives and friends of a student and their status of entrepreneurship activities.

From the table 26, students confirmed that family entrepreneurial background has an influence on job creation of students as indicated by **217 (81.6%)** as compared to those who rejected as indicated by 15 (**5.6%**). **34 (12.8 %)** of the respondents were undecided whether entrepreneurship behaviors of students influence their job creation intentions.

		Job creation				
Family entrepreneurial background	No influence	Neutral	Influence	Total		
Reject	4	8	29	41		
Neutral	0	12	24	36		
Accept	11	14	164	189		
Total	15	34	217	266		

 Table 26: Analysis for influence of family entrepreneurial background of students

 on job creation intentions

The researcher further went ahead to establish whether students' family entrepreneurial background influence their job creation intention by testing null hypothesis below.

# 4.10.1.3 Hypothesis H04.2: There is no statistically significant difference between students 'family entrepreneurial background and job creation intentions.

To test the relationship between students' family entrepreneurial background and job creation intentions of students, Freeman-Halton test was performed and the results indicated that students' family entrepreneurial background and job creation intentions of students have statistical significant relationship as being indicated by a p-value (p=.0002). Therefore, hypothesis H04.2 was rejected. This finding implies that the influence of students' family entrepreneurial background on job creation intentions is dependent.

# 4.10.1.4 To establish the influence of family entrepreneurial background of students on job seeking intentions

Students were asked whether entrepreneurial background influence their entrepreneurial behaviors and what effects do these entrepreneurial behaviors have on students' job seeking intentions.

From the table 27, students confirmed that family entrepreneurial background has an influence on job seeking intention of students as indicated by **96 (36.1%)** as compared to those who rejected as indicated by 89 (**33.5%**). **81 (30.4 %)** of the respondents were undecided whether entrepreneurship behaviours of students influence their job seeking intentions or not

	Job seeking				
Family entrepreneurial background	No influence	Neutral	Influence	Total	
Reject	13	17	11	41	
Neutral	3	20	13	36	
Accept	73	44	72	189	
Total	89	81	96	266	

 Table 27: Analysis for influence of family entrepreneurial background of students

 on job seeking intentions

The researcher further went ahead to establish whether students' family entrepreneurial background influence their job seeking intention by testing null hypothesis below.

# 4.10.1.4 Hypothesis H04.3: There is no statistically significant difference between students 'family entrepreneurial background and job seeking intentions.

To test this hypothesis, a chi-square independence test was performed. This analysis indicated that there was statistically significant difference as shown by chi-square test ( $x^2 = 21.797$ , p<0.000). This hypothesis was rejected. This finding implies that entrepreneurial background of students has influence on job seeking intention of students

They were asked to explain how entrepreneurial background influences their selfemployment and job creation intentions and below are some of the reasons they gave:

- 1. That student gets inspired to be self-employed
- Students get entrepreneurial and business management skills while they are still young
- 3. Family members act as role models to students and make them to start a business immediately
- 4. Students get business experience while they still young
- 5. Students get motivated and know the importance of being self-employed

Apart from family entrepreneurial background, students were asked to mention other factors that would make them not to involve in entrepreneurship activities after school and they stated capital as a major factor that would hinder them from involving in entrepreneurship activities. It is likely that students from well-established families with a lot of business networks to venture into entrepreneurship activities as compared to those from poor background because for them getting capital to start a business is easier. They suggested the following ways of overcoming the challenge of capital:

- 1. They should be borrowing loans from financial institutions and these institutions should be charging friendly interest rates to graduates intending to start a business
- 2. They also obtain goods for sale on credit, sale them and pay for them at later date
- They should convince their parents and friends to be contributing capital for them
- 4. Government should come up with ways of giving students loans to start businesses immediately they graduate the way they sponsor students through HELB.
- 5. They should also learn on how to save the little they get inform of pocket money and use it in future as capital.

Students were also asked to mention other challenges that make them not to start businesses immediately after schools and they gave the following reasons:

- 1. Unfavorable competition from well established businesses
- 2. Insecurity in the country due jobless youth
- 3. Strict government policies in case one wants to a business for example high taxation and long procedures for one to start a business
- 4. Fear to take risks by the students and poor infrastructure
- 5. Drug abuse and laziness among the youth
- 6. Graduates having job seeking minds and culture that does not support entrepreneurship
- Students not being exposed to entrepreneurial activities while in schools due to the exam-oriented methods used by tutors
- 8. That they lack those who can mentor them

Students were also asked to state how the above challenges can be overcome and they stated the following:

- 1. Enough practical skills to be taught so that to expose students to entrepreneurial activities while they are still in schools and also students should be exposed to successful entrepreneurs while they are still in schools.
- 2. Mechanism to be put in place fight corruption to enable the economy to be friendly to business people
- 3. The government should be willing and ready to support those students from polytechnics who are ready and willing to be entrepreneurs in terms of loosening their business policies and finances.
- 4. Financial institutions to lower their interest rates to make school leavers borrow loans.

