



SELINUS UNIVERSITY
OF SCIENCES AND LITERATURE

**IMPACTS OF ENTREPRENEURSHIP EDUCATION ON
ENTREPRENEURIAL BEHAVIOUR AMONG UNIVERSITY
GRADUATES IN KENYA**

By Simon Nyagah Mwangi

A DISSERTATION

Presented to the Department of
Entrepreneurship Education
program at Selinus University

Faculty of Business & Media
in fulfillment of the requirements
for the degree of Doctor of Philosophy
in Entrepreneurship Education

2024

ABSTRACT

Kenya continues to experience a high rate of unemployment among graduates from Technical and Vocational Education and Training (TVET) colleges and universities. The major challenge that has contributed to unemployment is the inability of changing the mindset and behaviour of students to be self-employed as opposed to seeking formal jobs upon graduation. Entrepreneurship education is used as a key strategic intervention to generate graduates who are psychologically prepared to initiate their own businesses and run them to earn a living. This study aimed to analyze critically the educational and cognitive factors that influence the graduates' entrepreneurial behaviour. The theoretical framework employed the social cognitive theory (SCT), which emphasizes on dynamic interaction between graduates' cognitive factors and environmental factors to produce the desired behaviour. The target population comprised of entrepreneurship of education graduates from universities in Kenya. Exponential non-discriminative snowball sampling technique was used to select respondents on referral basis while cluster sampling was used to group respondents from each university separately. Qualitative data was analyzed using content analysis while descriptive and regression analysis was used for quantitative data. Chi square and regression analysis test on relationship between entrepreneurship education and Entrepreneurial behaviour was done. The findings indicated that entrepreneurship education, as exemplified in pedagogical approach, individual characteristics and curriculum content has statistically significant positive influence on entrepreneurial behaviour. It was also concluded that government policy is a key factor as it played a moderating role in the entrepreneurial behaviour. From the findings, the government was recommended to come up with policies that are favourable to the business environment and facilitate entrepreneurs with business grants and incentives for business sustainability. The curriculum of entrepreneurship education was recommended to be more practical than theoretical, during training as well as in assessment.

TABLE OF CONTENTS		Page
TITLE PAGE		i
ABSTRACT		ii
TABLE OF CONTENTS		iii
LIST OF TABLES		v
LIST OF FIGURES		vi
LIST OF APPENDICES		vii
ACRONYMS AND ABBREVIATIONS		viii
OPERATIONAL OF KEY TERMS		ix
CHAPTER ONE: INTRODUCTION AND AIM OF STUDY		1
1.1 Background of the Study		1
1.1.1 Entrepreneurship Education		3
1.2 Statement of the Problem		4
1.3 Aim of the Study.....		5
1.4 Objectives of the Study.....		5
1.5 Research Hypothesis.....		5
1.6 Assumptions of the Study.....		6
1.7 Justification of the Study		6
1.8 Scope of the Study.....		7
1.9 Limitation of the Study.....		7
CHAPTER TWO: LITERATURE REVIEW		8
2.1 Introduction		8
2.2 Entrepreneurial Behaviour.....		8
2.3 Entrepreneurship Education in Kenya.....		8
2.4 Pedagogical Approach and Entrepreneur Behaviour.....		10
2.4.1 Teaching Methods and Entrepreneur Behaviour		10
2.4.2 Methods of Evaluation and Entrepreneur Behaviour		11
2.5 Individual Characteristics and Entrepreneur Behaviour.....		13
2.5.1 Self-efficacy and Entrepreneur Behaviour		13
2.5.2 Family Business Background and Entrepreneur Behaviour		13
2.6 Curriculum Content and Entrepreneur Behaviour.....		14
2.7 Government Policies and Entrepreneur Behaviour		17
2.8 Theoretical Framework.....		18

2.9 Conceptual Framework.....	19
2.10 Summary of the Literature Review	20
2.11 Research Gaps	21
CHAPTER THREE: METHODOLOGY	22
3.1 Introduction	22
3.2 Research Design	22
3.3 The Study Area and Target Population	22
3.4 Sampling Procedure and Sample Size	23
3.5 Research Instruments.....	23
3.6 Validity and Reliability	24
3.6.1 Validity	24
3.6.2 Pre-test	25
3.6.3 Reliability.....	25
3.7 Data Collection Procedures	26
3.8 Data Analysis.....	27
CHAPTER FOUR: RESULTS AND DISCUSSIONS	28
4.1 Introduction	28
4.2 Rate of Response	28
4.3 Reliability Analysis	28
4.4 Demographic Information	28
4.4.1 Gender of the Respondents	29
4.4.2 Age of the Respondents	30
4.5 Education Level of the Respondents	30
4.6 Duration of the Business.....	31
4.7 Frequency Analysis of Study Variable.....	31
4.7.1 Pedagogical Approach	31
4.7.2 Individual Characteristics	34
4.7.3 Curriculum Content	35
4.7.4 Government Policy	36
4.7.5 Entrepreneurial Behaviour	38

4.8 Analytical Model Diagnostic Tests	39
4.8.1 Normality Test	39
4.8.2 Autocorrelation Test	40
4.8.3 Multicollinearity	41
4.8.4 Homoscedasticity	41
4.9 Chi-Square Tests.....	42
4.10 Binary Regression Analysis.....	48
4.11 Multivariate Logistic Regression	53
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	59
5.1 Summary of Findings	59
5.2 Conclusion of Findings.....	59
5.3 Contribution to the Body of Knowledge	60
5.4 Recommendations	60
5.4.1 Recommendations to the Government	61
5.4.2 Recommendations to Curriculum Developers	61
5.4.3 Recommendations to the Trainers	62
5.5 Suggestions for Further Studies.....	62
REFERENCES	28
APPENDICES	34

LIST OF TABLES

Table 3.1: Summary of the Data Analysis Procedures	27
Table 4.1: Reliability of the Research Instruments	28
Table 4.2: Respondents' Gender	29
Table 4.3: Age of the Respondents	29
Table 4.4: Education Level of the Respondents	27
Table 4.5: Business Age	30
Table 4.6: Summary of Pedagogical Approach Constructs' Frequency Analysis	32
Table 4.7: Summary of curriculum content Constructs' Frequency Analysis	36
Table 4.8: Summary of Government policy Constructs' Frequency Analysis.....	37
Table 4.9: Summary of Frequency Analysis of entrepreneurial behaviour's Constructs	29

LIST OF FIGURES

Figure 2.1: Theoretical Framework	18
Figure 2.2: Conceptual Framework	19

LIST OF APPENDICES

Appendix I: Consent form for Participants.....	43
Appendix II: Questionnaire	44

ACRONYMS AND ABBREVIATIONS

EU	- European Union
KIM	- Kenya Institute of Management
KIPPRA	- Kenya Institute for Public Policy Research and Analysis
KUCCPS	- Kenya Universities and Colleges Central Placement Service
MDS	- Most Different System Design
MoE	- Ministry of Education
NACOSTI	- National Commission for Science, Technology, and Innovation
SCT	- Social Cognitive Theory
SDGs	- Sustainable Development Goals
TVET	- Technical and Vocational Education and Training

OPERATIONAL DEFINITION OF TERMS

Educational Factors: Refers to the elements that shape and affect learning and teaching.

Entrepreneurs: Refers to the graduates of entrepreneurship education who start up new business and make contributions to the economy. They are innovative, spot or identify opportunities and reallocate resources. They are risk takers, persistent, have a high locus of control, low need for status and power.

Entrepreneurship: It is the process of bringing together creative and innovative ideas, combining them with management and organization skills in order to combine people, money and resources to meet an identified need and thereby create wealth.

Entrepreneurship Education: Refers to a course that seeks to provide students with the knowledge, skills and motivation to encourage entrepreneurial success in a variety of settings. Variations of entrepreneurship education are offered at all levels of schooling from primary, secondary schools and through tertiary or graduate university programs.

Entrepreneurial Behaviour: Refers to the discovery and exploitation of a new business opportunity with the purpose of profit and growth.

Reciprocal Determinism: It is a theory which argues that human environment, thoughts and actions are interconnected and influence each other. In this study it is used to explain that an individual can learn entrepreneurship skills before becoming an entrepreneur or can be an entrepreneur and learn entrepreneurship skills later.

Self-efficacy: Refers to the person's belief in one's own competencies in dealing with difficult and uncertain tasks.

Unemployment: Refers to a situation where a graduate is unable to find job despite being capable of working and actively seeking for one.

Underemployment: Refers to a situation in which graduates are forced by circumstances to work in low-skill or low-paying jobs

Employability: Refers to the achievements and skills gained by graduates that make them more likely to be employed and succeed in their ventures.

CHAPTER ONE

INTRODUCTION AND AIM OF STUDY

1.1 Background of the study

Education is a path that leads graduates to a variety of options for personal and economic growth such as entrepreneurship or employment. Given the reducing job opportunities in the job market, it is advisable for graduates to pursue entrepreneurship opportunities. Entrepreneurial activities and entrepreneurship education are considered crucial to the economic development of nations. One of the guiding principles of Sessional Paper No. 1 of 2019 on *Policy Framework for Reforming Education and Training for Sustainable Development in Kenya*, is to focus on entrepreneurship, agriculture and industrial development (MoE, 2019). This is in line with the Constitution of Kenya 2010, Kenya Vision 2030 and Sustainable Development Goals (SDGs). The underlying thinking is that entrepreneurship skills are teachable and are not a preserve of personal characteristics.

Entrepreneurial behaviour is a set of key behaviours individuals exhibit that allow them to better navigate the world of business and experience success based on the business performance (Bilić, 2011). According to Sefiani (2013), entrepreneurial behaviour can be either as a result of internal or external factors. Internal factors, which are also referred to as endogenous factors are based on personal environment of the business owner. Entrepreneurship education is aimed at equipping students with quality internal factors towards success in their entrepreneurship ventures such as emotions, passion, trust, cognition, decision making, negotiation and conflict management (Pellegrini & Caputo, 2020). External factors according to Sefiani (2013) refers to environmental factors such as political and economic, which are beyond owners' control. However, in this study, entrepreneurial behaviour is defined based on the understanding of definition given by Dafna (2018), who supports the notion that a successful business is a venture that has operated consistently for at least thirty-six months. Other measures of entrepreneurial success include growth in outlets and number of employees, return on investment, cash flow, increased sales, market share and the venture's competitive advantage.

Besides education-related factors, cognitive factors have been noted as a major ingredient in shaping entrepreneurial behaviour. According to Ahmad (2007), many studies have highlighted the role of cognitive characteristics such as knowledge, attitudes, beliefs, experience,

background and education of entrepreneurs towards their entrepreneurial behaviours and firm's performance. Ahmad (2007) highlights that most active entrepreneurs are those aged 25 years and above. Gender has also been described as an important predictor of entrepreneurial behaviour and intention as males have more intentions towards entrepreneurship than females (Wilson, Kickul, & Marlino, 2007).

Globally, entrepreneurship programs were first introduced at the tertiary level first at Kobe University in Japan in the year 1938 and subsequently at Harvard Business School in the United States of America in 1947 (Katz, 2003). The supply and demand of entrepreneurship programs has grown considerably in the developed world from these earlier beginnings. The number of these programs exceeded 500 by the year 2000 in the US (Vesper & Gartner, 1997), and has continued growing ever since. In Kenya, developing entrepreneurial skills among the citizens is one of the major objectives of the economic pillar in Kenya Vision 2030. The efforts to promote entrepreneurship education programs are provided in some public and private universities and TVET colleges, either as a component of a large course or a stand-alone unit from certificate to degree levels. However, this study focused on graduates of entrepreneurship education from both private and public universities in Kenya.

1.1.1 Entrepreneurship Education

Entrepreneurship education is essential in producing an enterprising student (Storey, 2014). This means students are developed to acquire awareness and skills of entrepreneurship such as communication, creativity, critical thinking, leadership, negotiation, problem-solving, social networking and time-management skills. It focuses on encouraging students to apply enterprising skills and attributes to a range of different contexts, including new or existing businesses, charities, non-governmental organizations, the public sector, and social enterprises (The Quality Assurance Agency for Higher Education, 2012). The ultimate aims of entrepreneurship programs are to produce graduates with entrepreneurial behaviour, who are self-employed, catalyst for economic growth, create employment opportunities, be able to identify and exploit opportunity and inculcate the spirit of resilience through the curriculum (Paul, 2005). The universities in Kenya are guided by curricula that provides clear guidelines on course content, pedagogy and method of evaluation.

Different teaching approaches are involved depending on the different models that are used in teaching and communicating entrepreneurship education in institutions, organizations and society. There are two main approaches of teaching and learning entrepreneurship education; passive and active. Passive approach takes place only in the static classroom intended to develop the students' capacity to understand the information provided. Active approach involves a real or virtual entrepreneurial task where the student takes the primary role, and the educator acts more as "coach" or "facilitator" of the learning. This approach emphasizes the use of action learning or experiential learning, where through the learning, learners construct knowledge and learn by trying to solve every single problem.

Given the importance of entrepreneurship education in producing enterprising graduates, the role of evaluation is critical in determining what works well and what could be improved to achieve the desired results. Fayolle (2004) underscores that effective evaluation methods should cover diverse objectives of entrepreneurship education. The use of written examination to evaluate entrepreneurship education has been faulted for its inability to accurately and efficiently measure the acquisition of entrepreneurial skills (Mwasalwiba, 2010). Mwasalwiba argues that on the contrary, the approach of written examination only effectively measures the extent to which knowledge relating to entrepreneurship has been understood; ability among students to recall concepts; and some indication of students' interest in entrepreneurship education. Given limitations inherent in written examination, Syed (2015) identifies the use of the business plans or projects as a viable and effective approach to evaluate the acquisition of entrepreneurial skills. The Ministry of Education aims to achieve entrepreneurship success among graduates as a natural result of vocational skills training and fostering entrepreneurial intention among college and university students through the curriculum (Ministry of Education, 2019). Kenyan universities provide entrepreneurship education programs that are meant to provide the best environment for entrepreneurship success for the graduates.

Unemployment among graduates has remained a fundamental challenge threatening the economic development and stability in Kenya. The situation is worsening with seven (7) out of 10 entrepreneurship graduates being either unemployed, underemployed or unemployable as at 2019, while over 200,000 graduates remain unemployed every year (Nani, 2019). Considering the fact that these graduates constitute the most active segments of the population, their inability

to identify problems and establish entrepreneurial ventures is dangerous for the growth of the nation. Unfortunately, most of the entrepreneurship education, do not possess relevant entrepreneurial skills necessary to join and succeed in an entrepreneurship venture. Entrepreneurship education inculcates in learners' entrepreneurial behaviour that enables them confront situations in creative and innovative ways (Agu, 2013). Agu (2013) further explains that such entrepreneurial individuals create jobs for themselves and for others thereby reducing unemployment.

