

**FACTORS INFLUENCING ENTREPRENEURIAL ENGAGEMENT BY
STUDENTS IN PUBLIC UNIVERSITIES: A CASE OF NAIROBI
METROPOLITAN REGION, KENYA**

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**A Thesis submitted to Graduate School in partial fulfilment of the Requirements
for the Conferment of the Master Degree in Business Administration,
Entrepreneurship of Laikipia University**

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DECLARATION AND RECOMMENDATIONS

This research project is my original work and has not been presented for a degree in any other University or institution of higher learning and sources quoted have been duly acknowledged.

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DEDICATION

I dedicate this thesis to my late grandmother Zaweriah Wangui- you walked so I could run. Thank you for your emphasis on education and hard work. To my dear parents, Francis Muithui and Alice Muringo, without whom I would not have started my Masters - thank you for being constant in your prayers, in your push and support throughout this journey. To my siblings- Lucy, Patrick and Ann-, my nieces and nephews and to my friends, thank you for cheering me on even when I almost did give up.

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ABSTRACT

The aim of this study was to investigate the selected factors influencing entrepreneurial engagement among public university students in the Nairobi metropolitan area of Kenya. This study aimed to identify the psychological, socio-cultural, institutional and economic factors that influence entrepreneurial engagement, among university students. The study adopted descriptive research design. Specific areas studied were Nairobi, Kiambu and Kajado counties in the Nairobi metropolitan area. There are six public universities in this region that were included in the study, including the University of Nairobi, Kenyatta University, Jomo Kenyatta University of Agriculture and Technology, Kenya Technical University, Cooperative University, and Multimedia University. The target group included 1,006 public university students from incubation centres and actively involved in entrepreneurial ventures. The sample size was 286 respondents. In this study, open-ended and closed-ended questions were used to collect data. Data analysis involved the use of descriptive and inferential statistical techniques. Descriptive statistical data used frequency and percentage as well as measures of central tendency that were the mean and standard deviation. Inferential statistics on the other hand employed correlation and regression analysis. The results were presented in pie-charts, bar-graphs and statistical tables. Data for analysis was obtained from 279 out of the 286 respondents who returned the questionnaire representing an overall response rate of 97.5%. Overall, the findings showed that entrepreneurial engagements among university students could be positively predicted by the factors in the regression model. In particular, the results showed that the psychological well-being of students had a significant and positive influence on entrepreneurial participation among university students in the Nairobi metropolitan region implying that psychological factors significantly predicted students' entrepreneurial engagement in universities, $t(278) = 9.81; \beta = 0.027; p < 0.001$). Regarding the Social factors, the study established that social factors have a positive influence on entrepreneurial engagement of university students implying that social factors significantly predicted entrepreneurial engagement of university students ($t(278) = 13.73; \beta = 0.028; p < 0.001$). Further the study found that institutional related factors influenced entrepreneurial engagement of university students in doing business and working life implying that institutional factors significantly predicted entrepreneurial engagement among university students ($t(278) = 14.90; \beta = 0.0308; p < 0.001$). Economic factors on the other hand significantly predicted entrepreneurial engagement ($t(278) = 14.38; \beta = 0.0314, p < 0.001$) which implied that economic development had a positive influence on the entrepreneurial participation of students in public universities within the Nairobi metropolitan region. All the predicting factors (institutional, psychological, socio-cultural and economic) explained 49.11% variance of entrepreneurial engagement (adjusted $R^2 = 0.49.11, F(4, 278) = 95.33, p < 0.001$). This study concluded that university students need to discover, develop and use self-efficacy, innovation, management and fulfil the requirements in order to participate in entrepreneurship. Benefits such as business education, vocational training/curriculum and suitable workplaces should be created for young people who can attend business schools. It is important to encourage policy makers and university tutors to continue using entrepreneurship education as an effective strategy for teaching university students psychological skills such as good interpersonal skills, innovation, management, and the need for success.