### 4.11 Discussion of objective four: To establish the influence of students' family entrepreneurial background on their self-employment, job creation and job seeking intentions

The researcher was interested to know the relationship between students' family entrepreneurial background and entrepreneurial intentions of students. To establish this relationship, the following research hypotheses were developed:

## 4.11.1 Hypothesis H 04: Students' family entrepreneurial background does not have significant influence on their self-employment, job creation and job seeking intentions

The study established that **89.8%** of the students confirmed that students' family entrepreneurial background of students did influence self-employment intentions of students but scientifically, there was no statistical significant relationship between

entrepreneurial background of students and self-employment as indicated by Freeman-Halton test (p=.1164) being more than 0.05 which was considered to be significant. The study also found out that 36.1% of the students confirmed that family entrepreneurial background of students influence job seeking intentions of students and scientifically, there was statistical significant influence of family entrepreneurial background of students and job seeking as indicated by Chi-Square value of independence (p=.000) being less than the value considered to be significant.

This finding of the study is similar to that of Indira and Prasad (2016) who carried a study on the influence of family occupation on the Entrepreneurial Intentions of Management Students from a leading B school in Mumbai. A convenience sample of 130 students was selected at random and data was collected through a self-administered questionnaire. Students selected were from those families with salaried parents and those with parents engaged in business activities (entrepreneurs). The study revealed that there was no difference in entrepreneurial intentions of these students. Here, it means that family occupation did not influence entrepreneurial intentions of students.

Several entrepreneurship scholars have highlighted entrepreneurial background of students as one of the main factors that influence students from being self-employed despite having acquired entrepreneurial skills. Students' background consists of the students' social environment for example family members, friends, mentors, relatives, government policies governing business activities and financial institutions that lend capital to those in need of starting a business. There is a high likelihood that students' background that support entrepreneurial activities will enhance entrepreneurial culture of students leading to self-employment among students or if a student is from the social environment that support entrepreneurial culture will venture into business after school.

The findings of this study contradict the findings of other researchers who found that family entrepreneurial background of students influences their entrepreneurial intentions.

For instance, Nguyen (2018) who found out that student whose parents were selfemployed scored higher entrepreneurial intentions. That prior experience in selfemployment increases entrepreneurial intention. It is also contrary to a study carried out by Faloye and Olatunji (2018) in which their study showed that ability to take risk, the influence of family, friends and mentors were the major determinants of entrepreneurial intentions of selected participants.

Further this statistical findings is contrary to that of Faloye and Olatunji (2018) quoting Jinying and Pelagie (2014), Ambad and Darmit (2016), Tarus, Kemba, Kemboi, Okenwa and Otiso (2016), Popesch, Bostan, Robu,Maxim and Diaconu (2016), Cano and Tabares (2017) who found out that African economic environment, social network, influence of family, social environment, cultural factors, students being exposed to entrepreneurs, experienced network were the main determinant factors for entrepreneurial intentions for self-employment.

Kahando and Mungai (2018) who carried out a research in Kenyan polytechnics involving influence of cognitive factors on self-employment intentions among students in Kenya found out that the decision by students to become self-employed after graduation entirely depends on mentorship process from parents and other successful entrepreneurs in the community. That self-employment intention is cultivated through the value added to them by family members and close relatives.

These statistical findings of this study contradicted that of Bwisa (2011) who supported that culture, social and family obligations, and the desire for social status are prime

motives for entrepreneurial intentions hence economic success in a given Nation. Selfemployment is as a result of outbreak of entrepreneurial activities among young from schools and this is supported by the social variation in which these learners originate from.

This finding also contradicted that of Ayalew and Zeleke (2018) who found out that access to finance, professional contacts and networking with entrepreneurs, prior business experience, family background and achievement significantly predict the intention of self-employment.

The study also found out that **81.6%** of the students confirmed that family entrepreneurial background of students influence job creation intentions of students and scientifically, there was statistical significant influence of family entrepreneurial background of students and job creation as indicated by Freeman-Halton test value (**p=.0002**) being less than the value considered to be significant.