1.2 Statement of the Problem

Kenya is experiencing high number of unemployed graduates. In addressing the problem, the government through the Ministry of Education has put effort of changing the graduates' behaviour to venture into entrepreneurship as opposed to seeking formal employment. Entrepreneurship education has been used as a key strategic intervention in order to produce graduates who are psychologically prepared to initiate their own businesses and make income for living. However, most graduates are desperately moving from one office to another seeking for job opportunities hence end up joining the growing numbers of unemployed, frustrated and discouraged graduates. Despite the vast entrepreneurship opportunities in Kenyan market such as in the blue economy and *jua kali* sector, Belz and Binder (2015) question the quality of entrepreneurship education, terming the graduates as incompetent entrepreneurs and unable to venture in businesses. This calls for action to find out where the quality of graduates in entrepreneurship education gets compromised. This study analyzed critically the impacts of entrepreneurship education and cognitive factors that influence entrepreneurial behaviour amongst university graduates in Kenya. The research tried to address the gap of how the entrepreneurship education results in entrepreneurial behaviour among university graduates in Kenya. This follows the increased number of universities offering entrepreneurship education programs, high mobilization and support from government against the resultant high level of entrepreneurship education graduates seeking formal employment instead of venturing into entrepreneurship. The findings inform curriculum developers on the gaps that may be hindering smooth transition of graduates from class to successful entrepreneurs.

1.3 Aim of the Study

The purpose of this study was to analyze critically the impacts of entrepreneurship education and cognitive factors that influence entrepreneurial behaviour amongst university graduates in Kenya.

1.4 Objectives of the study

The general objective of this study was to analyze critically the impacts of entrepreneurship education and cognitive factors that influence entrepreneurial behaviour amongst university graduates in Kenya. The specific objectives were as follows.

1. To evaluate the level influence of pedagogical approaches of entrepreneurship education on entrepreneurial behaviour amongst graduates from universities in Kenya.
2. To measure the impact of individual characteristics of entrepreneurship education on entrepreneurial behavior among graduates from universities in Kenya.
3. To analyze the level influence of content of curriculum of entrepreneurship education on entrepreneurial behaviour amongst graduates from universities in Kenya
4. To establish the moderating effect of Government policy on the relationship between entrepreneurship education and entrepreneurial behaviour among graduates from universities in Kenya.

1.5 Research Hypothesis

The study tested the following null hypotheses.

- i. **H₀₁**: There is no significant influence of pedagogical approach on entrepreneurial behaviour amongst graduates from universities in Kenya.
- ii. **H₀₂**: There is no significant influence of individual characteristics on entrepreneurial behaviour amongst graduates from universities in Kenya.
- iii. **H₀₃**: There is no significant influence of curriculum content on entrepreneurial behaviour amongst graduates from universities in Kenya.
- iv. **H₀₄**: There is a significant moderating effect of government policy on entrepreneurial behaviour amongst graduates from universities in Kenya.

1.6 Assumptions of the Study

The study assumed that entrepreneurship skills are teachable and are not a preserve of personal characteristics. Further, the study assumed that the respondents were willing to disclose honest and accurate information about their entrepreneurship competencies and means of earning their livelihood as well as the whereabouts of their former classmates. Further, the study assumed that the aim of offering entrepreneurship education in Kenyan universities is to produce graduates who will join and succeed in entrepreneurship. In addition, the study assumed that the respondents acquired entrepreneurship skills before becoming entrepreneurs and not vice versa as depicted in the social cognitive theory.

1.7 Justifications and Significance of the Study

The level of unemployed and unemployable graduates from Kenyan universities is rising. Unemployment does not just affect economic aspect of life but also leads to a series of social and moral problems in any society such as increased crime rates among others. The entrepreneurship education programs offered in universities are meant to provide the best environment of equipping graduates with skills of starting and succeeding in entrepreneurship ventures. However, most of the graduates do not become entrepreneurs and instead, they start looking for formal employment. The frustrations that follow job seeking are a likely cause of depression and drug abuse among the graduates. This study aimed to identify the educational-related factors that influence entrepreneurial behaviour amongst university graduates. The findings are expected to help to understand whether entrepreneurship education course achieves its purpose. The findings are anticipated to uncover the gaps within entrepreneurship education, which will be implemented by the curriculum developers.

1.8 Scope of the Study

The study confined itself to identifying the educational and cognitive-related factors that influence entrepreneurial behaviour amongst university graduates. The respondents included entrepreneurship education graduates from the seven universities that offer entrepreneurship education course in Kenya, irrespective of their demographic scope. Further, the researcher examined the entrepreneurship education curriculum from the sampled institutions.

1.9 Limitations of the Study

The study relied on the respondents' views through the survey and interview. Reaching all respondents posed a challenge given that their whereabouts were unknown from the institutions. Although there are many other factors that may influence entrepreneurial behaviour of graduates, this study only focused on educational and cognitive factors of entrepreneurship education graduates. In addition, the researcher was only interested with entrepreneurship graduates of year 2019.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews the literature related to educational-related factors that influence entrepreneurial behaviour amongst graduates from universities in Kenya. The themes to be addressed were based on entrepreneurial behaviour, pedagogical approach, individual characteristics and curriculum content. In addition, the chapter provides a review of theories that inform the study.

2.2 Concept of Entrepreneurial Behaviour

Entrepreneurial behaviour refers to the discovery and exploitation of a new business opportunity with the purpose of profit and growth (Reconalla, 2016). It involves three distinct activities: 1) the identification of a new business opportunity, 2) the establishment of a new venture to exploit that opportunity, and 3) the management of the new venture to make it flourish over time. Launching a new venture is, probably, the most noticeable activity of the entrepreneurial behaviour (Baron, 2015). Thus, entrepreneurial behaviour is behaviour of individuals engaging in a process of creating new ventures, where the process includes units of actions which can be observed by others. However, in this study, entrepreneurial behaviour is defined based on the understanding of definition given by Dafna (2018), who supports the notion that a successful business is a venture that has operated consistently for at least thirty-six months.

2.3 Entrepreneurship Education in Kenya

Kenya's investment in education is guided by Vision 2030. The education sector policy stresses on the need to produce a properly trained workforce that is not only internationally competitive but also capable of stimulating employment to contribute to improved productivity, competitiveness and prosperity of individuals (Sessional Paper No. 1 of 2019). Kenya has to invest in technological innovation to stand a chance of realizing the aspirations of Vision 2030 and break into and maintain the middle-income status. Entrepreneurial learning and teaching methods are inculcating entrepreneurial skills and attitudes in students to motivate the creation of new venture by undergraduates (Dafna, 2018). The quest for white collar jobs and unemployment rate suggests the educational system in Kenya lacks the element crucial to

avoiding the high rate of unemployment in the country. Consequently, there may exist some gaps between the development of entrepreneurship education for students, and the eventual translation of this education into new venture creation.

Entrepreneurship has become a growing destination of employment for large numbers of youth as well as older workers pursuing self-employment and job satisfaction in Kenya. About 80% of Kenya's unemployed are between 22 and 34 years of age with the highest unemployment rates being for people around 25 years old, at 35 % (UNDP, 2013). Majority of university graduates in Kenya fall within the age bracket between 22 and 34 years. Initially viewed as a safety net for those unable to secure formal employment in established formal companies and other government entities, the image of the entrepreneurship sector has changed with time as well as the education level of those entering the sector.

Research that was conducted with a sample of 5,375 UK students and 10 universities showed that 9.7% of UK graduates become entrepreneurs during a period of five (5) years since their graduation (ILO, 2012). This is a high rate of entrepreneurial activity if we consider the span of the professional choices that the students can have and that they have a propensity to the dependent employment status. ILO (2012) maintains that the survival rate of the companies established by graduates is higher than the average and, in any case, higher than the companies established by non-graduates. This adds weight to this study given that well-trained graduates are more competent than their counterparts who were not trained. In addition, other studies as regards to the entrepreneurship, demonstrate that the companies established by graduates perform better, compared to the average of the rest of the companies with similar size. A study among graduates from English universities shows that they generally establish private or micro enterprises, which are based on their knowledge and skills (Rose, R & Kumar, N, 2006). In addition, the study supports a high correlation between the studied subject and the activities of the established business. This study analyzed the entrepreneurial behaviour of graduates from Kenyan universities.

2.4 Pedagogical Approach and Entrepreneurial Behaviour

Under pedagogical approach variable, literature review focused on how teaching methods and evaluation methods affect entrepreneurial behaviour of graduates from Kenyan universities.

2.4.1 Teaching Methods and Entrepreneurial Behaviour

A study by Murithi (2013) revealed that though entrepreneurship curriculum was rich in content, the delivery methods engaged did not add value to the graduates 'entrepreneurial readiness. The method of teaching is an important consideration on influencing learners' entrepreneurial behaviour. Mwasalwiba (2010). Learning techniques have long been acknowledged as important instructional elements of methodologies that support educational ideals (Skutil et al., 2016). Excursions, interviews, simulations, discussions, financial record preparation, role play, demonstrations, presentations, business plan preparation, case studies, brainstorming, and entrepreneurial trait self-assessment are all listed as common learning techniques in the entrepreneur ducation syllabus developed in 2006 (Republic of Kenya, 2006).

Johnson et al., (2015) argue that the best way to develop entrepreneurial skills is to expose students to real-world work environments where they can put what they've learned in class into practice. They suggest that because entrepreneurship is task- oriented, traditional techniques of nurturing specialized abilities should be abandoned in favor of task training. Students can embrace a culture of flexibility and experimentation in this way. Esmi et al., (2015) agree with Johnson et al., (2015) that the teaching of entrepreneurship should take into account the fact that it requires a creative rather than a mechanical process. As a result, EE, especially in this day and age, necessitates the adoption of novel and practical methodologies.

Recent research has focused on the various methods that can be used in EE. Syed (2015), for example, advocates for enhancing entrepreneurial skills through workshops, virtual start-up competitions, simulations, competitions involving the design of business plans, product development, internships, experiential learning, and knowledge exchange interactions, among other methods. Scientific visits, group discussions, case studies, group projects, simulations, interviews, individual projects, problem-solving, investment projects, project support, and official speech are among the pedagogical approaches identified by Arasti et al., (2012) as the most effective in improving entrepreneurial skills. Learning from mistakes, writing business

plans, gaining experiential learning for service and product sales, learning that is process-based rather than content-based, and problem-based learning, according to Oyelola (2013), are all important aspects of acquiring entrepreneurial skills.

Esmi et al., (2015) divide entrepreneurship-related learning techniques into three domains: direct, interactive, and practical–operational domains. Direct domain, according to Esmi and colleagues, comprises of techniques that promote direct exposure and include, for example, guest entrepreneurs, official speeches, mentorship, video shooting and shows, entrepreneurship tutoring, extracurricular activities, small business mentorship, and the use of specialized lessons. Group discussions, networking, and learning from mistakes are all classified as interactive learning techniques by Esmi et al., (2015). Meanwhile, the practical-operational domain includes techniques such as site visits, research projects and internships, training workshops, business planning, practical experience, investment projects, role-playing, studying nature, and starting businesses.

The study leaned towards Esmi et al., (2015) conceptualization of learning techniques as direct, interactive, and practical–operational domains. The direct techniques were measured using traditional lecture method, invitation of guest speakers, industrial attachment, conducting seminars on EE and use of videos. The interactive learning techniques were measured using assignments, group discussions, case studies, and visitation to business organizations. Lastly, the practical-operational learning techniques were measured using development of business plans, research projects, role-plays, academic trips business activities startups.

2.4.2 Methods of Evaluation and Entrepreneurial Behaviour

Evaluation is described as a systematic process that determines effectiveness of an instructional program and through which the nature and extent of behavioural change among students who may have been exposed to the instructional process can be determined. Afsahi (2016) outlines three main types of evaluation methods, which are formative, summative, and follow-up. Afsahi contends that formative evaluation occurs during the educational process with the intent of improving performance, often referred to as "feedback." Conversely, summative evaluation occurs after educational activity with the intent of documenting achievement or competence. Summative evaluation, according to Afsahi (2016) can be internal or external. Internal

evaluations are set and administered within the institution and external evaluations are set and administered by an independent body from the institution. Follow-up evaluation occurs sometime after an educational activity, with the intent of determining whether the learner has applied the knowledge/skill in practice.

Evaluation can be done at three main domains, which are, learner, facilitator, and course. At each level, both the process and outcome can be evaluated. Evaluation of the process involves assessment of the effectiveness of instructional methods used in a course, while evaluation of the outcome involves assessment of the effectiveness of results of the educational program. Mwasalwiba (2010) classified indicators for the evaluation of entrepreneurship education into two categories based on whether outcomes are short-term or long-term. The researcher opined that short-term indicators of evaluation include examination scores, transition rates, students' satisfaction, attitudinal change on perceptions, and intentions towards entrepreneurship among others.

Long-term evaluation helps the graduates to advance their entrepreneurial behaviour in search for higher and better results. Long-term evaluation indicators include; type and number of start-ups, innovations, technologies, job creation, employment rates among graduates, and contribution to society. Although Mwasalwiba (2010) observes that short-term evaluation indicators are difficult to distinguish between impacts of educational interventions and impacts of post-graduation contextual experiences, the researcher notes that they are helpful in forming the foundation of the long-term evaluations.

Written tests have been criticized for their failure to accurately and efficiently measure the learning of entrepreneurial skills in EE (Mwasalwiba, 2010). Mwasalwiba contends that, on the contrary, written tests effectively reflect only the amount to which entrepreneurial knowledge has been grasped, students' capacity to recollect concepts, and some indication of students' enthusiasm in EE subject. Syed (2015) recognizes the use of business plans or projects as a realistic and successful strategy to evaluate the acquisition of entrepreneurial abilities, given the constraints of written exams. The study identified the level of influence that formative, summative, and follow-up evaluations have on entrepreneurial behaviour amongst graduates from Kenyan universities.

2.5 Individual Characteristics and Entrepreneurial Behaviour

Under individual characteristics variable, literature review focused on how self-efficacy and family business background affect entrepreneurial behaviour among graduates from Kenyan universities.

2.5.1 Self-efficacy on Entrepreneurial Behaviour

Self-efficacy is a person's belief in one's own competencies in dealing with difficult and uncertain tasks and difficulties with special needs. Previous research showed that as people's self-efficacy beliefs increase, behavior change also increases. More specifically, an individual with high-level self-efficacy is more likely to exhibit initiation behavior, effort, and unwavering determination (McGee, J & Peterson, M, 2019). Self-efficacy beliefs influence behavior through four mediating processes: goal-setting and persistence, affect, cognition, and selection of environments and activities (Bandura, 1994). The influence of self-efficacy can be observed in the selection of goals, goal-oriented actions, effort invested in the process, and determination to succeed despite difficulties. Individuals holding a strong sense of self-efficacy tend to invest more effort in the process to cope with challenges they faced. The sense of self-efficacy greatly influences the ways in which individuals respond to life events, which ultimately affect cognition and action. measure the impact of self-efficacy on entrepreneurial behaviour amongst graduates from Kenyan universities.