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ACRONYMS AND ABBREVIATIONS

CUE:	Commission of University Education
GUESSS:	Global University Entrepreneurial Spirit Students' Survey
HELB:	Higher Education Loans Board
JKUAT:	Jomo Kenyatta University of Agriculture and Technology
KNEC:	Kenya National Examination Council
KYEP:	Kenya Youth Empowerment Project
NACOSTI:	National Commission for Science, Technology and Innovation
SME:	Small and Micro Enterprises
TVETA:	Technical and Vocational Education Training Authority
UON:	University of Nairobi

OPERATIONAL DEFINITION OF TERMS

Economic factors: check with the different factors of production that are essential to the increase of a person's or organization's enterprise, together with availability of capital, professional people, availability of markets and generation, and assisting infrastructure.

Entrepreneur: a person who runs a business. They are able to discover commercial enterprise possibilities, mobilize the essential resources, e.g. economic, time, human and provoke successful enterprise activities.

Entrepreneurship: it is the manner of spotting and knowing opportunities, in addition to the process of figuring out variable commercial enterprise possibilities and implementing them creatively and innovatively.

Incubation centres: Business incubation centres are organizations that assist emerging and early-stage enterprises during their initial growth phase by offering a wide range of specialized resources and services.

Institutional factors: are the traits embedded in the business that contributes to the boom of the need for enterprise development. They range from the expenses of putting in place a commercial enterprise, taxation, enterprise levies, macro and micro surroundings guide and others

Psychological factors: are the cognitive traits of a person that lead to the need for entrepreneurial awakening. These encompass risk-taking, innovation, creativity, motivation, among others

Socio-cultural factors: are social attributes that help the improvement of entrepreneurial spirit and lifestyle among participants. They encompass own family historical past, schooling, ethnic identity and cultural values, among others

Undergraduate: a person who is within the process of reading or training, especially and at the verge of acquiring an academic degree after finishing a university program.

Youths: younger folks who are under the age of 35 as per the constitution of Kenya.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

For some time, people have seen institutions of higher education as gateways to employment opportunities. Students who complete degree and diploma courses expect to enter the labour market after graduation and eventually become self-employed after several years of experience in an organization. Kume, Kume and Shahini (2013) argue that all over the world, students have been trained to join the labour pool after graduation and therefore most institutions include industry connections as a course requirement. However, the trend is shifting and more university students are deciding to start a business while still on campus. Morris, Shirokova, and Tsukanova (2017) explain that with changing dynamics in the global and local economic environment, college students are increasingly open to the idea of being entrepreneurs rather than seeking job opportunities.

Globally, universities are also encouraging students to cultivate entrepreneurial skills. According to Bergmann, Hundt and Sternberg (2016), "...in recent years, universities have taken measures to varying degrees to increase the entrepreneurial propensity of their students, creating more or less supportive contexts for starting a business" (p. 54) . Information gathered by Global University Entrepreneurial Spirit Students Survey (GUESS) also points to increased student interest in entrepreneurship. A 2016 international survey of 50 countries found that 21.9% of college students are currently running a business, while 8.8% are already in business (GUESS 2016). Statistics point to a growing number of students who are willing to risk the minimal funds they have to start a business. Ideally, they targeted budding entrepreneurs who risk starting a business with minimal skills and zero experience. Bergmann et al. (2016) point out that while postgraduate students are expected to have relatively broader experience in the labour market or business environment, undergraduates have to rely on limited knowledge gained in the classroom and by observing business entities. As such, it is reasonable to

examine the intrinsic and extrinsic factors that motivate young students to pursue entrepreneurship.

Morris, Shirokova, and Tsukanova (2017) argue that students engage in entrepreneurial activities both for self-motivation and for the existence of “entrepreneurial ecosystems”. This ecosystem extends from an institution to a national business environment that tends to encourage young people to venture into business. Siegel and Wright (2015) believe that it is important for researchers to investigate the specific factors that create entrepreneurial ecosystems that motivate students to start businesses while they are still engaged in their studies. They point out that some big companies like Microsoft, Google and Facebook were founded by students and this motivates many young people in higher education to pursue their entrepreneurial passion.