This finding is in agreement with that of Nguyen (2018) who found out that students, whose parents were self-employed, scored higher entrepreneurial intentions. That prior experience in self-employment increases entrepreneurial intention. Nandamuri (2016) looking at an analysis of family occupational background as a construct of entrepreneurial orientation among the youth in India established that the family occupational background has a significant impact on the entrepreneurial management capabilities and entrepreneurial orientation of the present-day youth. It is true because family background plays a vital role in upbringing of an individual. Those individuals from families that involve in business activities or they are so much in entrepreneurship are likely to practice the same in future due to entrepreneurial role models.

Venkatapathy and Pretheaba (2014) carried out a study on postgraduate students in an Indian University. The study used the Theory of Planned Behavior (TPB) in which intentions are regarded as resulting from attitudes, perceived behavioral control and subjective norms. The study used stratified random sampling method. The sample size of the study was 176 students comprising of 92 males and 84 female students. The study revealed that there was statistically significant correlation between a family business background and intention to start a new business in India. This finding is in agreement with that of Faloye and Olatunji (2018) who found out in their study that ability to take risk, the influence of family, friends and mentors were the major determinants of entrepreneurial intentions of selected participants.

Georgescu and Herman (2020) investigating the main factors influencing students' entrepreneurial intentions particularly focusing on entrepreneurial family background and entrepreneurship education among Romanian high school students and University students in their final year of study found that students with an entrepreneurial family background had a higher entrepreneurial intention than those without such a background. Also, the study established that effectiveness of entrepreneurship education and entrepreneurship personality traits affected entrepreneurial intention of students.

This findings is in agreement with that of Faloye and Olatunji (2018) quoting Jinying and Pelagie (2014), Ambad and Darmit (2016), Tarus, Kemba, Kemboi, Okenwa and Otiso (2016), Popesch, Bostan, Robu,Maxim and Diaconu (2016), Cano and Tabares (2017) who found out that African economic environment, social network, influence of family, social environment, persona, cultural factors, , students being exposed to entrepreneurs, experienced network were the main determinant factors for entrepreneurial intentions for self-employment.

Kahando and Mungai (2018) carried out research in Kenyan polytechnics involving influence of cognitive factors on self-employment intentions among students in Kenya and found out that the decision by students to become self-employed after graduation entirely depends on mentorship process from parents and other successful entrepreneurs in the community. That self-employment intention is cultivated through the value added to them by family members and close relatives. This concurs with the findings of this study where by majority of the respondents if not all agreed that learners' background directly affect their entrepreneurial spirit. Learners' background in this study referred to social background of learners to mean the family, friends and close relatives of the learner.

According to Bwisa (2011) support that culture, social and family obligations, and the desire for social status are prime motives for entrepreneurial intentions hence economic success in a given Nation. Self-employment is as a result of outbreak of entrepreneurial activities among young from schools and this is supported by the social variation in which these learners originate from.

Wilbard (2009) found out that family background registered a higher influence on entrepreneurial intentions with male and general population of students from family that have entrepreneurship experience showing much higher inclination towards selfemployment.

This finding is not in agreement with that of Nguyen (2018) who found out those students whose parents were self-employed, scored higher entrepreneurial intentions. That prior experience in self-employment increases entrepreneurial intention.

Ayodele (2014) studied the effects family background has on entrepreneurial intentions of fresh graduates in Nigeria and it was revealed that family background of a student a

had an impact on entrepreneurial intentions in that the family acts as a source of finance, human resources, social and cultural values and role modeling.

These findings agree with the findings of many researchers because an individual learn very well by observing what others are doing. If learners have friends who are entrepreneurs will help them to be entrepreneurs in future because there is a saying that states 'show me your friends and I will tell you who you will be in future'. Proverbs chapter 13:20 says "He who walks with wise men becomes wise". This means that if you want to be wise then walk with wise people. If you want to be an entrepreneur, walk with successful entrepreneurs. Tutors, parents and relatives to students are close role models or mentors of learners. If all are entrepreneurs, then this will enhance entrepreneurial culture of students in future.