2.5.2 Family Business Background and Entrepreneurial Behaviour

Glyptis et al., (2021) points out that a number of family owned and/or managed enterprises have been in business for several generations globally. This is done so that the corporate vision, which is held in common same family or a limited number of families, may be established and possibly carried out. Members of the family often take part in the firm at a variety of different phases during its life cycle. This is because family participation is an important aspect of family-owned enterprises. It is difficult to keep family companies continuing and to pass them down to subsequent generations because of their significance to the gross domestic product (G.D.P) and employment levels of industrialized countries. According to Bouncken et al., (2020), family business are the commonest enterprises found all over the globe and have been there for a very long time. According to Minola et al., (2017), in Kenya, families are the primary proprietors of a diverse array of businesses, ranging from humble small startups to multinational giants. The

majority of companies in Kenya are family-owned, which are notable for their innovation and spirit of entrepreneurship.

Tacit knowledge transfer within family business background is crucial in the influence of an individual's entrepreneur behaviour as it is acquired over a life time through a close interaction with family business culture (Su and Daspit, 2021). Su and Daspit (2021) maintain that tacit knowledge is information and experience that are already present. Additionally, two parts to tacit knowledge: cognitive and technical. The individual's technical side is represented by their practical skills and product or process knowledge. The involvement in task comprehension prevents codification of the technical aspects of tacit-knowledge. Tacit knowledge is difficult to code and transmit because it is based on the thoughts and perspectives of the person who has it.

Bouncken et al., (2020) concurs that skills/knowledge in the context of a family business includes not only the knowledge and essential skills to perform daily duties, but also the surrounding context, expert insight, experience, beliefs, and values. The most crucial indicators of acquisition of entrepreneurial skills and knowledge from family business are the nurturing, preparing, and developing of the successor. Additionally, other avenues include formal education, apprenticeships and mentoring. It is evident therefore that family business background greatly influences entrepreneurial behavior of an individual.

2.6 Curriculum Content and Entrepreneurial Behaviour

The content of a curriculum refers to the sum of all facts, themes, beliefs, and topics, generally grouped under subject strands and informed by required values, skills, knowledge, and attitudes, and used to form the basis of instruction (UNESCO IBE, 2013). The content is carefully chosen depending on the reason for the learning, how authentic or valid it is, and how well it serves the trainees' interests and welfare. Other considerations in content selection include content utility, learner comprehension, and learner empowerment; resource optimization; content feasibility depending on resource and time availability; content relevance; and importance of the learning process. According to Syomwene et al., (2017), curriculum developers must consider the above elements if the chosen content is to maximize learning experiences.

Arguments over the outcomes of EE content are numerous and nuanced. The three generic themes of EE provision are theoretical-oriented courses that teach (1) "about" entrepreneurship (Piperopoulos & Dimov, 2014) to increase awareness of entrepreneurship, encouraging students to choose entrepreneurship as a potential career choice (Fayolle & Gailly, 2013), and considering self-employment. The content of EE subject has been identified as a crucial factor in EE's ability to foster entrepreneurial abilities (Syed, 2015). Syed contends that, in addition to the content, instructor experience plays an important part in the success of acquiring entrepreneurial skills. Questions have been raised about the relevance of the content of EE taught at Kenyan TVET colleges for properly nurturing entrepreneurial abilities required to impact the Kenyan economy (Ngware et al., 2019). They contend that the content used is out of date, having been created in 2006, and does not address the present economic climate.

On the one hand, Fayolle and Gailly (2008) argue that entrepreneurship content should be designed in such a way that it can cover skills and knowledge related to aspects such as the what of being an entrepreneur (know-what); the ability to handle diverse situations (know-how); the capacity to network (know-who); the ability to contextualize psychology and behavior of entrepreneurs (know-why); and the intuition to know when to seize entrepreneurial opportunities (know-when) (know-when). The know-what knowledge relates to understanding what one must do to make decisions and act in a particular way; know-how knowledge, on the other hand, refers to entrepreneurial abilities and skills obtained via learning-by-doing (Garud, 1997). In entrepreneurship, know-who knowledge relates to social contacts and helpful networks. Furthermore, know-why refers to information gained via research into the principles and theories that underpin a phenomenon (Garud, 1997) of what influences human behavior and actions, as well as entrepreneurs' attitudes, values, and drive. Finally, know-when refers to intuition about the time in one's life when it is both possible and desirable to engage in entrepreneurial activity.

It is not clear whether this duration is sufficient to impart students with entrepreneurial skills. Furthermore, the topics of EE content are generic for certificate and diploma level of training in all professions ranging from business, sciences and humanities (Republic of Kenya 2012). The content is not tailored for a particular specialization, but offers a range of common topics to all specializations in technical and business fields. The generic content may not offer students

tailored training in line with special requirements of each field to correspond to the diversity of the economic fields (Mwasalwiba 2010). Sefiani (2013), in his study on entrepreneurship education in USA found that the most critical areas of entrepreneurship education are small business management, new venture creation, small business finance, small business consulting, entrepreneurial marketing, technology/innovation, new product development, venture capital, creativity, small business strategy seminar and franchising. These are critical areas that every learner should understand before graduating to join entrepreneurship ventures.

Kabongo and Okpara (2009) concur in their study on entrepreneurship education in Sub-Saharan universities. They found that entrepreneurship was the most frequently offered course in business curricula, followed by entrepreneurial finance, courses in entrepreneurial growth, feasibility analysis, creativity and innovation. Furthermore, because of the rising complexity, uncertainty, and globalization, experts argue that individuals need to be prepared with entrepreneurial skills through appropriate education and training (Lackeus, 2015). This confirms the efforts put by education stakeholders to impart entrepreneurial behaviour even through offering entrepreneurship as common units in some universities in Kenya. This study established the level of influence that content of curriculum has on entrepreneurial behaviour amongst university graduates in Kenya.

2.7 Governments policy and Entrepreneurial Behaviour

Teaching of entrepreneurship in every Technical and Vocational Education and Training institution in the country was endorsed in 1988 following recommendations of a presidential select committee (Republic of Kenya, 1976). Teaching of entrepreneurship education as a subject in Kenya thus started formally in the early 1990s (Bwisa, 2011). It was hoped that entrepreneurship education will create an enterprise culture in students. Since then, the country has enacted supporting policies and initiated targeted programs to facilitate startup and growth of small.

According to the government website (2021), Some of the key government policies related to entrepreneurship in Kenya are: 1. Vision 2030: Kenya's Vision 2030 is a long-term development blueprint that outlines the government's goals and strategies for transforming Kenya into a middle-income country by 2030. It emphasizes the promotion of entrepreneurship,

innovation, and the growth of small and medium-sized enterprises (SMEs) as key drivers of economic development, 2. Micro and Small Enterprise Authority (MSEA): The Micro and Small Enterprise Authority is a government agency established to promote and support the development of micro and small enterprises in Kenya. It provides various services such as business development services, access to finance, and capacity building programs to help entrepreneurs start and grow their businesses, 3. Youth Enterprise Development Fund (YEDF): The Youth Enterprise Development Fund is a government initiative aimed at empowering Kenyan youth by providing them with access to affordable finance, training, and mentorship to start and expand their businesses. It offers loans and grants to young entrepreneurs to support their entrepreneurial endeavors.

Access to Finance was the fourth government policy. The Kenyan government has implemented various measures to improve access to finance for entrepreneurs, especially those in the informal sector and underserved areas. This includes the establishment of specialized funds such as the Uwezo Fund, Women Enterprise Fund, and the Biashara Fund, which provide financial support to women, youth, and other marginalized groups. The fifth was the Innovation and Technology Hubs whereby the government has been actively supporting the establishment of innovation and technology hubs across the country. These hubs provide entrepreneurs with access to affordable working spaces, mentorship, networking opportunities, and other support services. These policies and initiatives are aimed at creating an enabling environment for entrepreneurs in Kenya and fostering a culture of innovation and business growth.

2.8 Theoretical framework

The study was informed by social cognitive theory (SCT). The theory was developed by a Canadian psychologist, [Albert Bandura](#) in 1986 (Bandura, 1986). SCT is rooted in a view of human agency in which individuals are viewed as agents proactively engaged in their own development and can make things happen by their actions. Key to this sense of agency is the fact that, among other personal factors, individuals possess self-beliefs that enable them to exercise a measure of control over their thoughts, feelings, and actions, that "what people think, believe, and feel affects how they behave" (Bandura, 1986). It conceives individuals as agents and active contributors to the development of the circumstances that surround their lives (Bandura, 2018). Environments and social systems influence human behaviour through

psychological mechanisms of the self-system. Although SCT theory does not account for all development behaviour of an individual since thoughts and feelings are influenced by many internal and external factors as well as inherited and maturation factors, its realistic approach was preferred in this study to explain the variables affecting graduates entrepreneurial behaviour. Figure 2.1 is a SCT model showing the relationship between cognitive, environmental and behavioural factors to determine human behaviour.

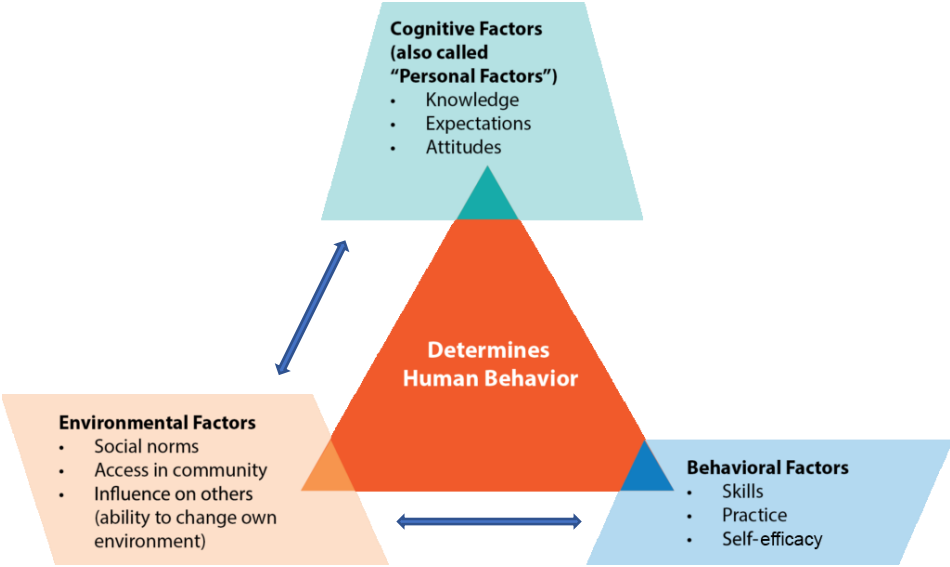


Figure 2.1: The SCT. Source: Albert Bandura (1986)

From Figure 2.1 above, there exists a direct correlation between behavioural, environmental and cognitive factors in producing desirable or favorable human behaviour. In this study, behavioural factors include education skills acquired by graduates from Kenyan universities. Cognitive factors include the self-efficacy of the respondents, that together with behavioural factors, determines the desired human behaviour, entrepreneurial success. Reciprocal determinism is depicted in the diagram by the bidirectional arrows, where environmental factors intervenes for behavioural and cognitive factors that influence to produce the desired human behaviour and vice versa. Personal and cognitive factors contribute in the social learning network that provides multi-level learning channels for student entrepreneurs to continuously improve their skills in learning and practice (Dafna, 2018). Therefore, entrepreneurship education and learner’s cognitive factors might impart entrepreneurial behaviour and enhance confidence to enable learners solve new and unexpected problems.

2.9 Conceptual framework

The study plans to compare and analyze the education and cognitive factors that influence entrepreneurial behaviour amongst graduates from Kenyan universities.

Figure 2.2: Independent, intervening and dependent variables

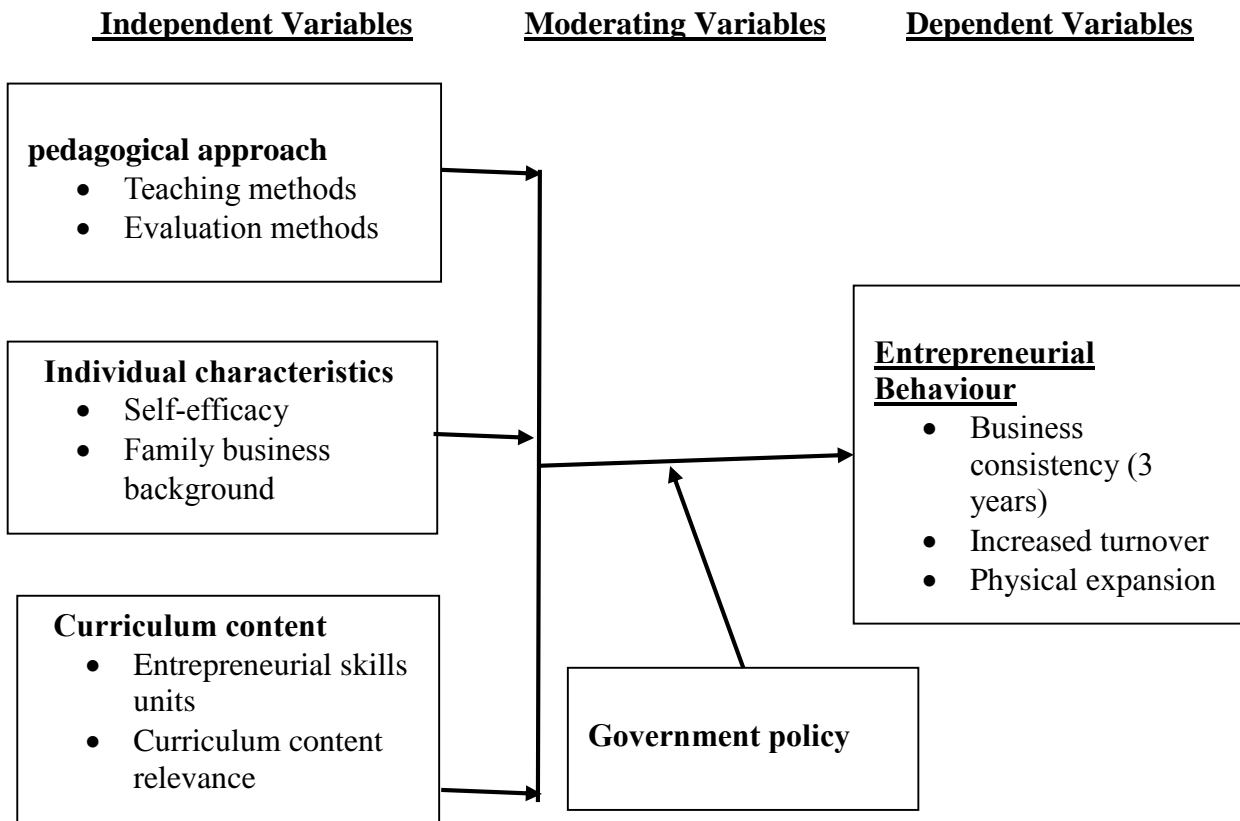


Figure 2.2: Conceptual framework

The study aimed at establishing the effect of entrepreneurship education on the entrepreneurial behaviour on university graduates in Kenya as government policy moderated their relationship. The conceptual framework outlines variables that interrelate as students' progress through their career paths to acquire the relevant entrepreneurial behaviour. Independent variables which are dimensions of entrepreneurship education include pedagogical approach, individual characteristics and curriculum content, dependent variable is entrepreneurial behaviour while the intervening variable was government policy.