In Kenya, the government, private sector and higher education institutions have realized the importance of supporting student enterprises. Peterman and Kennedy (2003) argue that it is evident that employment opportunities in the country are limited and young people in educational institutions should consider self-employment. In 2012, the Ministry of Education launched the Science, Technology and Innovation Policy, which aims to strengthen the capacity of universities and technical and vocational education (TVET) institutions to support innovation and entrepreneurship (Kenya, 2012). This is part of a long-term initiative to achieve Kenya's Vision 2030 by empowering local businesses and manufacturing industries. Kenya's Ministry of Education also works closely with the Technical and Vocational Education and Training Authority (TVETA), the Commission for University Education (CUE) and the Kenya National Examination Council (KNEC) to ensure that students in higher education receive entrepreneurial training. Gürol and Atsan (2006) argue that it is essential that students are equipped with the necessary skills to develop business plans, sources of funding and running business activities. Such training plays an integral role in building the capacity of students who want to start a business while still learning. In addition, the government has also tapped funding opportunities for young people who want to venture into business through the Kenya Youth Enterprise Fund (KYEP). Although the fund is open to all young people between the ages of 18 and 35, university students can also apply for funds and start their business

ideas. Nyambegera and Kilonzo (2014) point out that funding is a key challenge for budding entrepreneurs and the government's move to use a special enterprise fund for young people is an integral part of supporting entrepreneurship.

Selected private sector organizations have partnered with higher education institutions to create business incubation and innovation centres aimed at supporting student businesses. A report by Otuki (2013) points to the potential of university business centres to stimulate economic growth in the country. The centres focus on students' innovative business ideas and are key to developing the country's competitive advantage in services, ICT and manufacturing industries. Otuki (2013) notes that in the last 10 years, several universities in Kenya have established business centres for student entrepreneurs, which include Chandaria Business Innovation and Incubation Center at Kenyatta University, Kuza Incubation Centre at JKUAT, Business Incubation Center at Mount Kenya University, C4D Centre at the University of Nairobi, the CUEA Innovation Hub at the Catholic University of East Africa and the IBiz Africa Hub at Strathmore University. This trend undoubtedly testifies to the more intensive efforts of students for entrepreneurial activities.

A 2019 report by Business Today tells the story of Moses Muriithi Kihunii, an engineering student at Kenyatta University, who used his university loan of Ksh 40,000 a year to invest in an online business and later ventured into the real estate industry while still a student (Mulunda 2019). Another news report by The Standard provides the success story of Kennedy Kipng'en, a University of Laikipia student who also invested his HELB loan to start commercial sugarcane farming in his rural home in Kericho District (Mburu 2019). These two reports point to a current trend in many colleges where students are even prepared to risk an education loan to start a business. The stories are supported by hundreds of start-ups that are currently being incubated by various business and innovation centres at private and public universities.

This study hypothesized that some of the underlying factors influencing college students toward entrepreneurship include psychological, socio-cultural, institutional, and economic factors. Kerr, Kerr, and Xu (2018) identified four key psychological factors

that increase entrepreneurs' entrepreneurial engagement, which include self-efficacy, innovativeness, locus of control, and need for achievement. Their study noted that while other people are comfortable with the status quo, individuals with an entrepreneurial spirit are always looking for ways to create solutions and achieve their dreams. In terms of socio-cultural factors, a family with a previous entrepreneurial background often influences and motivates siblings to delve into entrepreneurship, and it is expected that they will be more inclined towards entrepreneurship in the future (Dondo, 2013).