Ranwala (2016) studied the impact of family background and entrepreneurship specific education on entrepreneurial knowledge in venture creation and the study revealed that family background and entrepreneurship specific education had an impact on entrepreneurial knowledge in venture creation. In other words, entrepreneurship can be stimulated through family background and the entrepreneurship education. Social capital which include family networks, professional and recreational networks and having entrepreneurial role models influence entrepreneurial intentions of students (Ali, Ahsan, and Dziegielewski, 2017)

It is coming out clearly from the above literature that students' background like family, relatives, friends and culture of the student dearly influence students from becoming entrepreneurs for self-employment and job creation. It has been shown that students from entrepreneurial social class eventually involve in entrepreneurial activities after graduating. The researcher is in agreement with these findings because majority of the students agreed that students' background positively influence entrepreneurial intention of a learner for self-employment and job creation. In addition, they mentioned

government policies governing business activities, insecurity and availability of capital as some of the factors influencing students from becoming self-employed after graduating. They gave the following as ways through with family entrepreneurial background influence entrepreneurial intentions:

- 1. That students get inspired to be self-employed
- 2. They get entrepreneurial and business management skills while they are still young
- 3. Family members act as role models to students and make them to start a business immediately
- 4. They get business experience while they still young.
- 5. Students get motivated and know the importance of being self-employed

To overcome the challenge of getting capital to enable them start a business after schools, they suggested that:

- 1. They should be borrowing loans from financial institutions and these institutions should be charging friendly interest rates to graduates intending to start a business
- 2. They should also obtain goods for sale on credit, sale them and pay for them at later date
- They should convince their parents and friends to be contributing capital for them
- Government should come up with ways of giving students loans to start businesses immediately they graduate the way they sponsor students through HELB.

5. They should also learn on how to save the little they get inform of pocket money and use it in future as capital.

Students were also asked to mention other challenges that make them not to start practicing entrepreneurial activities immediately after schools and they gave the following reasons.

- 1. Unfavorable competition from well established businesses
- 2. Insecurity in the country due jobless youth
- 3. Strict government policies in case one wants to start a business for example high taxation and long procedures for one to start a business
- 4. Fear to take risks by the students and poor infrastructure
- 5. Drug abuse and laziness among the youth
- 6. Graduates having job seeking minds and culture that does not support entrepreneurship
- Students not being exposed to entrepreneurial activities while in schools due to the exam-oriented methods used by tutors
- 8. That they lack those who can mentor them

Students were also asked to state how the above challenges can be overcome and they stated the following:

- 1. Enough practical skills to be taught so that to expose students to entrepreneurial activities while they are still in schools and also students should be exposed to successful entrepreneurs while them are still in schools.
- 2. Mechanism to be put in place to fight corruption to enable the economy to be friendly to business people

- 3. The government should be willing and ready to support those students from polytechnics who are ready and willing to be entrepreneurs in terms of loosening their business policies and finances.
- 4. Financial institutions to lower their interest rates to make school leavers borrow loans.

If these institutions adopt effective entrepreneurship education programs well blended with appropriate teaching methods may provide a more appropriate assistance to students to have better insights after graduation and this may increase their selfemployment and job creation intentions. Otherwise, they generally tend to see seeking jobs after school in different public sectors being the best option to go.

#### **CHAPTER FIVE**

## SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS 5.1 Introduction

This chapter entails summary of findings, conclusions and recommendations based on the study findings. The chapter goes ahead to suggest areas for further study.

## **5.2 Summary of Findings**

The purpose of the study was to establish the effects entrepreneurship education has on entrepreneurial intentions of students (self-employment, job creation and job seeking intentions). To establish these relationships, the study used four objectives as follows:

Objective one: To establish the relationship between students' characteristics (age and gender) of the students and self-employment, job creation and job seeking intentions.

The findings showed that students' characteristics did not influence students' intentions of being self-employed and job creation. Students' characteristics influenced job seeking intentions. Most of the students across the age and gender believed that looking for jobs after school was the best option.

# Objective two: To establish the influence teaching methods have on selfemployment, job creation and job seeking intention of students.

It was established that lecture method, question and answer method and group discussion method were frequently used. The frequency of use of these methods had positive relationship with self-employment and job seeking intention of students. There was no relationship between lecture method and job creation intentions of students. Group discussion and question and answer method showed a positive relationship with job creation. These findings contradicted the findings of many researchers as mentioned in the study since these methods were classified as traditional teaching methods that promote cramming and memorizing by learners mainly to do well in an exam. These methods could not boost self-employment and job creation intentions among students. In other words, these methods could not promote entrepreneurial spirit in students.