2.10 Summary of the Literature Review

The reviewed literature concentrated on the literature related to educational-related factors that influence entrepreneurial behaviour amongst graduates from Kenyan universities. The reviewed literature indicates that the content of entrepreneurship education's curriculum,

methods of teaching used and methods of evaluation affect the entrepreneurial behaviour of the graduates. There is a notable relationship between the components of entrepreneurship education and entrepreneurship behaviour of the graduates from Kenyan Universities.

2.11 Research Gaps

From the literature review, it is evident that research in the area of entrepreneurship education, has been done both locally and internationally. Further research has been done on the relationship between entrepreneurship educations' curriculum and students' entrepreneurial intentions. The curriculum, according to previous research, is intended to provide knowledge that motivates students to acquire and develop entrepreneurial behaviour. However, most of the entrepreneurship education graduates start looking for formal employment instead of venturing into entrepreneurship activities. They may end up jobless, frustrated and depressed which is a likely cause of depression and drug abuse. Therefore, this study analyzed the effect of entrepreneurship education on entrepreneurial behaviour amongst graduates from Kenyan universities.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the procedures that used used by the researcher in carrying out the study. The chapter covers the study area, target population, the research design, research instruments, validity and reliability, data collection procedures, data analysis techniques and regulatory requirements.

3.2 Research Design

The study applied the most different systems design (MDSD) to compare the educational factors; content of curriculum, methods of teaching and methods of evaluation used in universities in Kenya. MDSD is used on comparing very different cases that are all have the same dependent variable (Mills, Durepos, & Wiebe, 2012). The researcher examined the education and cognitive factors that influence entrepreneurial behaviour amongst graduates from universities in Kenya. The factors included an in-depth understanding of the curriculum content, method of teaching and methods of evaluation that leads to the graduate's entrepreneurial behaviour. Two methods of technical philosophy; critical analysis and conceptual analysis approach were used to reinforce MDSD research design since they have elaborate description of the phenomena under study.

3.3 Study Area and Target Population

The study area were the universities that offer entrepreneurship education course in Kenya. According to Commission of University Education (2022), Kenya has 53 chartered public universities as at July 2022, where five of them offer bachelor's degree in entrepreneurship; Kirinyaga University, Karatina University, Jomo Kenyata University of Agriculture and Technology, Chuka University and Co-operative University.

The target population of this study comprised of 550 graduates from five public universities in Kenya that offer degree programs in entrepreneurship education, who graduated in 2019, regardless of whether they have ventured into entrepreneurship activities or not. From the literature review, an entrepreneurial venture is considered to be successful if it has been in existence for three years and above, hence the graduates of year 2019 were most preferred.

3.4 Sampling Procedure and Sample Size

Sampling is the process of selection of sampling units from the population to estimate population parameters in such a way that the sample will represent the population (Gall & Borg, 2007). In this study, the unit of analysis was all 2019, degree graduates, of entrepreneurship education from universities in Kenya. Purposive and cluster sampling were used to obtain the sample. The researcher got the details of the graduates from their former institutions for follow up. Graduates from each university were clustered together, separately, because the curriculum in each university may be different from the other.

The sample size of entrepreneurship education graduates from universities in Kenya were determined using Krejcie and Morgan's formula, as indicated in appendix vii. The sample size for the 550 graduates from universities is 226 respondents.

3.5 Research Instruments

The researcher used questionnaires to collect data since they could reach a large group of respondents within a short period and with minimal cost. Questionnaires were administered to the graduates of entrepreneurship education. The questionnaires comprised of closed and open-ended items in six sections. Section A sought the demographic information of the respondents. Section B had 6 items focusing on the pedagogical approach in entrepreneurship education, section C had 6 items on individual characteristics and section D had 5 items on curriculum content, section E contained 6 items on government policy and section F had 6 items on entrepreneurial behaviour.

3.6 Validity and Reliability

Reliability denotes how consistently a method measures something, thus a set of measurements is considered reliable if the same result can be achieved consistently using the same methods under the identical circumstances (Creswell, 2014). According to Hamed (2016), the accuracy and consistency of an instrument represent its validity and reliability, which are important aspects of research technique. It is acknowledged that social theory notions can be vague at times, in addition to not being directly observable (Neuman, 2007), hence the necessity to assess the validity and reliability of scales that are used to measure such instruments.

3.6.1 Validity

According to Kathuri and Pals (1998) validity is the extent to which an instrument measures what it purports to measure. This study employed content and face validity. Face validity, according to Bolanirwa (2015), is a validation method that relies on a scientific assessment of whether the indicators used to reveal the concept are accurate. Face validity, according to Neuman (2007), is a validation that ensures that the questionnaire's design and structure are appropriate for the problem under investigation. Accordingly, the researcher sought feedback from research experts drawn from the department of education on the questionnaire's applicability, both in terms of form and structure, in accordance with other studies' suggestions (Helen & Joanna, 2015; Haradhan, 2017).

The content validity approach was used as the study's second method of validation. Content validity is defined by Sangoseni, Hellman, and Hill (2013) as the extent to which an instrument covers the needed content of a certain construct. Since the selection of a variable in research is based on extensive review of theoretical and empirical literature, it is considered to be content validity. Expert raters should conduct a reasonable analysis to determine content validity, according to Sangoseni *et al.*, (2013). Based on this, the researcher requested educational research experts to conduct a rational examination of the questionnaire to check if it contained all of the material about the respective scales and if it was based on current literature.

3.6.2 Pre-test

To ensure clarity and content validity, the questionnaires were pretested before being administered. The purpose of pretesting the survey questionnaire was to ensure the respondents understand the questions in the survey questionnaire and that there is no issue with the choice of wording (Sekaran & Bougie, 2016; Stockemer, 2019). Mugenda and Mugenda (2003) asserted that, the accuracy of data to be collected largely depended on the data collection instruments in terms of validity and reliability.

The research instruments underwent pre-testing with 10% of the sample size which totals to 23 (10% of 226) of respondents. Mugenda and Mugenda (2003) reported that a pre-test sample should be between 1% and 10% depending on the sample size. The researcher got the details of the graduates from their former institutions for follow up. Orodho (2009) observed that

simple random sampling ensures that each unit has an equal probability of being chosen. Random sample is the most representative of the entire population and least likely to result in bias as it contains statistical properties which allow researchers make inferences about the population based on the results obtained from the sample. After the pre-testing, the questions which may be ambiguous, repeated, and long will be adjusted and revised to incorporate the feedback provided and ensure they are clearly understood by the respondents thus ensuring validity of the data collection instruments.

3.6.3 Reliability

Reliability ensures that there is consistency in the production of the results such that the researcher or another researcher can be able to collect the same desired information as the original instrument intended to use in the same target population (Oson & Onen 2005). To achieve reliability, questionnaires were filled by the respondents who graduated with an entrepreneurship education degree in Kenya in the year 2019. Cronbach's alpha was employed for testing questionnaire reliability and the internal consistency of the data items whose reliability was measured using Cronbach's alpha coefficient.

3.7 Data Collection Procedures

The researcher obtained research permit and authorization from the National Commission for Science, Technology and Innovation (NACOSTI). This gave the researcher the authority to conduct the research and to make appointments in advance with the selected institution's heads and heads of curriculum through direct visits, mails and telephone to create a good rapport. The researcher got the list of 2019 graduates and their contact details from their respective institutions and organized on how they would fill the questionnaires. The questionnaires were administered in person where respondents were given approximately 30 minutes to complete.

3.8 Data Analysis

Data analysis is the process of collecting, modeling, and analyzing data to extract insights that support decision-making. Qualitative and quantitative data was gathered within the same time frame, analyzed separately, and then merged for interpretation. Content analysis was used to obtain comprehensive information from qualitative data about the topic under study and establishing trends and patterns from the collected information. The researcher manually

transcribed all questionnaires and organized them into meaningful sets and group them into related codes. The coded information was then grouped into themes and presented in form of a narrative, and this was used in making conclusions and recommendations. The analysis was then based on the descriptive statistics, where mean, mode, frequency and percentages to were used to summarize the data sets before presenting the data inform of tables and charts.

To analyze the qualitative data, the researcher utilized content analysis where data was classified based on the researched phenomena, categorizing it and observing the manner in which the concepts interrelate as indicated by the respondents. To establish the relationship, a regression was established. For each study objective, an overall mean was determined and matched with the overall mean of entrepreneurial behaviour amongst university graduates in Kenya. From this relationship, the model was generated to determine the relationship. The regression equation assumed the following form;

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where;

Y = Entrepreneurial behaviour

β = Unstandardized coefficient

X₁ = pedagogical approach

X₂ = Individual characteristics

X₃ = Curriculum content

X₄ = Government policy

ϵ = error term.

β_0 = the constant which is the value of dependent variable when all the independent variables are 0.

$\beta_1 - \beta_3$ = the regression coefficient or change induced by X₁, X₂, X₃ and X₄ on Y. It determines how much each (X₁, X₂ and X₃) contributes to Y (entrepreneurial behaviour amongst university graduates in Kenya).

S/No.	Objective	Hypothesis	Variables	Statistical Tools
1.	To analyze the level influence of pedagogical approach of entrepreneurship education on entrepreneurial behaviour amongst graduates from universities in Kenya.	There is a significant level influence of content of curriculum of entrepreneurship education on entrepreneurial behaviour amongst graduates from universities in Kenya.	<ul style="list-style-type: none"> • Independent Variable • Content of entrepreneurship education curriculum • Dependent Variable • Entrepreneurial behaviour 	<ul style="list-style-type: none"> • Descriptive • Regression Analysis
2.	To evaluate the level influence of Individual characteristics of entrepreneurship education on entrepreneurial behaviour amongst graduates from universities in Kenya.	There is a significant level influence of pedagogical approaches of entrepreneurship education on entrepreneurial behaviour amongst graduates from universities in Kenya.	<ul style="list-style-type: none"> • Independent Variable • Pedagogical approaches of entrepreneurship education • Dependent Variable • Entrepreneurial behaviour 	<ul style="list-style-type: none"> • Descriptive • Regression Analysis
3.	To measure the impact of Curriculum content on entrepreneurial behavior among graduates of entrepreneurship education from universities in Kenya.	There is a significant level of impact of individual characteristics on entrepreneurial behavior among graduates of entrepreneurship education from universities in Kenya.	<ul style="list-style-type: none"> • Independent Variable • Individual characteristics • Dependent Variable • Entrepreneurial behaviour 	<ul style="list-style-type: none"> • Descriptive • Regression Analysis

Table 3.2: Summary of Data Analysis Procedures

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

Interpretation and discussions of research finding as derived from descriptive and inferential analysis of data is presented in this part of the study.

4.2 Rate of Response

A total of 203 questionnaires were issued to the respondents and 191 of them were received back obtaining a response rate of 94.09%. This was partially credited to half-finished, not returned and unfilled questionnaires. According to Wimmer and Dominick (2012), a rate of return of 21-70% is sufficient, gives assurance for accuracy, reduces biasness and as acceptable for the questionnaires that are self-administered hence 82.7% is acceptable in this study.

4.3 Reliability Analysis

Oson & Onen (2005) argues that research instruments are termed to be reliable when same researcher or another researcher is in a position to get the identical anticipated facts as the original instrument anticipated to do in the same target population implying that there is consistency in the results' production. In the study, reliability was achieved by clearly defining the sample population and 32 respondents from 1 university in Nairobi County strictly filling the questionnaires for the pre-test. Cronbach's alpha was used for reliability analysis to test reliability of questionnaires and internal consistency of data items. As recommended by Kipkebut (2010) Cronbach's alpha coefficient that ranges between 0 and 1 was used to measure data reliability.

Table:4.1 Reliability of Research Instruments

Variable	Cronbach's Alpha	Number of Items
Pedagogical approach	0.708	6
Individual characteristics	0.802	6
Curriculum content	0.756	6
Government policy	0.750	6
Entrepreneurial behaviour	0.787	6

According to Nunnally (1978), reliability of 0.70 and above is a sufficient measure of reliability. Cronbach's alpha for each construct was more than or equal to 0.700, indicating that the questionnaire was adequate for assessing the components of interest in the research. Pedagogical approach got a coefficient of Cronbach's Alpha of 0.713; individual characteristics of 0.811, curriculum content of 0.768, government policy of 0.756 while entrepreneurial behaviour got a 0.783 Cronbach's Alpha coefficient.

4.4 Demographic Information

Demographic characteristics are important as they consist of Respondents' study behavior that justifies respondents' suitability in the kind of study carried out. These characteristics such as gender and e-status in the Kenyan universities are important for ascertaining experience and level of knowledge necessary for assessment of the influence of entrepreneurship education with government policy as the moderating factor.

4.4.1 Gender of the respondent

Table 4.2 Respondent's Gender

	Frequency	Percent
Female	60	31.4
Male	131	68.6
Total	191	100.0

Respondents were examined on whether they were male or female. Results indicated that out of the 191 respondents, 68.6% of them were male while 31.4% were female. Gender of an individual can influence one's behaviour or attitude towards a phenomenon consequently influencing his or her values and perceptions on the study.

4.4.2 Age of the respondents

Table 4.3 *Age of the respondents*

	Frequency	Percent
below 25 years	9	4.7
25-30 years	108	56.5
31-40 years	70	36.6
above 40 years	4	2.1
Total	191	100.0

Respondents were requested to indicate their age. Results showed that those below 25 years accounted for 4.7%, those between 25-30 were the majority at 56.5% followed by the ages between 31-40 at 36.6% and a few of the respondents were within above 40 years bracket.

4.5 Education level of the respondents

Table 4.4 *Education level of the respondents*

	Frequency	Percent
Diploma	16	8.4
Undergraduate	116	60.7
Masters	53	27.7
Doctorate	6	3.1
Total	191	100.0

From the results, those who had diploma level were 8.4%, majority were undergraduates at 61.7% and followed closely by master's level at 27.7% and the least were doctorate holders at 3.1%. Determining the age of respondents was necessary as it was likely to affect the level of understanding and operations of the business.

4.6 Duration in Business

Table 4.5 Business Age

		Frequency	Percent
Valid	1 year	34	17.8
	2 years	92	48.2
	Above 3 years	65	34.0
	Total	191	100.0

On the age of business, 17.8% of the participants indicated that their businesses were 1 year old, 48.2% had their business for 2 years, while 34% have been having a business for over 3 years.

4.7 Frequency Analysis of Study Variable

Results of the frequency analysis of the study variables as well as discussions of the findings were done as indicated in this section.