Otuki (2013) revealed that institutional factors include skills and entrepreneurial education that increase the level of entrepreneurial involvement. The entrepreneurial skills required by an entrepreneur can be divided into three main areas, namely technical skills, business management and personal entrepreneurial skills. Ireland and Webb (2007) further added that the level of education affects entrepreneurial propensities. Nyambegera and Kilonzo (2014) identified the significant role of economic factors as drivers of entrepreneurial engagement among university students. They include favorable economic variables such as the availability of credit facilities, a ready market for goods and services, and available professional services that motivate students to start businesses.

Watiri (2012) in a study on the factors that influence students to engage in entrepreneurship found that peer pressure, family and experience motivated Strathmore University students to start a business. A similar study by Mueni (2016) focused on the United States International University-Africa (USIU) and found that some of the factors influencing student entrepreneurship include entrepreneurial training, personal attributes and demographic factors such as age and gender. The study also compared the entrepreneurial intentions of graduates and undergraduate students.

1.2 Statement of the Problem

Like other emerging economies in the world, Kenya faces challenges with high youth unemployment. Youth unemployment in Kenya stands at 83.2%, while employment is 16.8% in the formal sector and 84.1% in the informal sector (KNBS, 2021). This has also led to many universities in Kenya making entrepreneurship a compulsory module for all students (Ndemo & Weiss, 2017). Although the trend shows that an increasing number of

university students in Kenya are engaging in entrepreneurial activities, the majority are still looking for employment (Binyanya, Wandolo & Mugambi, 2021). Statistics show that more than 83% of university students still gravitate towards employment (Kisubi et al., 2021). This suggests an assumption that entrepreneurial engagement among university students in Kenya may still be weak. This forms the rationale for this study; to examine the factors influencing entrepreneurial engagement among university students in Kenya. As reported by Koria et al. (2021), understanding the determinants leading to increased entrepreneurial engagement among university students is essential to strengthen the initiative in practice. Engidaw (2021) further stated that economic, socio-cultural, institutional and psychological factors have a significant influence on youth entrepreneurial engagement.

Based on the existing literature, there are mixed conclusions about the factors influencing entrepreneurial engagement among university students. Singh, Verma, and Rao (2017) studied the influence of individual and sociocultural factors on entrepreneurial engagement among college students in India. The findings showed that psychological and sociocultural factors are key drivers of students' entrepreneurial engagement. Engidaw (2021) investigated entrepreneurial engagement and culture among students at Woldia University in Ethiopia. The findings showed that information, leadership and psychological factors are important determinants. In Kenya, a study by Fikirini (2017) looked at the factors influencing the choice of entrepreneurship among tertiary graduates. The findings showed presence of significant relationship between technological factors, personal factors and information related factors are decisive.

Based on several illustrations, there is a contextual, conceptual and methodological knowledge gap. Context gaps emerge from studies such as Engidaw (2021) and Singh et al. (2017) are based on the Kenyan context. A recognized conceptual gap is that there is no consensus among scholars regarding the key constructs influencing entrepreneurial engagement among college students. The methodological gap arises in, among other things, the research design, type of data, and data analysis used in the various studies. This creates significance for further empirical evaluation of factors affecting entrepreneurial engagement of public university students in Kenya.

1.3 Purpose of the Study

The general objective is to investigate selected factors influencing entrepreneurial engagement among public university students in the Nairobi Metropolitan Region of Kenya.

1.4 Specific Objectives

The following research objectives guided the study;

- i. To find out the influence of psychological factors on the entrepreneurial engagement of public university students in Nairobi metropolitan region.
- ii. To assess the influence of socio-cultural factors on the entrepreneurial engagement of public university students in Nairobi metropolitan region.
- iii. To evaluate the influence of institutional factors on the entrepreneurial engagement of public university students in Nairobi metropolitan region.
- iv. To investigate the influence of economic factors on the entrepreneurial engagement of public university students in Nairobi metropolitan region.

1.5 Research Questions

The following research questions guided the study;

- i. How do psychological factors influence the entrepreneurial engagement of public university students in Nairobi metropolitan region?
- ii. To what extent do socio-cultural factors influence the entrepreneurial engagement of public university students in Nairobi metropolitan region?
- iii. What is the effect of institutional factors influence the entrepreneurial engagement of public university students in Nairobi metropolitan region?
- iv. To what extent do economic factors influence the entrepreneurial engagement of public university students in Nairobi metropolitan region?