Demonstration and modeling, use of ICT in teaching, use of resource person, brainstorming, project- based learning and field trip were not frequently used. Since they were not frequently used, self-employment and job creation intentions of students could not be cultivated well although field trip method positively influenced job creation. In other words, there was no significant difference between these methods and self-employment and job creation intentions of students although only field trip influenced job creation intention of students. The less use of these methods, led to less interest by students in being self-employed and creating jobs for others hence making majority of students being interested in seeking jobs after graduation.

These findings were in agreement with the previous studies on the relationship between entrepreneurship education and entrepreneurial intention of students in that these methods were considered by many previous researchers that they are active methods that if they are frequently used, promote entrepreneurial intention among students hence boosting self-employment and job creation intentions of students. The researcher recommended further study to establish whether these findings hold in other polytechnics other than the one where the study took place.

That inactive or traditional teaching method like lecture method will leave majority of students without entrepreneurial intentions since in most cases it is used by lecturers to cover the syllabus within a short period of time and it enables cramming for exam purposes but not for permanent learning. They suggested use of role models, application of ICT in teaching and learning processes, field trips, brainstorming and project-based learning as the best methods of teaching entrepreneurship education.

Objective three: To establish the perception of students towards entrepreneurship education for self-employment, job creation and job seeking intentions.

From the parameters used to test perception of students towards entrepreneurship education indicated that students had a positive perception towards entrepreneurship education being in agreement with findings of previous studies.

# **Objective four: To establish the influence of students' family entrepreneurial background on their self-employment, job creation and job seeking intentions**.

From the findings, it showed that students' family entrepreneurial background had a significant influence on self-employment, job creation and job seeking intentions.

The study recommended another study on influence of students' family entrepreneurial background on entrepreneurial intentions of students but it should be done in polytechnics in Kenya other than polytechnics where this study took place.

## **5.3 Conclusion**

The study was conducted to establish the effect of Entrepreneurship Education on Self-Employment, job creation and job seeking Intentions of polytechnic students. The researcher came up with the following conclusion based on the research objectives.

There was no scientific statistical significant relationship between age and selfemployment and job creation intentions of students. There was statistical significant relationship between age and job seeking intentions. There was no scientific statistical significant relationship between gender and selfemployment and job creation intentions of students. There was statistical significant relationship between gender and job seeking intentions.

Tutors still use traditional, inactive or passive teaching methods like lecture with do not cultivate entrepreneurial culture in students to enable them be self-employed and create jobs for others. Active methods like site visits, use of role models, ICT, practical teaching involving business incubators in polytechnics where students can apply what they have learned in class, brainstorming and use of successful entrepreneurs as motivational speakers are less used. Also, respondents agree that these active methods have a positive influence on self-employment and job creation intentions of students.

Majority of the respondents agree that they are studying entrepreneurship education for self-employment and job creation. Some of them, who are not ready to be self-employed and create jobs for others, said they are studying entrepreneurship education to seek jobs in different companies around the globe.

Further the study concludes that students have a positive perception towards entrepreneurship education for self-employment and job creation. Although some of them would like to be employed after schooling. Majority confirmed that entrepreneurship education is useful in the development of an individual's career option. If well taught, it can cultivate one's entrepreneurial culture.

The study further concludes that students' family background for example low family income (unavailability of starting capital), low entrepreneurial spirit in the family and student culture, poor government policies that govern business activities, poor infrastructure, insecurity and fear of unknown are some of the factors influencing those graduating not to venture into entrepreneurial activities to enable them be selfemployed and create jobs for others.

#### **5.4 Recommendations**

Based on the findings of the study, below were the recommendations of the study:

The researcher recommended that Entrepreneurship education tutors should use active methods that cultivate entrepreneurial culture among students. They should use enterprising approaches such as use of quest speakers, business plans, site visits, case studies, ICT integration in teaching, brainstorming and mentorship programmes in teaching and learning entrepreneurship education.

Student – teacher ratio is wide. Entrepreneurship education lecturers recommended that more entrepreneurship education lecturers should be employed to solve this problem of teacher shortages. This will enable effective and proper teaching of entrepreneurship education. Sometimes, it is difficult to use practical approach of teaching entrepreneurship like field trips, use of role models, application of ICT and many other practical methods due to cost implication, workload, teacher shortage and time. Lecturers recommended that the polytechnic stakeholders should work hand in hand with the government and even curriculum developers to support them with proper learning resources to enable them teach entrepreneurship effectively.

To ensure that polytechnics are singing the same song with curriculum planners, the researcher recommended that Kenya institute of curriculum development should work closely with curriculum implementers to review entrepreneurship education syllabus to make it more practical oriented and ensure that it is fully implemented and evaluated.