4.7.1 Pedagogical Approach

Please indicate your level of agreement to the statements below on the influence of pedagogical approach on entrepreneurial behaviour amongst graduates from TVET colleges and universities in Kenya. 1= Strongly Disagree 2- Disagree, 3= Neutral, 4 = Agree, 5= Strongly Agree

Table 4.6 Summary of Pedagogical Approach Constructs' Frequency Analysis

Statement	Disagree	Neutral	Agree	Total
Experiential learning was an effective method for teaching entrepreneurship because it allowed me to develop skills such as creativity, problem-solving, and risk-taking	4.7%	29.3%	66%	100
Case studies were effective in promoting entrepreneurial behavior because they provide me with a platform to analyze and learn from the successes and failures of real entrepreneurs.	3.1%	11.5%	85.4%	100
Business simulations were effective in promoting entrepreneurial behavior because they allow me to develop critical thinking and decision-making skills	0%	4.2%	95.8%	100
Action-based learning was effective in promoting entrepreneurial behavior because it allows me to develop practical skills, gain experience, and build networks with other entrepreneurs	1%	6.8%	92.2%	100
Mentoring was effective in promoting entrepreneurial behavior because it allowed students to learn from experienced entrepreneurs and to build networks that can be valuable in their future entrepreneurial endeavors.	9.1%	18.3%	67.3%	100
Design thinking was effective in promoting entrepreneurial behavior because it encourages students to think creatively and to develop solutions that address real-world problems.	8.4%	20.4%	71.2%	100

Respondents were requested to state their level of agreement on 6 statements. The first statement “experiential learning was an effective method for teaching entrepreneurship because it allowed them to develop skills such as creativity, problem-solving, and risk-taking”. 4.7% of the respondents disagreed with the statement, 29.3% remained neutral while 66% agreed. Second statement “Case studies were effective in promoting entrepreneurial behavior because they provide me with a platform to analyze and learn from the successes and failures of real entrepreneurs” Of the respondents, 3.1% disagreed while an overwhelming 85.4% responded to the affirmative.

Third statement “Business simulations were effective in promoting entrepreneurial behavior because they allow me to develop critical thinking and decision-making skills”. None of the respondents disagreed while the majority agreed with it. On the fourth statement “Action-based learning was effective in promoting entrepreneurial behavior because it allows me to develop practical skills, gain experience, and build networks with other entrepreneurs”, 1% of the respondents disagreed and majority who accounted for 92.2% answered on the affirmative. Fifth statement “Mentoring was effective in promoting entrepreneurial behavior because it allowed students to learn from experienced entrepreneurs and to build networks that can be valuable in their future entrepreneurial endeavors.” Respondents totaling to 9.1% disagreed with the statement as 67.3% agreed. When requested to comment on the 6th statement “Design thinking was effective in promoting entrepreneurial behavior because it encourages students to think creatively and to develop solutions that address real-world problems”, 8.4% did not agree with it while 71.2% agreed.

From the findings, it is very clear based on the university graduates’ responses that pedagogical approach was appropriate and effective enough to cause an impact on their entrepreneurial behaviour. The findings concur with the research by Syed (2015) that focused on the various methods that can be used in EE. for example, the scholar advocated for enhancing entrepreneurial skills through workshops, virtual start-up competitions, simulations, competitions involving the design of business plans, product development, internships, experiential learning, and knowledge exchange interactions, among other methods. Scientific visits, group discussions, case studies, group projects, simulations, interviews, individual projects, problem-solving, investment projects, project support, and official speech are among

the pedagogical approaches identified by Arasti et al., (2012) as the most effective in improving entrepreneurial skills. Learning from mistakes, writing business plans, gaining experiential learning for service and product sales, learning that is process-based rather than content-based, and problem-based learning, according to Oyelola (2013), are all important aspects of acquiring entrepreneurial skills.

4.7.2 Individual Characteristics

Please indicate your level of agreement to the statements below on the influence of content of individual characteristics on entrepreneurial behaviour amongst graduates from TVET colleges and universities in Kenya. 1= Strongly Disagree 2- Disagree, 3= Neutral, 4 = Agree, 5= Strongly Agree

Table 4.7 Summary of individual characteristics Constructs' Frequency Analysis

Statement	Disagree	Neutral	Agree	Total
I think that individuals with a high level of risk-taking propensity are more likely to engage in entrepreneurial activities.	6.3%	37.2%	56.5%	100
I believe that individuals who are mentored to be family business successors are more likely to pursue entrepreneurial opportunities.	6.8%	20.4%	72.7%	100
Individuals with family business background have high affinity for entrepreneurship than those without.	7.3%	20.9%	71.8%	100
I believe most entrepreneurs with family business background inherited their business from their parents	6.3%	32.5%	61.2%	100
I believe that individuals with a high level of perseverance are more likely to succeed as entrepreneurs.	12%	12.6%	75.3%	100
I believe that individuals with a strong desire to create innovative solutions are more likely to become entrepreneurs.	21%	39.8%	39.2%	100

Participants were requested to indicate their level of agreement on 6 statements in government policy. On the first statement “I think that individuals with a high level of risk-taking propensity are more likely to engage in entrepreneurial activities.” 6.3% disagreed while 56.5% agreed

with the statement. Just 6.8% disagreed with the statement “I believe that individuals who are mentored to be family business successors are more likely to pursue entrepreneurial opportunities.” while an overwhelming majority, 72.7% agreed. Asked whether “Individuals with family business background have high affinity for entrepreneurship than those without.” 7.3% disagreed and 71.8% agreed. On the statement “I believe most entrepreneurs with family business background inherited their business from their parents”, 6.3% disagreed while 61.2% agreed. 12% of the participants disagreed with the statement “I believe that individuals with a high level of perseverance are more likely to succeed as entrepreneurs.” as 75.3% agreed.

4.7.3 Curriculum Content

Please indicate your level of agreement to the statements below on the influence of content of curriculum on entrepreneurial behaviour amongst graduates from TVET colleges and universities in Kenya. 1= Strongly Disagree 2- Disagree, 3= Neutral, 4 = Agree, 5= Strongly Agree

Table 4.8 Summary of curriculum content Constructs’ Frequency Analysis

Statement	Disagree	Neutral	Agree	Total
The Entrepreneurship Education curriculum equipped me with the necessary knowledge and skills required to prosper in my business	0%	19.9%	80.1%	100
Entrepreneurial curriculum contains information on how students can identify and shape opportunities, assess business concepts, develop operational plans and grow new enterprises	3.8%	25.1%	70.1%	100
The content of the entrepreneurship courses was relevant to the current business environment in Kenya	2.1%	20.9%	77%	100
Entrepreneurial curriculum in my institution provided opportunities for practical application of the entrepreneurship concepts taught in class	15.7%	27.2%	57.1%	100

Entrepreneurial curriculum in my institution emphasized on the development of entrepreneurial attitudes such as risk-taking and innovation which I apply in my business	0%	24.1%	75.9%	100
The entrepreneurship education I received has influenced my decision to become an entrepreneur	0%	8.4%	91.7%	100

On entrepreneurial behavior, the participants were asked to indicate their level of agreement on 6 statements and frequency analysis was done. Those who disagreed with the statement “The Entrepreneurship Education curriculum equipped me with the necessary knowledge and skills required to prosper in my business” were 0% and those who agreed were 80.1%. The second statement “Entrepreneurial curriculum contains information on how students can identify and shape opportunities, assess business concepts, develop operational plans and grow new enterprises”, 3.8% of the respondents disagreed while 70.1% answered on the affirmative. When asked about the statement “The content of the entrepreneurship courses was relevant to the current business environment in Kenya”, 2.1% disagreed and 77% agreed. On the statement “Entrepreneurial curriculum in my institution provided opportunities for practical application of the entrepreneurship concepts taught in class” 15.7% disagreed while 51.7% agreed with the statement. No one disagreed while 75.9% agreed with the statement “Entrepreneurial curriculum in my institution emphasized on the development of entrepreneurial attitudes such as risk-taking and innovation which I apply in my business”. About the sixth statement, “The entrepreneurship education I received has influenced my decision to become an entrepreneur” no one disagreed and an overwhelming 91.7% agreed with the statement.

4.7.4 Government policy

Please indicate your level of agreement to the statements below on the influence of content of government policy on entrepreneurial behaviour amongst graduates from TVET colleges and universities in Kenya. 1= Strongly Disagree 2- Disagree, 3= Neutral, 4 = Agree, 5= Strongly Agree

Table 4.9 Summary of Government policy Constructs' Frequency Analysis

Statement	Disagree	Neutral	Agree	Total
Kenyan government policy encourages entrepreneurial innovation	6.8%	16.8%	76.4%	100
Government has created a favorable business environment	1%	6.8%	92.2	100
The government provides financial incentives to entrepreneurs	4.2%	10.5%	85.3%	100
Government has enhanced access to business capital	2.1%	9.4%	88.5%	100
Government fosters industry-specific development	11%	14.1%	74.9%	100
The government provides financial grants to entrepreneurs	8.4%	23.6%	68%	100

Participants were requested to indicate their level of agreement on 6 statements in government policy. On the first statement “Kenyan government policy encourages entrepreneurial innovation” 6.8% disagreed while 76.4% agreed with the statement. Just 1% disagreed with the statement “Government has created a favorable business environment” while an overwhelming majority agreed. Asked whether “The government provides financial incentives to entrepreneurs” 4.2% disagreed and 85.3% agreed. On the statement “Government has enhanced access to business capital”, 2.1% disagreed while 88.5% agreed. 11% of the participants disagreed with the statement “Government fosters industry-specific development” as 74.9% agreed. On the statement “The government provides financial grants to entrepreneurs” 8.4% disagreed and 68% agreed. It is therefore prudent to conclude from the findings that Majority of the respondents were in agreement that Kenyan government policy is helpful to the entrepreneurs.

The findings concur with the key government policies related to entrepreneurship in Kenya according to the government website (2021) especially the fifth hub which is about Innovation and Technology. The hub details that the government has been actively supporting the establishment of innovation and technology hubs across the country. These hubs provide

entrepreneurs with access to affordable working spaces, mentorship, networking opportunities, and other support services. These policies and initiatives are aimed at creating an enabling environment for entrepreneurs in Kenya and fostering a culture of innovation and business growth.

4.7.5 Entrepreneurial Behaviour

Please indicate your level of agreement to the statements whereby 1= Strongly Disagree 2- Disagree, 3= Neutral, 4 = Agree, 5= Strongly Agree

Table 4. Summary of Frequency Analysis of entrepreneurial behaviour's Constructs

Statement	Disagree	Neutral	Agree	Total
I have never closed my business since I started it 3 years ago	5.8%	17.3%	76.9%	100
My business has been running for the last 3 years	4.7%	20.4%	74.9%	100
My business profit has consistently been increasing	5.2%	28.3%	66.5%	100
I have opened over 2 branches since the inception of my business	14.7%	11%	74.4%	100
There has been an increased annual turnover over the years	16.2%	29.3%	54.7%	100
My strong business network has been key to its growth	3.6%	14.7%	81.7%	100

On entrepreneurial behavior, the participants were asked to indicate their level of agreement on 6 statements and frequency analysis was done. Those who disagreed with the statement “I have never closed my business since I started it 3 years ago” were 5.8% and those who agreed were 76.9%. The second statement “My business has been running for the last 3 years”, 4.7% of the respondents disagreed while 74.9% answered on the affirmative. When asked about the statement “My business profit has consistently been increasing”, 5.2% disagreed and 66.5% agreed. On the statement “I have opened over 2 branches since the inception of my business” 14.7% disagreed while 74.4% agreed with the statement. 16.2% disagreed while 54.7% agreed

with the statement “There has been an increased annual turnover over the years”. About the sixth statement, “My strong business network has been key to its growth” 36% disagreed and 81.7% agreed with the statement.

From the frequency analysis, it is evident that an overwhelming number of the University graduates who went through entrepreneurial education engaged in entrepreneurship which is still thriving. This is a strong indication that entrepreneurship education had an impact on their entrepreneurial behaviour.

4.8 Analytical Model Diagnostic Tests

The choice of an analytical model for the data is preceded by ascertaining that the collected data satisfies the assumptions of the analytical model. In this study the data was assessed to determine whether it satisfied the assumptions of classical linear regression model. Linearity, normality, multicollinearity and homoscedasticity assumptions were assessed.

4.8.1 Normality Test

Tests of normality are done to ascertain whether the sample data was drawn from normally distributed data. Most statistical procedures or parametric tests which include correlation, regression, t tests, and analysis of variance are based on the assumption that data has normal distribution (Ghasemi and Zahediasl, 2012). Tests for the assessment of normality include Kolmogorov-Smirnov (K-S) test, Lilliefors corrected K-S test, Shapiro-Wilk test, among others (Ghasemi & Zahediasl, 2012). Therefore, Kolmogorov-Smirnov test and the Shapiro-Wilk test were conducted to assess whether the sample of this data was obtained from a normal distribution. In the Shapiro-Wilk Test, the null hypothesis is that distribution is not normal while the alternative hypothesis is that distribution is normal.

If the Significance value of the Shapiro-Wilk test is greater than 0.05, the data distribution is considered normal but if it is below 0.05, the data is said to deviate from a normal distribution. Failing the normality test allows the researcher to state with 95% confidence that the data does not fit normal distribution. Passing the normality test only allows the researcher to state that no significant departure from normality was found in data distribution.

Table 4.11*Tests of Normality*

	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Pedagogical approach	0.063	340	.023	.978	340	0.001
Individual characteristics	0.042	340	.027	.941	340	0.016
Curriculum content	0.061	340	.012	.929	340	0.014

For all variables, both tests yielded a statistically significant result $p = <0.001 < 0.05$. This means that the null hypothesis of normality was rejected, and the data on the variables was not normally distributed. In this regard, non-linear statistical techniques were adopted over classical linear techniques for this study because this normality and other assumptions of classical linear regression were violated by the data.

4.8.2 Autocorrelation Test

Tests for auto correlation are conducted to ascertain that the errors are independent and not as a result of others. Durbin Watson scale was used to test for auto correlation. The values are supposed to fall between 1.5 and 2.5 if there is no presence of auto correlation. Results indicated a value of 2.062 which revealed that error was not auto correlated.

Table 4. 12:*Model Summary*

Model	Durbin-Watson
1	2.062

Source: Research Data (2023).

4.8.3 Multicollinearity

Test for multicollinearity was run to detect any relationship between the independent variables. Multicollinearity can be detected by use of Variance Inflation Factor (VIF). The variables are supposed to be independent in a linear regression relationship. However, variables may be inter

correlated therefore lacking independence of variable, whereby a change in one independent variable result in the change of the other independent variable (Taherdoost, 2016). Both tolerance and VIF tests were conducted. Values for VIF that are above 10 show very serious [multicollinearity](#). Tolerance is the reciprocal of VIF. The results of this model are as presented in the table.

Table 4. 13

Coefficients

Model	Collinearity Statistics	
	Tolerance	VIF
Pedagogical approach	0.628	2.176
Individual characteristics	0.458	2.325
Curriculum content	0.719	2.784

a. Dependent Variable: Entrepreneurial behaviour

With VIF values of less than 10 between the independent variables and tolerance value greater than 0.1 no severe multicollinearity existed in this model.

4.8.4 Homoscedasticity

Distribution of variances across the variables were tested for homoscedasticity and presented on the table.