1.6 Significance of the Study

Research is important in all areas of policy, business, and scientific research. Unemployment has been found to be high in Kenya, and the government and other stakeholders are looking for ways to create jobs and stimulate economic growth.

Entrepreneurship by college students not only helps young people start their own businesses, but also creates more jobs as the size of the business grows. Thus, this research will assist in the development of higher education and youth entrepreneurship policies. It will include the creation of training programs at colleges and universities to help young people take advantage of entrepreneurship and provide students with resources to enter the world of work.

In education, the results of this study will expand knowledge on this problem. The findings will be beneficial to Kenyan higher education as they will facilitate comparison with other countries in the region or internationally. The research will also help universities prevent an increasing number of students from seeking self-employment while studying. Identifying what drives student entrepreneurship will lead universities to help entrepreneurs by providing support such as manufacturing facilities and even flexible working hours. The findings of this study will also highlight private organizations currently supporting business students in providing support based on the needs or needs of participants.

1.7 Scope and Limitation of the Study

The study focused on factors influencing entrepreneurial engagement among public university students in Kenya. Four independent variables entered into the study; psychological, sociocultural, institutional and economic factors. The dependent variable was entrepreneurial involvement. The location of the study was six public universities (University of Nairobi, Kenyatta University, Jomo Kenyatta University of Agriculture and Technology, Multimedia University, Technical University of Kenya, Cooperative University) in the counties of Nairobi and Kiambu in the Nairobi Metropolitan Area. The location was ideal for study as these universities have the highest concentration of student population in Kenya and the Nairobi metropolitan region is Kenya's commercial hub. The target population was university students who are actively engaged in entrepreneurial activities and are also registered in campus incubation centres.

This study was limited to public universities in the Nairobi metropolitan area of Kenya. Therefore, generalization of the findings is limited to public universities in the Nairobi

metropolitan area. For private universities and other public ones outside the field of study, research work should be presented appropriately.

1.8 Assumptions of the Study

This study assumed that the aim of the university is to use initiatives and programs to create a work culture among students. This study was based on the assumption that participants understood the concept of entrepreneurship. This study was based on the assumption that entrepreneurship students are willing to give the correct information that the study seeks. Economic, social, economic and psychological factors are estimated to influence entrepreneurial participation of Kenyan university students.

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CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter presents a literature review that guides the study according to the study variables. It also provides a summary of the theoretical and conceptual overview in which the study is grounded. A theoretical and conceptual overview creates an understanding of the knowledge that underlies the study.

2.2 Literature Review

There is a wide range of literature on the topic of entrepreneurship. Scholars on the subject have extensively researched and developed concepts that connect business with major aspects of humanity such as psychology, sociology, and economics. Therefore, this section focuses on an empirical literature review based on research variables that include economic, socio-cultural, institutional and psychological factors. The review analyses the different perspectives on this topic and relates them to the aim of the study.

2.2.1 The influence of psychological factors on entrepreneurial engagement

Researchers have linked entrepreneurial behaviour with the self. Zhang et al. (2020) argued that even if a person is educated and experienced in business management, personal characteristics still play an important role. A study by Karimi and Reisi (2023) showed that young people who participate in entrepreneurship realize that they have entrepreneurial skills to run a successful business. The ability to sell and manage people is an important trait. Sahu et al. (2023) agree that emotional intelligence is essential for a business person who must face different challenges every day and be able to manage everything.