While developing entrepreneurship education curriculum, the researcher recommended that parents, tutors, entrepreneurs, and all education stakeholders should be involved. This will make curriculum implementation easier and interesting.

The researcher also recommended that the government should simplify its business policies for business entry and growth to encourage entrepreneurship among graduates that will enable them to create jobs for others and be self-employed as opposed to seeking jobs in companies which are not available.

The researcher further recommended that the government should extent loans to school leavers in form of business loans at a very low or no interest rate or as a matter of serious concern make funds available to all entrepreneurship education graduates to set up their business enterprises. This will boost entrepreneurial culture among graduates since majority of them argued that starting capital is one of the factors influencing them to start a business.

The researcher also recommended that the government should also come up with ways of solving insecurity problems in some parts of the country since it is one the reasons why graduates are not involving in entrepreneurship activities.

Also, the researcher further recommended that the government should establish Enterprise College where graduates of entrepreneurship education are enrolled to gain practical skills.

It was clearly shown from the study that students' family, friends, close relatives, entrepreneurship tutors and successful entrepreneurs who act as role models influence students' entrepreneurial culture. This group of people should be their responsibility to instill entrepreneurial culture all the time they interact with the students for knowledge production, strategies in entrepreneurial up skilling and sustainable life skills.

## **5.5 Suggested Areas for Further Study**

The study was interested to know the effect of entrepreneurship education on selfemployment, job creation and job seeking intention of polytechnic students. The researcher recommends the following research topics:

- 1. Problems encountered by entrepreneurship education tutors in the teaching and learning practical oriented entrepreneurship education.
- Assessment of the methods used to evaluate entrepreneurship education in Kenyan polytechnics.
- 3. A similar study in National Polytechnics in other parts of the country other than the region where this study took place.
- 4. The study was conducted among selected National Polytechnics students taking entrepreneurship education therefore, the researcher suggests a similar study on University students in Kenya to find out whether the results of this study can be replicated among University students.

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## **APPENDICES**

## **Appendix 1: Research Questionnaire for students**

#### Instructions

This research questionnaire is developed to obtain data from the respondents on the effects of entrepreneurship education on self-employment, job creation and job seeking intentions. Please do not write your name anywhere in this questionnaire. Tick ( $\sqrt{}$ ) where appropriate or fill in the required information in the space provided. The information you give will be handled confidentially.

## PART A: Demographic Data

1. What is your gender?

- Male [] Female []
- What is your age bracket? Below 20 years [ ] 20 to 30 years [ ] A above 30 years [ ]

## **SECTION B: Teaching Methods**

This section seeks to elicit data in relation to the teaching methods being used to teach entrepreneurship education. Please fill in the table below by ticking on the appropriate score using the scale below.

- 3. How often are the following teaching methods listed in the table below used by your tutors? Always = 5, Often = 4, Sometime = 3, Rarely = 2, Never = 1
  Teaching and Learning Methods
  5
  4
  3
  2
  1
  - a) Lecture
  - b) Group discussion
  - c) Project based learning
  - d) Ict integration in learning
  - e) Field trips
  - f) Demonstration/ Modeling
  - g) Brainstorming
  - h) Use of resource persons
  - i) Question and Answer method

\_\_\_\_\_

- 6. How often are successful entrepreneurs come to interact with you as entrepreneurial motivational speakers in the process of learning entrepreneurship education? Always [], Often [], Sometime [], Rarely [], Never []
- 7. Does your institution have business centers or enterprises where you are taken after classes to apply entrepreneurship skills apart from the normal field attachment?

Strongly Agree [], Agree [], Neutral [], Disagree [], Strongly Disagree []

8. Do you own or operate any business activities?

Yes [] No [] If yes specify which one.....

## **SECTION C: Students' Perception Towards Entrepreneurship Education**

This section seeks to elicit data on perception of students towards entrepreneurship education. Please fill by ticking on the appropriate scores using the scale below.

9. State whether you agree or disagree that it was your own choice to do entrepreneurship studies.

Strongly Agree [ ], Agree [ ], Neutral [ ], Disagree [ ], Strongly Disagree [ ]

10. State whether you agree or disagree that you gave entrepreneurship studies the first priority among many courses that were available to choose from during your first course selection.