Table 4:14: Homoscedasticity

Levene's Test of Equality of Error Variances^a		
Dependent Variable: Entrepreneurial behaviour		
	F	Sig.
Pedagogical approach	5.77	<0.001
Individual characteristics	4.98	<0.001
Curriculum content	8.614	<0.001

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a Design: Intercept +pedagogical approach, individual characteristics and curriculum content

There was significant difference in error variances of the dependent variable across groups ($p \leq 0.001$). This result shows that the error variables were not homogeneous and thus this classical linear regression assumption was violated. Since the homogeneity of error variance of the dependent variable was violated, classical linear regression analysis was not suitable for the data that was collected hence the use of binary logistic regression analysis.

4.9 Chi-square tests; Hypothesis Testing and testing relationship between Independent Variable (IV) and Dependent Variable (DV)

To test the hypothesis of the study and the relationship between IV (pedagogical approach, individual characteristics and curriculum content) and DV (entrepreneurial behavior) Chi-square test of significance was done since the data was categorical in nature. Chi-square test analysis measures the association of each independent variable with the dependent variable. Additionally, Chi-square statistical test measures the association between two categorical variables. The smaller the P-value, the stronger the evidence that statistically significant relationship exists between categorical variables hence the level of statistical significance is expressed as a P-value between 0 and 1. The level of statistical significance is often expressed as a P-value between 0 and 1. A p-value less or equal to the level of significance (0.05) indicates significant evidence of an existing statistically significant relationship between the categorical variables. A p-value is interpreted as not statistically significant if it is higher than the level of

significance which is 5% (0.05) in the study. Therefore, a relationship between categorical variables is interpreted as significant if p-value is less or equal to 0.05 (5%).

4.9.1 H₀₁: There is no significant influence of pedagogical approach on entrepreneurial behaviour amongst graduates from universities in Kenya.

Hypothesis one was tested by conducting Chi-square test analysis to establish the association between pedagogical approach and entrepreneurial behaviour. For the interpretation purpose there is a significant relationship between variables when p-value is less or equal to 0.05 while there is no significant relationship between categorical variables when p-value is greater than 0.05.

Table 4.15

Chi-Square Analysis; pedagogical approach and entrepreneurial behaviour

	Value	Asymptotic Significance (2- sided)	P-value
Pearson Chi-Square	0.302 ^a	0.583	0.000
Likelihood Ratio	0.341	0.559	
N of Valid Cases	191		

According to the chi square results, there is a strong statistical relationship between e-pedagogical approach and entrepreneurial behaviour at 5% significance level (P<0.05).

Table 4.16***Pedagogical approach and entrepreneurial behaviour cross tabulation***

			Behaviour recorded		Total
			No entrepreneurial behaviour	There is entrepreneurial behaviour	
pedagogical2 recoded	No pedagogical approach	Count % within pedagogical2 recoded	1 7.7%	12 92.3%	13 100.0%
	There is pedagogical approach	Count % within pedagogical2 recoded	23 12.9%	155 87.1%	178 100.0%
Total		Count % within pedagogical2 recoded	24 12.6%	167 87.4%	191 100.0%

Cross tabulations analysis results show that those who felt there is no pedagogical approach use in the Kenyan Universities and entrepreneurial behaviour was not achieved were 7.7%. Those who felt there is no pedagogical approach use in the Kenyan Universities and entrepreneurial behaviour was achieved were 92.3%.

Likewise, those who felt that there is pedagogical approach use in the Kenyan Universities and entrepreneurial behaviour was not achieved were 12.9%. Those who felt there is pedagogical approach use in the Kenyan Universities and entrepreneurial behaviour was achieved were 87.1%.

4.9.2 H₀₁: There is no significant influence of individual characteristics on entrepreneurial behaviour amongst graduates from universities in Kenya.

Table 4.17

Chi-Square Analysis; individual characteristics and entrepreneurial behaviour

	Value	Asymptotic Significance (2-sided)	P-Value
Pearson Chi-Square	1.682 ^a	.195	0.000
Likelihood Ratio	1.968	.161	0.000
N of Valid Cases	191		

According to the chi square results, there is a strong statistical relationship between e-pedagogical approach and entrepreneurial behaviour at 5% significance level ($P=0.000 < 0.05$).

Table 4.18

Individual characteristics and entrepreneurial behaviour cross tabulation

			Behaviour2 recoded		Total
			No entrepreneurial behaviour	There is entrepreneurial behaviour	
characteristics2 recoded	No Individual characteristics	Count % within characteristics2 recoded	2 5.9%	32 94.1%	34 100.0%
	There is individual characteristics	Count % within characteristics2 recoded	22 14.0%	135 86.0%	157 100.0%
Total		Count % within characteristics2 recoded	24 12.6%	167 87.4%	191 100.0%

Results from cross tabulations analysis show that those who felt there is no individual characteristics use in the Kenyan Universities and entrepreneurial behaviour was not achieved were 5.9%. Those who felt there is no individual characteristics use in the Kenyan Universities and entrepreneurial behaviour was achieved were 94.1%.

Similarly, those who felt that there is individual characteristics use in the Kenyan Universities and entrepreneurial behaviour was not achieved were 14%. Those who felt there is individual characteristics use in the Kenyan Universities and entrepreneurial behaviour was achieved were 86%.

4.9.3 H₀₁: There is no significant influence of curriculum content on entrepreneurial behaviour amongst graduates from universities in Kenya.

Table 4.19

Chi-Square Analysis; Curriculum content and entrepreneurial behaviour

	Value	Asymptotic Significance (2-sided)	P-Value	Exact Sig. (1-sided)
Pearson Chi-Square	1.175 ^a	.278	0.265	0.265
Likelihood Ratio	.961	.327		
N of Valid Cases	191			

Table 4.20***Individual characteristics and entrepreneurial behaviour cross tabulation***

			Behaviour2 recoded		Total
			No entrepreneurial behaviour	There is entrepreneurial behaviour	
curriculum2 recoded	No curriculum	Count	2	6	8
		% within curriculum2 recoded	25.0%	75.0%	100.0%
	There is curriculum	Count	22	161	183
		% within curriculum2 recoded	12.0%	88.0%	100.0%
Total		Count	24	167	191
		% within curriculum2 recoded	12.6%	87.4%	100.0%

Cross tabulations analysis show that those who felt there is no curriculum content use in the Kenyan Universities and entrepreneurial behaviour was not achieved were 25%. Those who felt there is no curriculum content use in the Kenyan Universities and entrepreneurial behaviour was achieved were 75%. Similarly, those who felt that there is curriculum content use in the Kenyan Universities and entrepreneurial behaviour was not achieved were 12%. 88% of the respondents felt there is curriculum content use in the Kenyan Universities and entrepreneurial behaviour was achieved.

Table 4.21

Summary Chi-Square Test Analysis for Measuring the Association between each Independent Variable and Entrepreneurial Behaviour.

	Value	Asymptotic Significance (2- sided)	P-value
<i>Pedagogical approach</i>			
Pearson Chi-Square	0.302a	0.583	0.000
Likelihood Ratio	0.341	0.559	
N of Valid Cases	191		
<i>Individual characteristics</i>			
Pearson Chi-Square	1.682a	0.195	0.000
Likelihood Ratio	1.968	0.161	
N of Valid Cases	191		
<i>Curriculum content</i>			
Pearson Chi-Square	1.175a	0.278	0.000
Likelihood Ratio	0.96	0.327	
N of Valid Cases	191		

Chi-Square Test Analysis summary for measuring the association between each variable and learner goals achievement points out that for all the variables p-values are less than 0.05 (P-value of 0.000). This is evident that there is a strong statistically significant relationship between all the independent variables with the dependent variable.

4.10 Binary Regression Analysis

In addition to the use of Chi-square analysis to test the study hypothesis, it was also very important to run regression analysis tests. This is because from Chi-square analysis, the researcher gets insights ultimately on the relationship of the variables of interest while in regression analysis, insights on both the relationship of variables of interest and the actual contribution of each independent variable on dependent variable is given. Therefore, in the study, regression analysis of pedagogical approach, individual characteristics, curriculum

content and government policy was done, both for hypothesis testing and to get insights of the impact of each independent variable on the dependent variable.

4.10.1 Regression analysis of pedagogical approach and entrepreneurial behaviour

Table 4.22

Model Summary

Deviate score	Cox & Snell R Square	Nagelkerke R Square
144.071 ^a	0.002	0.003

It is important to note that Nagelkerk's R squared coefficient of determination which is an adjusted version of the Cox & Snell R-square was used for model summaries' interpretation purpose as it adjusts the scale of the statistic to cover the full range from 0-1.

In this model summary, Nagelkerke R Square (R=0.003) is changed to percentage to become 3% thus implying that pedagogical approach account for 3% of the variation in entrepreneurial behaviour.

Table 4.23

Variables in the equation

Variation	B	S.E.	P Value	Odds ratio
Pedagogical approach	0.577	1.065	0.013	1.781

A significant relationship between pedagogical approach and entrepreneurial behaviour (p value=0.013, p value<0.1) was evident.

Furthermore, the results showed that where there is pedagogical approach use learners are 1.781 times more likely to acquire entrepreneurial behavior after graduating from the Kenyan Universities.

4.10.2 Regression analysis of individual characteristics and entrepreneurial behaviour

Table 4.24

Model Summary

Deviate score	Cox & Snell R Square	Nagelkerke R Square
232.861 ^a	0.154	0.205

Nagelkerke R Square (R=0.205) was changed to percentage to become 20.5% thus implying that individual characteristic account for 20.5% of the variation in entrepreneurial behaviour.

Table 4.25

Variables in the equation

Variable	B	S.E.	P-Value	Odds ratio
Individual characteristics	2.773	0.729	0.000	16.000

A significant relationship between individual characteristics and entrepreneurial behaviour (p value=0.000, P value<0.1) was evident.

Furthermore, the results showed that where there is individual characteristic use learners are 16.000 times more likely to acquire entrepreneurial behavior after graduating from the Kenyan Universities.

4.10.3 Regression analysis of curriculum content and entrepreneurial behaviour

Table 4.26

Model Summary

Deviate score	Cox & Snell R Square	Nagelkerke R Square
262.689 ^a	0.011	0.015

In this model summary, Nagelkerke R Square (R=0.015) is changed to percentage to become 1.5% thus implying that curriculum content account for 1.5% of the variation in entrepreneurial behaviour.

Table 4.27

Variables in the equation

Variable	B	S.E.	Sig.	Odds Ratio
Curriculum content	1.099	0.816	0.028	3.000

A significant relationship between curriculum content and entrepreneurial behaviour (p value=0.028, P value<0.1) was evident.

Furthermore, the results showed that where there is individual characteristic use learners are 3.000 times more likely to acquire entrepreneurial behavior after graduating from the Kenyan Universities.

Table 4.28

Model Summary of Binary regression analysis accounting for each variable contribution to entrepreneurial behaviour

Variable	Deviate Score	Cox & Snell Square	R Nagelkerke R Square
Pedagogical approach	144.071 ^a	0.002	0.003
Individual characteristics	232.861 ^a	0.154	0.205
Curriculum content	262.689 ^a	0.111	0.015

Nagelkerke R Square was changed to percentage to show the percentage contribution of each independent variable to the dependent variable. Pedagogical approach accounted for 3% of the variation in entrepreneurial behaviour, individual characteristics accounted for 20.5% of the variation in entrepreneurial behaviour and curriculum content accounted for 1.5% of the variation in entrepreneurial behaviour.

The findings will help the Kenyan Universities to invest more on those independent variables that contribute more to the entrepreneurial behaviour.

Table 4.29

Relationship Between Independent and Dependent Variables, The Extent of Their Likelihood in Influencing Learner Goals Achievement (Variables in The Equation)

Variable	B	S.E.	P-value	Odds Ratio
There is pedagogical approach (Reference)	-	-	-	-
No Pedagogical approach	0.577	1.065	0.013	1.781
There is Individual characteristics (Reference)	-	-	-	-
There is no individual characteristics	2.773	0.729	0.000	16.000
There is Curriculum content (Reference)	-	-	-	-
There is no curriculum content	1.099	0.816	0.028	3.000

A significant relationship between pedagogical approach and entrepreneurial behaviour (p value=0.013, p value<0.1) was evident. Furthermore, the results showed that where there is pedagogical approach use graduates are 1.781 times more likely to acquire entrepreneurial behavior after graduating from the Kenyan Universities. A significant relationship between individual characteristics and entrepreneurial behaviour (p value=0.000, P value<0.1) was evident. Furthermore, the results showed that where there is individual characteristic use graduates are 16.000 times more likely to acquire entrepreneurial behavior after graduating from the Kenyan Universities. A significant relationship between curriculum content and entrepreneurial behaviour (p- value=0.028, P- value<0.1) was evident. Furthermore, the results showed that where there is individual characteristic use graduates are 3.000 times more likely to acquire entrepreneurial behavior after graduating from the Kenyan Universities.

4.10.4 Summary of Hypothesis Testing Results

A hypothesis is a tentative, testable specific statement of prediction that answers scientific questions. Each hypothesis of the study was tested using Chi-square analysis and binary regression analysis and results presented in tables. The hypothesis was tested at 5% significance level for it to be rejected or accepted.

Table 4.30***Hypothesis Testing Summary Table***

	Hypothesis (Null)	P-value	Results
H₀₁	There is no significant influence of pedagogical approach on entrepreneurial behaviour amongst graduates from universities in Kenya.	<0.05	Hypothesis was rejected
H₀₂	There is no significant influence of individual characteristics on entrepreneurial behaviour amongst graduates from universities in Kenya.	<0.05	Hypothesis was rejected
H₀₃	There is no significant influence of curriculum content on entrepreneurial behaviour amongst graduates from universities in Kenya.	<0.05	Hypothesis was rejected
H₀₄	There is a significant moderating effect of government policy on entrepreneurial behaviour amongst graduates from universities in Kenya.	<0.05	Hypothesis was rejected

Source: Research data (2021)

4.11 Multivariate Logistic Regression

Prediction of a categorical placement on a dependent variable based on multiple independent variables is done by the use of a multivariate logistic regression model. Independent variable could be binary or continuous. Modelling a linear relationship between the independent variables and dependent variable is the main goal of multivariate logistic regression. Additionally, study results explained the moderating role of government policy and entrepreneurial behaviour.