Many studies have shown that entrepreneurs share certain psychological characteristics. Kerr, Kerr, and Xu (2018) identified four key characteristics of entrepreneurs, including self-efficacy, innovation, locus of control, and the need for completed action. His research indicates that entrepreneurs are always looking for ways to find solutions and make their dreams come true, while others are happy with the situation. However, Karimi

and Reisi (2023) pointed out that there is a difference between creativity and innovation. Teenagers tend to engage themselves in creative activities such as drawing, singing, dancing. Innovation, on the other hand, goes beyond art and includes finding solutions to human problems (Zhang et al. (2020). Sahu et al. (2023) argued that students who believe that they can be successful at an early age have confidence in starting to work with the expectation of growth. Non-believers go to work using safe hunting to ensure their regular income. Bryniak (2020) pointed out that entrepreneurship is a mood that often compels people to take risks with limited resources in the hope of profiting from them.

There may be uncertainty, but the few who want to come to an agreement think about the reward, not the loss. This view is supported by the uncertainty theory of entrepreneurship (Li, Qu & Huang, 2018). Bad behaviour is an important part of the job. According to Sahu et al. (2023) more than 70% of businesses started by young people between the ages of 18 and 35 fail. Few people are in the habit of trying other strategies in the hope of failing and finding opportunity. Dutta (2016) believes that many college students may start their own business because of their friends or family background, but may not be able to persevere to avoid disappointment and failure. Li, Qu and Huang (2018) argued that this can lead to students having to balance their studies and run a business. In order to graduate, the size of the problem must not only be strong, but also determined by a strong character.

Various studies have investigated the psychological effects of business partnerships. For example, in Turkey, Maslaki, Surucu, and Sesen (2022) investigated the impact of students' positive psychological capital on corporate participation. The quantitative study design was based on cross-sectional data collected from 564 university students studying in the Turkish Cypriot region using a questionnaire random sampling method. Analysis was performed using the Statistical Package for the Social Sciences (SPSS) version 24 and Analysis of Moment Structure (AMOS) version 18.0. The research results showed that psychological capital had a significant impact on entrepreneurial commitment. This research has helped policymakers formulate policies that support college student EI to reduce the burden of unemployment.

In China, Zhang et al. (2020) analyzed the factors affecting dimensions of psychological capital (CP) in students' EE. A total of 211 students from local universities in Ningbo were selected for the survey. Principal component analysis was used to examine the differential validity of PC and ELE. One-way analysis of variance was used to analyze differences in demographic variables between PC, ELE, and positive affect (PE). The study also used structural equation modeling to analyze the mediating role of PE in PC and ELE. Additionally, there appears to be a significant difference between the unconstrained PC-ELE model and the constrained model ($p=0.05$). The contextual gap is that the study was in China, a developed economy.

Liang, Lee, and Liang (2015) investigated the impact of psychology and entrepreneurship among university students in Hong Kong. The independent variables examined are self-efficacy, metacognition, intrinsic motivation and negative emotion. This study used a longitudinal survey design and focused on university students majoring in electrical engineering and computer science. The sample size is 233 participants; data were collected through observation and analysis using descriptive and inferential statistics. The findings show that self-efficacy has the greatest impact on job performance, followed by negative thinking, and metacognition has the least impact. The background difference is that the research was conducted in Hong Kong. A different method is that the study uses a longitudinal study design. A different concept is that the variables examined include self-efficacy, metacognition, intrinsic motivation, and negative affect. The study was in Turkey and this is a contextual gap.

In Indonesia, Rokhman and Ahamed (2017) investigated social and psychological factors affecting job engagement among university students in Central Java, Indonesia. The psychological variables examined are need for achievement, high risk, and locus of control. The social variables examined were family background, education, and lifestyle. This study adopted a descriptive research design with a sample size of 300 undergraduate students as respondents. Data were collected through questionnaires and interviews and analyzed through descriptive and statistical analysis. The findings show that psychological factors such as the need to achieve, high risk and locus of control are important factors in entrepreneurship among high level students in Indonesia. A different

background is that the research was done in Indonesia. A different perspective is that this research focused on psychological variables such as need to achieve, risk tolerance, and locus of control.