Strongly Agree [ ], Agree [ ], Neutral [ ], Disagree [ ], Strongly Disagree [ ]

11. How did you feel when you got admission to study entrepreneurship education?

Very good [], good [], indifferent [], fair [], Not good []

12. Is studying of entrepreneurship education necessary?

Yes [], No []. Please explain your choice you have made

13. How will you feel when you become self-employed?

Very good [], good [], neutral [], fair [], Not good []

14. State whether you agree or disagree that you have gotten enough entrepreneurship skills to carry out entrepreneurial activities.

Strongly Agree [ ], Agree [ ], Neutral [ ], Disagree [ ], Strongly Disagree [

15. Using the scale below, please fill the table that follows Strongly Agree =5, Agree =4, Neutral =3, Disagree=2, Strongly Disagree = 1 statement

5 4 3 2 1

a). I'm studying entrepreneurship because I want to be self employed

b). I'm studying entrepreneurship because I want to create jobs for others

c). I want to get entrepreneurship skills to look for a job in different companies around the globe

d). I'm doing entrepreneurship studies because it was the only choice available

e). I'm doing it because of peer pressure

f). I'm doing it because it is a very easy course to pass with good grades

## <u>SECTION D: Other Challenges Influencing students' intentions of becoming self-</u> <u>employed</u>

This section seeks to elicit data on other challenges that influence students' intention of becoming self-employed. Tick ( $\sqrt{}$ ) where appropriate or fill in the required information in the space provided.

<ul><li>16. State whether you agree or disagree that entrepreneurship background of a student influences his or her intention of becoming self-employed.</li><li>Strongly Agree [], Agree [], Neutral [], Disagree [], Strongly Disagree []</li></ul>
17. In your own opinion how does entrepreneurial background influence students from becoming entrepreneurs hence employing themselves?
18. Do you think that lack of capital to start a business is the main reason why students are not able to start a business after graduation?
Strongly Agree [ ], Agree [ ], Neutral [ ], Disagree [ ], Strongly Disagree [ ]
19. In your own opinion how can the challenge of capital be overcome in relation to starting a business?
relation to starting a business?
relation to starting a business?
relation to starting a business?
relation to starting a business? 20. List other challenges you think are making students not to be self-employed

21. What do you think could be the solution(s) of the above challenges?

## THE END

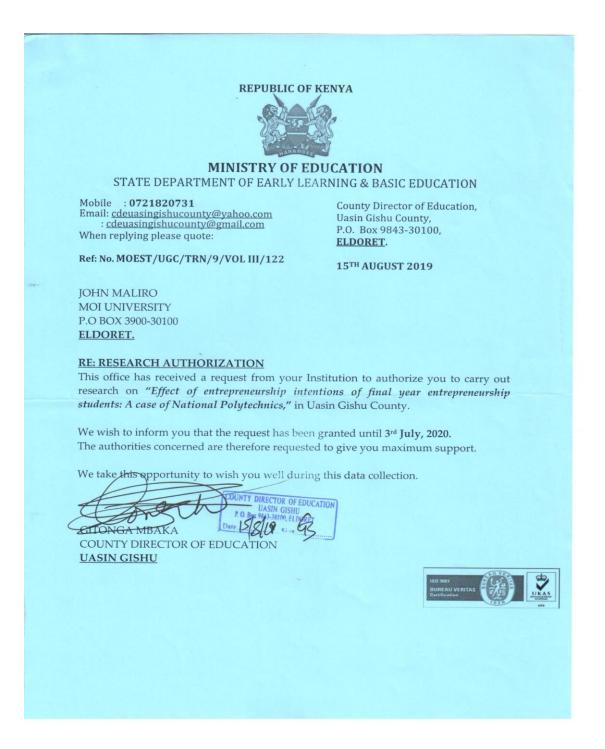
THANK YOU.

## NATIONAL COMMISSION FOR SCIENCE, **TECHNOLOGY AND INNOVATION** Telephone +254-20-2213471, NACOSTI, Upper Kabete 2241349.3310571.2219420 Off Waiyaki Way P.O. Box 30623-00100 Fax:+254-20-318245,318249 Email: dg@nacosti.go.ke NAIROBI-KENYA Website : www.nacosti.go.ke When replying please quote Ref: No. NACOSTI/P/19/55105/31624 Date: 4th July 2019 John Maliro Moi University P.O Box 3900-30100 ELDORET. **RE: RESEARCH AUTHORIZATION** Following your application for authority to carry out research on "Effect of entrepreneurship education on entrepreneurial intentions of final year entrepreneurship students: A case of National polytechnics in Western, Kenya." I am pleased to inform you that you have been authorized to undertake research in Trans Nzoia and Uasin-Gishu Counties for the period ending 3rd July, 2020. You are advised to report to the County Commissioners, and the County Directors of Education, Trans Nzoia and Uasin-Gishu Counties before embarking on the research project. Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a copy of the final research report to the Commission within one year of completion. The soft copy of the same should be submitted through the Online Research Information System. mms COUNTY COMMISSIONER BONFACE WANYAMA. UASIN GISHU COUNTY FOR: DIRECTOR-GENERAL/CEO Copy to: The County Commissioner Trans Nzoia County.