Table 4.31

Multivariate Logistic Regression summary determining the influence of entrepreneurship education on entrepreneurial behavior (without moderating variable)

Variable	B	S.E.	P-value	Odds Ratio
<i>Pedagogical approach</i>				
There is pedagogical approach (Reference)	-	-	-	-
No Pedagogical approach	-2.164	0.234	0.000	0.128
<i>Individual characteristics</i>				
There is Individual characteristics (Reference)	-	-	-	-
There is no individual characteristics	-0.845	0.723	0.03	0.431
<i>Curriculum content</i>				
There is Curriculum content (Reference)	-	-	-	-
There is no curriculum content	-0.845	0.825	0.026	0.453

Source: Research Data (2021)

It was evident from the results that pedagogical approach is significantly associated with entrepreneurial behaviour. This means that, without the pedagogical approach, university graduates are 0.128 times less likely to achieve better in entrepreneurial behaviour compared to graduates from universities where pedagogical approaches are used. Results were significant at 5%. Results indicated that individual characteristics is significantly associated with entrepreneurial behaviour ($P > 0.05$). This means that, without individual characteristics, university graduates are 0.431 times less likely to achieve entrepreneurial behaviour as compared to university graduates who have individual characteristics. Results showed that curriculum content is significantly associated with entrepreneurial behavior ($p < 0.05$). This means that, without proper curriculum content, university graduates are 0.453 times less likely to achieve entrepreneurial behaviour as compared to university graduates who have proper curriculum content. This concurs with a study done by Ndala (2019) who found out that entrepreneurship education has a significant relationship on entrepreneurial behaviour of university graduates. Computer simulations, case development and journal writing have been considered as pedagogy tools in entrepreneurship education (Ndala, 2019).

Table 4.32

Multivariate Logistic Regression summary determining the influence of entrepreneurship education on entrepreneurial behavior (moderating variable included)

Variable	B	S.E.	P-value	Odds Ratio
<i>Pedagogical approach</i>				
There is pedagogical approach (Reference)	-	-	-	-
No Pedagogical approach	2.382	0.204	0.000	0.103
<i>Individual characteristics</i>				
There is Individual characteristics (Reference)	-	-	-	-
There is no individual characteristics	0.971	0.642	0.01	0.342
<i>Curriculum content</i>				
There is Curriculucontent (Reference)	-	-	-	-
There is no curriculum content	0.912	0.751	0.014	0.313

Source: Research Data (2021)

With the introduction of the moderating variable; government policy, the results indicated that pedagogical approach is significantly associated with entrepreneurial behaviour. If there is no pedagogical approach university graduates are 0.103 times less likely to achieve entrepreneurial behaviour when compared graduates in universities that have pedagogical approach in use. Results indicated that individual characteristics is significantly associated with entrepreneurial behaviour ($P > 0.05$). If there are no individual characteristics university graduates are 0.342 times less likely to achieve entrepreneurial behaviour compared to university graduates who have individual characteristics. Results showed that curriculum content is significantly associated with entrepreneurial behavior ($p < 0.05$). If there are no curriculum content university graduates are 0.313 times less likely to achieve entrepreneurial behaviour when compared to university graduates who have curriculum content.

Table 4.33

Comparison between the model without moderating variable and the model with moderating variable (government policy)

Variable	B	S.E.	P-value	Odds Ratio
Without moderating variable (government policy)				
<i>Pedagogical approach</i>	-	-	-	-
There is pedagogical approach (Reference)	-2.164	0.234	0.000	0.128
No Pedagogical approach				
<i>Individual characteristics</i>	-	-	-	-
There is Individual characteristics (Reference)	-0.845	0.723	0.03	0.431
There is no individual characteristics				
<i>Curriculum content</i>	-	-	-	-
There is Curriculum content (Reference)	-0.845	0.825	0.026	0.453
There is no curriculum content				
Without moderating variable (government policy)				
<i>Pedagogical approach</i>	-	-	-	-
There is pedagogical approach (Reference)	2.382	0.204	0.000	0.103
No Pedagogical approach				
<i>Individual characteristics</i>	-	-	-	-
There is Individual characteristics (Reference)	0.971	0.642	0.01	0.342
There is no individual characteristics				
<i>Curriculum content</i>	-	-	-	-
There is Curriculum content (Reference)	0.912	0.751	0.014	0.313
There is no curriculum content				

Source: Research Data (2021)

It is noteworthy that without the moderating variable (government policy) all the variables have a significant relationship with entrepreneurial behaviour at 5% significance level. Likewise, with the introduction of government policy, all variables still have a significant relationship with entrepreneurial behaviour at 5% confidence level. From the results it is also notable that when moderating variable (government policy) was introduced the odds ratio became less thus

explaining more of variation in entrepreneurial behaviour. It was therefore concluded that government policy is a key factor as it played a moderating role in the entrepreneurial behaviour.

The findings concur with the key government policies related to entrepreneurship in Kenya according to the government website (2021) especially the fifth hub which is about Innovation and Technology. The hub details that the government has been actively supporting the establishment of innovation and technology hubs across the country. These hubs provide entrepreneurs with access to affordable working spaces, mentorship, networking opportunities, and other support services. These policies and initiatives are aimed at creating an enabling environment for entrepreneurs in Kenya and fostering a culture of innovation and business growth.

CHAPTER 5

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

This chapter presents summary of findings, conclusions and recommendations based on literature review, study objectives and results of the hypotheses that was tested

5.1.1 Summary of findings

The study sought to analyze the influence of entrepreneurship education and entrepreneurial behaviour of graduates from universities in Kenya. The study was directed by specific objectives; to evaluate the level of influence of pedagogical approaches of entrepreneurship education on entrepreneurial behaviour amongst graduates from universities in Kenya, to measure the impact of individual characteristics of entrepreneurship education on entrepreneurial behavior among graduates from universities in Kenya and to analyze the influence level of the curriculum content of entrepreneurship education on entrepreneurial behaviour amongst graduates from universities in Kenya. The study also sought to establish the moderating effect of Government policy on the relationship between entrepreneurship education and entrepreneurial behaviour among graduates from universities in Kenya. Chi square and regression analysis test on relationship between entrepreneurship education and Entrepreneurial behaviour was done and revealed that pedagogical approach, individual characteristics and curriculum content can be used statistically as predictors explaining the variation in the Entrepreneurial behaviour among graduates from universities in Kenya.

5.1.2 Pedagogical approaches and entrepreneurial behaviour amongst graduates from universities in Kenya

The first objective was to evaluate the level of influence of pedagogical approaches of entrepreneurship education on entrepreneurial behaviour amongst graduates from universities in Kenya. Chi square results revealed that a significant relationship between pedagogical approach and entrepreneurial behaviour exists ($p \text{ value} = 0.013 < 0.1$) at 0.05 significance level was evident. Furthermore, the results showed that, where effective pedagogical approaches are used, graduates are 1.781 times more likely to acquire entrepreneurial behavior after graduating from the Kenyan Universities. Consequently, null hypothesis was rejected.

5.1.3 Impact of Individual characteristics and entrepreneurial behaviour amongst graduates from universities in Kenya

The second objective was to measure the impact of individual characteristics of entrepreneurship education on entrepreneurial behavior among graduates from universities in Kenya. Chi square results revealed that individual characteristics had a positive and significant impact on entrepreneurial behaviour amongst graduates from universities in Kenya with ($P=0.000<0.05$) at 95% confidence level. Accordingly, null hypothesis was rejected. Additionally, the results showed that, where individual characteristic was considered, impact on learners is 16.000 times more likely to acquire entrepreneurial behavior after graduating from the Kenyan Universities.

5.1.4 Curriculum content and entrepreneurial behaviour amongst graduates from universities in Kenya

The third objective was to analyze the level influence of content of curriculum of entrepreneurship education on entrepreneurial behaviour amongst graduates from universities in Kenya. Chi square results evidenced a significant relationship between curriculum content and entrepreneurial behaviour ($p\text{-value}=0.028$, $P\text{-value}<0.1$) was evident. Subsequently, null hypothesis was rejected. Furthermore, the results showed that where there is quality content of curriculum, learners are 3.000 times more likely to acquire entrepreneurial behavior after graduating from the Kenyan Universities.

5.1.5 The moderating effect of Government policy on the relationship between entrepreneurship education and entrepreneurial behaviour among graduates from universities in Kenya

The moderating effect of Government policy on the relationship between entrepreneurship education and entrepreneurial behaviour among graduates from universities in Kenya was established as the fourth objective. It is noteworthy that without the moderating variable (government policy) all the variables had a significant relationship with entrepreneurial behaviour at 5% significance level. Likewise, with the introduction of government policy, all variables still had a significant relationship with entrepreneurial behaviour at 5% confidence level. From the results it is also notable that when moderating variable (government policy) was introduced the odds ratio became less thus explaining more of variation in entrepreneurial

behaviour. It was therefore concluded that government policy is a key factor as it played a moderating role in the entrepreneurial behaviour.

5.2 Conclusion of Findings

The study concluded that entrepreneurship education as exemplified in pedagogical approach, individual characteristics and curriculum content has statistically significant positive influence on entrepreneurial behaviour. It was also concluded that government policy is a key factor as it played a moderating role in the entrepreneurial behaviour.

5.3 Contribution to the Body of Knowledge

The study makes a number of contributions to the development of entrepreneurship literature. Whereas previous studies have focused on entrepreneurship education in general, this study has been able to show the relationship that exists between specific entrepreneurship education practices and entrepreneurial behaviour of graduates. The study fills knowledge gap by explaining the contribution of specific educational and cognitive factors on entrepreneurship education practices to quality entrepreneurial behaviour.

By isolating entrepreneurship education into specific standalone variables (pedagogical approach, individual characteristics and curriculum content) this study managed to conduct an in-depth analysis of the contribution of each entrepreneurship education practice variable to entrepreneurial behavior of graduates. As a result, variable specific significance and contribution to student entrepreneurial behaviour were empirically explained. Through this kind of approach, the study was able to contribute to advancing empirical literature on entrepreneurship. Gaps in areas of concern were identified and flagged out for further research.

5.4 Recommendations

Based on the findings, a number of recommendations to the government, curriculum developers, researchers and entrepreneurship trainers were made.

5.4.1 Recommendations to the Government

The government could consider partnering with successful entrepreneurs to establish a pool of resource persons of good repute who could be called upon from time to time to serve as mentors and source of entrepreneurial networks. From the findings it was concluded that government policy is a key factor as it played a moderating role in the entrepreneurial behaviour. Consequently, the government ought to come up with policies that are favourable to the business environment and facilitate entrepreneurs with business grants and incentives for business sustainability.

5.4.2 Recommendations to the Curriculum Developers

The study provides useful insights that if considered may contribute to the design of a robust competency-based entrepreneurship education. Entrepreneurship education should be designed and packaged in a manner that integrates pedagogical approach, individual characteristics and curriculum content as the findings evidenced that the three factors have a significant relationship with entrepreneurial behaviour. There should be continuous appraisal of entrepreneurship education practices during execution to ensure standard that is set on implementation is maintained throughout the process of execution of entrepreneurship education. In addition, the curriculum of entrepreneurship education should be more practical than theoretical, during training and in assessment. Report of the appraisal exercise should be shared with stakeholders concerned thus promoting continuous stakeholders' engagement.

5.4.3 Recommendations to Trainers and University Institutions

It is important for the trainers to strike a balance in respect to pedagogies and learning resources engaged in order to expose students to different experiences and industry dynamics other than sticking to traditional lecture methods and handouts. Universities should use technology as a strategic learning resource coupled with enhanced use of experiential pedagogies that encourage learning by doing, social interactions and sharing of experiences from the industry. This would further boost entrepreneurial intention of students and contribute to actualizing Kenya Vision 2030 of making Kenya a middle level industrialized country.

5.5 Suggestion for Further Studies

The study sample comprised of university graduates. The researcher suggests the following possible areas for further studies;

1. Research can be done comprising of diploma level TVET students in Kenya to establish whether the findings will remain the same.
2. A comparative study comprising of university entrepreneurship of education graduates and TVET graduates in Kenya, on the basis of their entrepreneurial success.
3. Research can be done on the effectiveness of CBC curriculum on enhancing entrepreneurial intention of pupils in primary schools and junior secondary schools in Kenya.

REFERENCES

- Agu, A. G. (2013). Solid Earth. *Journal of Geophysical Research*, 10-12.
- Abd Hamid, M. (2013). *Entrepreneurship education: The implementation in Year 1 primary school curriculum in Malaysia. A case study of one district in East Peninsular Malaysia*. University of York: Doctoral dissertation.
- Afsahi, S. E. (2016). The Role of Evaluation in Curriculum Design. *Researchgate*, 5-46.
- Ahmad, N. H. (2007). *A cross cultural study of entrepreneurial competencies and entrepreneurial success in SMEs in Australia and Malaysia*. Australia: University of Adelaide, Adelaide School of Business.
- Akpan, E., Effiong, S., & Ele, A. (2012). Entrepreneurship education policy: An intervention strategy for economic development in Nigeria. *Business & Entrepreneurship Journal*, 101-112.
- Alberti, F., Sciscia, S., & Poli, A. (2004). *Entrepreneurship Education; Notes on an ongoing debate Proceedings of the 14th Annual International Entrepreneur Conference*, . Federico 11, Italy.: University of Napoli.
- Babbie, E. (2010). *The practice of social research*. Belmont: 12th Edition, Wadsworth.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice Hall: Englewood Cliffs, NJ.
- Bandura, A. (2018). Toward a psychology of human agency: pathways and reflections. *Perspect. Psychol. Sci.*, 130-136.
- Baron, R. (2015). OB and entrepreneurship: The reciprocal benefits of closer conceptual links. *Research in Organizational Behavior*, 225-249.
- Belz, F.-M., & Binder, J. K. (2015, February 3). Sustainable Entrepreneurship: A Convergent Process Model. *Sustainable Lifestyles*, p. 36.
- Benson, S. (2008). *Information systems- A business approach*. Australia: John Wiley & Sons.
- Bilić, I. (2011). How Does Education Influence Entrepreneurship Orientation? *A Case Study of Croatia*, 115-1

- Cárcamo-Solís, M.D, Arroyo-López, M.D, & Alvarez-Castañón, L.C. (2017). Developing entrepreneurship in primary schools. The Mexican experience of “My first enterprise: Entrepreneurship by playing”. *Teaching and Teacher Education*, 291-304.
- Commission of Enquiry, (2006). COMMISSION REGULATION (EC) No 1881/2006. *Official Journal of the European Union*, 360-365.
- Creswell, J. (2014). *Research design : qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, California: SAGE Publications, Inc.
- Dafna, K. (2018). Managerial performance and business success: Gender differences in Canadian and Israeli entrepreneurs. *Journal of Enterprising Communities: People and Places in the Global Economy*, 300-331.
- Department of Education, (2012). The Quality Assurance Agency for Higher Education. *Guidance for UK Higher Education Providers*, 1-8.
- Fayolle A. (2004). Exploratory study to assess the effects of entrepreneurship programs on student. *Journal of Enterprising Culture*, 169-184.
- Fayolle, A. (2013). Personal views on the future of entrepreneurship education. *Entrepreneurship & Regional Development*, Vol. 25, Nos. 7–8, 692–701.
- Ferk, M, Quien, M, & Posavec, Z. (2013). Female vs. Male Entrepreneurship-is there a difference? *Studies of Organisational Management & Sustainability*, 1(1), 67-77.
- Fraenkel,J.R, & Wallen, N.E. (2009). *How to Design and Evaluate Research in Education (7th ed)*. New York: McGraw-hill.
- Gafar, M., Kasim, R., & Martin, D. (2013). Entrepreneurial Idea Development to Business Start-Up: Teaching Methodological Approach. *IOSR Journal of Research & Method in Education*, 1-23.
- Gibb, A. A. (1992). Methodological Problems in the Development of a Growth Model of Business Enterprise. *Journal of Entrepreneurship*, 1-35.
- Hytti, U. (2008). Enterprise education in different cultural settings and at different school levels. . *The dynamics between entrepreneurship, environment and education*, 131.