Goethner, Obschonka, Silbereisen, and Cantner (2017) examine the psychological determinants of entrepreneurial participation among research students in Germany. The variables investigated are business behavior, management perceptions and standards. This study is based on the Behavioural Planning theory. The research design used is a cross-sectional design with a sample size of 340 participants. Data were collected through questionnaires developed and analyzed using the analytical method. The results of the study show that entrepreneurial style has the greatest influence on entrepreneurship among science students. One difference in the background is that the research was conducted in Germany, which has a growing economy compared to Kenya. A different concept is that this study focuses on psychological changes such as work behaviour, sense of control, and structure. The methodological difference is that the study uses a design and data analysis. The theoretical difference is that the research is based on Ajzen's theory of planned behaviour.

2.2.2 The influence of socio-cultural factors on entrepreneurial engagement

Researchers examining the influence of family on entrepreneurial intentions tend to focus on entrepreneurial patterns and the influence of family history. In addition, Giwa and Babakatun (2019) found that children who grew up with entrepreneurial parents were more likely to choose entrepreneurship. Adiza, Alamina and Aliyu (2020) argued that many graduates need support after graduation after testing skills acquired in previous education. One way to provide such support is through training, which is very good as it addresses the specific problems entrepreneurs face (Sun & Yoon, 2022).

Support may include individual and group assistance with specific problems with mentors as models. Perceived parental support has been shown to be associated with Mexican American graduates' educational plans, career prospects, career choices, prestige and career aspirations, and self-employment decisions (Meng & Berger, 2019). According to Giwa and Babakatun (2019), collaboration is done through family training

and motivation, which should be an on-going process that identifies, evaluates and develops the skills that enable the organization to adapt to workplace and job changes. However, in-house training and motivation programs focus on preparing graduates for business leadership and other important jobs (Meng & Beger, 2019). Family education and motivation, especially in family businesses, is a process rather than an event (Sun & Yoon, 2022).

Therefore, the earlier the family business starts the process, the better it will follow the children and develop interest. Often business owners teach and encourage their young to keep the business running in this family concept. Families with entrepreneurial backgrounds seem to influence and encourage their siblings to pursue entrepreneurship and predict that they will have more entrepreneurship in the future (Adiza, Alamina & Aliyu, 2020). According to Meng and Berger (2019), students whose parents are business owners are more likely to start a new business after graduation. Parents are seen as role models that set standards, values and behaviours for their children in their daily lives as well as the use of technology. For this reason, children observe and assimilate some values that are passed on to them by their parents every day and that shape their future and careers (Sun & Yoon, 2022). Giwa and Babakatun (2019) argued that entering a family business can motivate entrepreneurs and thus offer an opportunity to realize entrepreneurial ambitions. The business commitment of both parents is related to the business interests of the children. Parental involvement in entrepreneurship will affect youth entrepreneurship.

Meanwhile, Meng and Berger (2019) stated that entrepreneurs not only encourage their employees to become self-employed, but also have good reasons to believe that their children are financially supported and behave in business even without inheriting their parents' business. When a parent dies or retires. Further, Sun and Yoon (2022) argued that social context plays an important role in creating job needs and making different job choices. Entrepreneurship can be seen as the result of a process of social interaction. Since the family is the first social agent, it can be assumed that successful entrepreneurs are supported by their marriage. Accordingly, Pacut (2020) concluded that family and

community work history have important implications for work practices. This can be seen from two general perspectives.

In Nigeria, Adiza, Alamina and Aliyu (2020) studied the impact of sociocultural factors on the performance of women entrepreneurs. A cross-sectional research design was used to recruit 160 women entrepreneurs from four Niger Delta states. Data were collected using convenience sampling techniques and analyzed using multiple regressions. The results show that socio-cultural dimensions influence women's entrepreneurial performance to different degrees. It is concluded that since individuals do not live in a vacuum but in a social context, cultural factors tend to influence their entrepreneurial behavior, namely their self-awareness and their desire for social mobility. The study was in Nigeria, a country with a different entrepreneurial environment from Kenya.