## Appendix 2: Research Authorization from County Commission Uasin Gishu

The County Director of Education

# Appendix 3: Research authorization from Ministry of Education, Uasin Gishu County



## **Appendix 4: Research Letter from the University**



National Council for Science and Technology P.O. Box 30623-00100 NAIROBI

Dear Sir/Madam,

## RE: RESEARCH PERMIT IN RESPECT OF MALIRO JOHN-(EDU/PGCM/1033/16)

The above named is a 2<sup>nd</sup> year Master of Education (M.Ed) student at Moi University, School of Education, Department of Curriculum, Instruction and Educational Media, School of Education.

It is a requirement of his M.Ed Studies that he conducts research and produces a thesis. His research is entitled:

## "Effects of Entrepreneurship Education on Entrepreneurial Intentions of Final Year Entrepreneurship Students: A Case of National Polytechnics in Western, Kenya ."

Any assistance given to enable him conduct research successfully will be highly appreciated.

Yours faithfully,

13.05. 2019 PROF. J. K. CHANG'ACH

DEAN, SCHOOL OF EDUCATION

THE ELDORET NATIONAL POLYTECHNIC HR & ENTREPRENEURSHIP (ISO Certified Institution) 

## **Appendix 5: Research Authorization from NACOSTI**



## NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Talaphoer +254-20-2313471, 2241349-3310571,2219429 Fax: =254-20-318249 Email: dg@naccesti.go.ke Website: www.naccesti.go.ke When replying please quote

NACOSTI, Upper Kabete Off Weigaki Way P.O. Box 30523-00100 NACROBI-KENYA

Ref. No. NACOSTI/P/19/55105/31624

Date 4th July 2019

John Maliro Moi University P.O Box 3900-30100 ELDORET.

#### RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "Effect of entrepreneurship education on entrepreneurial intentions of final year entrepreneurship students: A case of National polytechnics in Western, Kenya." I am pleased to inform you that you have been authorized to undertake research in Trans Nzoia and Uasin-Gishu Counties for the period ending 3<sup>rd</sup> July, 2020.

You are advised to report to the County Commissioners, and the County Directors of Education, Trans Nzoia and Uasin-Gishu Counties before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a copy of the final research report to the Commission within one year of completion. The soft copy of the same should be submitted through the Online Research Information System.

BONFACE WANYAMA. FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner Trans Nzoia County.

The County Director of Education Trans Nzoia County.

The County Commissioner Uasin Gishu County.

The County Director of Education Uasin Gishu County.

## **Appendix 6: Research Certificate from NACOSTI**

THIS IS TO CERTIFY THAT: MR. JOHN MALIRO of MOI UNIVERSITY, 0-50100 KAKAMEGA,has been permitted to conduct research in Transnzoia, Uasin-Gishu Counties

on the topic: EFFECT OF ENTREPRENEURSHIP EDUCATION ON ENTREPRENEURIAL INTENTIONS OF FINAL YEAR ENTREPRENEURSHIP STUDENTS: A CASE OF NATIONAL POLYTECHNICS IN WESTERN, KENYA.

for the period ending: 3rd July,2020 Permit No : NACOSTI/P/19/55105/31624 Date Of Issue : 4th July,2019 Fee Recieved :Ksh 1000

> Director General National Commission for Science, Technology & Innovation

Applicant's Signature

#### THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

The Grant of Research Licenses is guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014.

#### CONDITIONS

- The License is valid for the proposed research, location and specified period.
- 2. The License and any rights thereunder are non-transferable.
- 3. The Licensee shall inform the County Governor before
- commencement of the research.
- 4. Excavation, filming and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
- 5. The License does not give authority to transfer research materials.
- 6. NACOSTI may monitor and evaluate the licensed research project.
- 7. The Licensee shall submit one hard copy and upload a soft copy of their final report within one year of completion of the research.
- 8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice.

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REPUBLIC OF KENYA



National Commission for Science, Technology and Innovation

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