- ILO. (2012). *The youth employment crisis: Highlights of the 2012 ILO report*. Geneva: International Labour Office.
- Iromoka, S. (2005). *Business Education At A Glance*. Lagos: Tee Polishers.
- Kabongo, J. & Okpara, J. (2010). Entrepreneurship education in sub- Saharan African Universities. *International Journal of Entrepreneurial Behavior & Research*, 296-308.
- Kaijage, E., & Wheeler, D. (2013, February 1). Supporting Entrepreneurship Education in East Africa. *Semantic Scholar*, p. 32.
- Katz, J. A. (2003). The Chronology and Intellectual Trajectory of American Entrepreneurship Education. *Journal of Business Venturing*, 18, 283-300.
- Kent, C. A. (1990). *Entrepreneurship education : current developments, future directions*. New York : Quorum Books.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607–610
- Levesque, M, & Minniti, M. (2006). The effect of aging on entrepreneurial behavior. *Journal of Business Venturing*, 21(2), 177-194.
- Linan, F. (2008). “Skill and Value Perceptions: how do they affect entrepreneurial intentions”? *International Entrepreneurship Management Journal*, Vol.4, 257-272.
- Matlay, H. (2008). The impact of entrepreneurship education on entrepreneurial outcomes. The impact of entrepreneurship education on entrepreneurial outcomes. . *Journal of small business and enterprise development*, 15(2), 382-396.
- Mills, A., Durepos, G., & Wiebe, E. (2012). Most Different Systems Design (MDSD). *Encyclopedia of Case Study Research*, 1-28.
- Ministry of Education, (2019). *SESSIONAL PAPER NO. 1 OF 2019*. Nairobi: The Government Printer.
- Ministry of Education, (2022, July 15). *List of Accredited Universities in Kenya 2022*. Retrieved from Education., Commission for University: <https://www.cue.or.ke/>
- McGee, J. E., & Peterson, M. (2019). The long- term impact of entrepreneurial self-

- efficacy and entrepreneurial orientation on venture performance. *Journal of Small Business Management*, 57(3), 720–737.
- Mwasalwiba, E. (2010). A review of its objectives, teaching methods, and impact indicators. *Journal of Education and Training*, 52(1), 20-47.
- Namusonge, G., & Ikuu, D. M. (2013, July 3). Factors Affecting Growth of Information Communication Technology Firms in Nairobi, Kenya. *Semantic Scholar*, p. 42.
- Nani, G. (2019). Entrepreneurial education in the school curriculum: in search of positioning in Zimbabwe. *Problems and Perspectives in Management*, 14(3), 85-90.
- Njoroge, R. &. (1986). *Philosophy and Education in Africa. An Introductory Text for Student of Education*. Nairobi: TransAfrica Press.
- Noel, T. (2001). *Effects of Entrepreneurial Education on intent*. Wichita State University.
- Ogbene, A. (2006). Home economics for self –reliance in a depressed economy: An entrepreneurial initiative. *Journal of home economics research special education*, 7, 101-112.
- Ogola, F. O. (2011). *A Critique of 'Individual Fulfilment' as a Goal of University Education Among Undergraduates in Kenya*. Nairobi, Kenya: Egerton University Press.
- Olokundun, M. (2017). Academy of Entrepreneurship Journal. *Perceptions of students on entrepreneurship curriculum contents and openmindedness: Implications for business idea generation of Nigerian university students*, 6-19.
- Onwuchekwa, C. (1993). *Management Theory and Organizational Analysis: A Contingency Theory Approach*,. Enugu: Obio (Nig) Enterprises.
- Oosterbeek, H., Van Praag, M., & Ijsselstein, A. (2010). The Impact of Entrepreneurship Education on Entrepreneurship Skills and Motivation. *European Economic Review*, 54, 442-454.
- Oyelola, O. (2013). Embedding entrepreneurship education in to curriculum: A case study of Yaba College of technology, Centre for Entrepreneurship Development. *The 1st International Africa Enterprise Educators Conference*, 71-105.

- Oyugi, J. (2015). *Entrepreneurship education, self efficacy and intentions*. Saarbrücken: LAP LAMBERT Academic Publishers.
- Paul, E. (2005). *Entrepreneurship in Vocational Education*. Enugu: OZYBEL Publishers.
- Pellegrini, M., & Caputo, A. (2020). *Entrepreneurial Behaviour: Unveiling the Cognitive and Emotional Aspects of Entrepreneurship*. Howard House, Wagon Lane, Bingley BD16 1WA, UK: Emerald Publishing Limited.
- Petridou, E, Sarri, A, & Kyrgidou, L. (2009). Entrepreneurship education in higher educational institutions: The gender dimension. *Gender in Management: An International Journal*, 24(4), 286–309.
- Pittaway, L., & Edwards, C. (2012). Assessment: Examining Practice in Entrepreneurship Education. *Education and Training*, 54, 778-800.
- Praag, V. (2007). *Identifying the difference in returns to education for entrepreneurs and employees: Identification by means of changes in compulsory schooling laws*. Amsterdam: Working Paper University of Amsterdam.
- Programme), U. (. (2013). *Human Development Report 2013: The Rise of the South: Human Progress in a Diverse World*. New York.
- Rae, D. (2012). International entrepreneurship education. *Education + Training*, Vol. 54 Iss 8/9, 639 – 656.
- Ragin, C. (1984, November 8). *What is Qualitative Comparative Analysis (QCA)*. Retrieved from http://eprints.ncrm.ac.uk/250/1/What_is_QCA.pdf
- Raposo, M, do Paço, A, & Ferreira, J. (2008). Entrepreneur's profile: a taxonomy of attributes and motivations of university students. *Journal of Small Business and Enterprise Development*, 15(2), 405-418.
- Reconalla, M. (2016). *ENTREPRENEURIAL BEHAVIOR*. NEW YORK: BN.
- Rose, R, & Kumar, N. (2006). The dynamics of entrepreneurs' success factors in influencing venture growth. *Journal of Asia Entrepreneurship and Sustainability*, 1-22.

- Schatz, F, & Welle, K. (2016). Qualitative Comparative Analysis: A valuable approach to add to the evaluator's toolbox? Lessons from recent applications. *CDI Practice Paper No. 13*.
- Schober, Patrick, Boer, Christa, & Schwarte, Lothar. (2018). Correlation Coefficients: Appropriate Use and Interpretation. *International Anesthesia Research Society*, 1963-1968.
- Sefiani, Y. (2013). *Factors for Success in SMEs: A Perspective from Tangier*. University of Gloucestershire.
- Seikkula- Leino, J. (2011). The implementation of entrepreneurship education through curriculum reform. *Journal of Curriculum Studies*, 43(1), 69-85.
- Storey, D. (2014). Six steps to heaven: evaluating the impact of public policies to supports mall business in developed economies. *Handbook of Entrepreneurship*, 176-194.
- Syed, Z. (2015). Entrepreneurship Education in Tourism and Hospitality Programs. *Journal of Hospitality and Tourism Education*, 27(1), 20-29.
- Tanveer, M, Akbar, A, Gill, H, & Ahmed, I. (2013). Role of Personal Level Determinants in Entrepreneurial Firm's Success. *Journal of Basic and Applied Scientific Research*, 3(1), 449-458.
- Taormina, R. J, & Lao, S. (2017). Measuring Chinese entrepreneurial motivation: Personality and environmental psychological. *Journal of Entrepreneurial Behaviour and Research*, 13(4), 200 - 221.
- Türetgen, I, Unsal, P, & Erdem, I. (2008). The Effects of Sex, Gender Role, and Personality Traits on Leader Emergence: Does Culture Make a Difference? *Small Group Research*, 32(1), 44-89.
- Turker, D, & Sonmez Selçuk, S. (2009). Which factors affect entrepreneurial intention of university students? . *Journal of European industrial training*, 33(2), 142-159.
- Vesper, K. (2016). *New Venture Strategies*. Englewood Cliffs: NJ: Prentice Hall.
- Vesper, K. H., & Gartner, W. (1997). Measuring Progress in Entrepreneurship Education. *Journal of Business Venturing*, 12(5):403-421.

- Wang, Y, & Verzat, C. (2011). Generalist or specific studies for engineering entrepreneurs? Comparison of French engineering students' trajectories in two different curricula. *Journal of Small Business and Enterprise Development*, 18(2), 366–383.
- Welmilla, I, Weerakkody, W, & Ediriweera, A. (2011). The Impact of Demographic Factors of Entrepreneurs on Development of SMEs in Tourism Industry in Sri Lanka. *Faculty of Commerce and Management Studies, University of Kelaniya, Sri Lanka*, 11-56.
- Wilson, F, Kickul, J, & Marlino, D. (2007). Gender, entrepreneurial Self-Efficacy, And entrepreneurial career intentions: Implications for entrepreneurship Education. *Entrepreneurship theory and practice*, 31(3), 387-406.
- Wilson, F., Kickul, J., & Marlino, D. (2007). “Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: implications for entrepreneurship education”. *Entrepreneurship Theory & Practice*, 387-406.
- Wood, F. (2008). *Business Accounting*. New York : Financial Times/Prentice Hall.

APPENDICES

Appendix I: Consent Form for Participants

CONSENT FORM

I accept to participate in the research project by which the contact of confidentiality is binding. I declare that I will notify the researcher in case of any commitment or inconvenience that may necessitates my withdrawal.

Signature: Date:

Appendix II: Questionnaire

Introduction

I am a student from the Selinus University of Science and Literature pursuing a doctor of philosophy degree in Education. I am conducting a study to compare the education and cognitive factors that influence entrepreneurial behavior amongst university graduates in Kenya. My focus is on the content of curriculum, methods of teaching and methods of evaluation used in entrepreneurship education. You have been selected for the study because you are a graduate of entrepreneurship education with a existing business venture. Your experiences would be of great contribution to this study. Kindly fill in the blank spaces. Do not write your name on the questionnaire. Be honest, and your information will be treated with confidence. Fill in the blank spaces or tick the correct alternative where applicable.

Section A: Demographic information

1. Indicate your gender. Male Female

3. Indicate your age.

25-30 years

31-40 years

Above 41 years

4. Highest education level

Diploma Undergraduate

Masters Doctorate

5. Have you ventured into business since you graduated? Yes No

6. If yes, how long have you been in business?

1 year

2 years

Above 3 years

Section B: The influence of pedagogical approaches on entrepreneurial behaviour amongst university graduates in Kenya

Please indicate your level of agreement to the below statements on the influence of pedagogical approaches on entrepreneurial behaviour amongst university graduates in Kenya.

1= Strongly Disagree 2- Disagree, 3= Neutral, 4 = Agree, 5= Strongly Agree

S/No.	Teaching and Learning Approaches	1	2	3	4	5
B1	Experiential learning was an effective method for teaching entrepreneurship because it allowed me to develop skills such as creativity, problem-solving, and risk-taking					
B2	Case studies were effective in promoting entrepreneurial behavior because they provide me with a platform to analyze and learn from the successes and failures of real entrepreneurs.					
B3	Business simulations were effective in promoting entrepreneurial behavior because they allow me to develop critical thinking and decision-making skills					
B4	Action-based learning was effective in promoting entrepreneurial behavior because it allows me to develop practical skills, gain experience, and build networks with other entrepreneurs.					
B5	Mentoring was effective in promoting entrepreneurial behavior because it allowed students to learn from experienced entrepreneurs and to build networks that can be valuable in their future entrepreneurial endeavors.					
B6	Design thinking was effective in promoting entrepreneurial behavior because it encourages students to think creatively and to develop solutions that address real-world problems.					

Section C: Impact of individual characteristics on entrepreneurial behaviour amongst university graduates in Kenya.

Please indicate the most appropriate response with the scale given below. 1= Strongly Disagree
2- Disagree, 3= Neutral, 4 = Agree, 5= Strongly Agree

	Individual Characteristics	1	2	3	4	5
C1	I think that individuals with a high level of risk-taking propensity are more likely to engage in entrepreneurial activities.					
C2	I believe that individuals who are mentored to be family business successors are more likely to pursue entrepreneurial opportunities.					
C3	Individuals with family business background have high affinity for entrepreneurship than those without.					
C4	I believe most entrepreneurs with family business background inherited their business from their parents					
C5	I believe that individuals with a high level of perseverance are more likely to succeed as entrepreneurs.					
C6	I believe that individuals with a strong desire to create innovative solutions are more likely to become entrepreneurs.					

Section D: The influence of content of curriculum on entrepreneurial behaviour amongst university graduates in Kenya

Please indicate your level of agreement to the statements below on the influence of content of curriculum on entrepreneurial behaviour amongst university graduates in Kenya. 1= Strongly Disagree 2- Disagree, 3= Neutral, 4 = Agree, 5= Strongly Agree

	Content of Curriculum on Entrepreneurial Behaviour	1	2	3	4	5
D1	The Entrepreneurship Education curriculum equipped me with the necessary knowledge and skills required to prosper in my business					
D2	Entrepreneurial curriculum contains information on how students can identify and shape opportunities, assess business concepts, develop operational plans and grow new enterprises					
D3	The content of the entrepreneurship courses was relevant to the current business environment in Kenya					
D4	Entrepreneurial curriculum in my institution provided opportunities for practical application of the entrepreneurship concepts taught in class					
D5	Entrepreneurial curriculum in my institution emphasized on the development of entrepreneurial attitudes such as risk-taking and innovation which I apply in my business					
D6	The entrepreneurship education I received has influenced my decision to become an entrepreneur					

Section E: The influence of government policy on entrepreneurial behaviour amongst university graduates in Kenya.

Please indicate your level of agreement to the below statements on the influence of government policy on entrepreneurial behaviour amongst university graduates in Kenya. 1= Strongly Disagree 2- Disagree, 3= Neutral, 4 = Agree, 5= Strongly Agree

	Government policy on Entrepreneurial Behaviour	1	2	3	4	5
E1	Kenyan government policy encourages entrepreneurial innovation					
E2	The government provides financial incentives to entrepreneurs					
E3	Government has created a favorable business environment					
E4	Government has enhanced access to business capital					
E5	Government fosters industry-specific development					
E6	The government provides financial grants to entrepreneurs					

Section F: Entrepreneurial behaviour amongst graduates from universities in Kenya

Please indicate your level of agreement to the below statements on entrepreneurial behaviour amongst university graduates in Kenya. 1= Strongly Disagree 2- Disagree, 3= Neutral, 4 = Agree, 5= Strongly Agree

	Entrepreneurial Behaviour	1	2	3	4	5
F1	I have never closed my business since I started it 3 years ago					
F2	My business has been running for the last 3 years					
F3	My business profit has consistently been increasing					
F4	I have opened over 2 branches since the inception of my business					
F5	There has been an increased annual turnover over the years					
F6	My strong business network has been key to its growth					