In a similar study from Nigeria, Giwa and Babakatun (2019) examined the impact of socio-cultural factors on the development of female entrepreneurship in Kaduna State. Data were collected from 332 women entrepreneurs in Kaduna metropolitan city using a descriptive research design and then analyzed using correlation and regression analysis techniques to determine the cause, effect, strength and magnitude of the relationship between socio-cultural factors and women's development. The study found that there was a significant relationship between socio-cultural factors and the development of female entrepreneurship in Kaduna metropolis. This indicates that there is a significant relationship between religion and female entrepreneurship, culture and female entrepreneurship and gender roles and the development of female entrepreneurship in Kaduna metropolis. The study was in Nigeria, a country with a different entrepreneurial environment from Kenya.

Doğan (2015) examined the factors affecting entrepreneurial participation among university students in Turkey. The focus was on students in their final year of business studies. This study used a longitudinal survey design with a sample size of 110 participants. Data is collected through the Partnership Survey and analyzed using descriptive and descriptive data. The findings show that there is a positive and significant relationship between students' entrepreneurial success and their participation in entrepreneurship. Students whose parents are self-employed are more likely to start a

business than their peers. A study by Moa-Liberty, Tunde and Tinuola (2016) examined the role of self-efficacy and leadership among young entrepreneurs in Nigeria. The variables examined are gender, race, age, and self-efficacy. The research design used was a cross-sectional design with a sample size of 300 randomly selected participants. Data collection was done through questionnaires and analysis was done through descriptive and descriptive analysis. Research hypotheses were tested using multiple regression and t tests. The findings show that young entrepreneurs are more likely to join start-ups than their female counterparts. Also, young people with good self-efficacy are more likely to join the labor market. One difference in the background is that the research is based on young Nigerians. One of the differences between the research methods is that the research method is based on system building. The conceptual difference is that the variables examined include gender, race, age, and self-efficacy.

Khuong and An (2016) investigated the factors affecting entrepreneurial participation among Vietnamese university students. The variables examined were personal characteristics, past work practices, social norms, external environment, and perceived competence. The research design used was a qualitative communication method with a large sample of 401 participants. Data were collected through questionnaires and analyzed using multiple regression and analysis. The findings show that three independent variables have a positive effect on the academic achievement of entrepreneurial commitment; previous job, external environment and performance. The background difference is that the study was done in Vietnam.

2.2.3 Influence of institutional factors on entrepreneurship engagement

Educational systems play a fundamental role in knowledge transmission and this knowledge can serve to either free or fetter those acquiring the knowledge (Li, 2019). Educational systems, universities especially, are also capable of attaching a value to knowledge thus increasing cultural capital by legitimizing its exchange value of the degrees granted and endorsing credentials (Demiray, Burnaz & Li, 2021). This form of symbolic or cultural capital is characteristic of the capitalistic ideas of the instrumental value of knowledge (Pacut, 2020). It can be assumed that the education one receives from a university prepares one for participation in the job market considering the market

demands determine what jobs and what knowledge are relevant. Universities must contend with producing knowledge for knowledge's sake and producing knowledge in response to market forces.

A past review by Torres, Augusto and Quaresma (2023) revealed that, the skill required by an entrepreneur can be classified into three main areas namely, technical skills, business management and personal entrepreneurial skills. The authors went further to state that technical skills involve such things as writing, listening, oral presentation, organizing, coaching, being a team player and technical know-how. Business management skills include those areas involved in starting, developing and managing an enterprise. In addition, they asserted that personal entrepreneurial skills differentiate an entrepreneur from a manager. Skills included in this classification are inner control (discipline), risk-taking, being innovative, being change oriented, being persistent, and being a visionary leader among others (Demiray, Burnaz & Li, 2021).

Santoro et al. (2020) claims that entrepreneurship education programs help develop attitudes favourable to starting one's own business and also provide knowledge and skills for running a business, for example, business law, accounting and bookkeeping, credit and finance, and marketing. Skills development encompasses a wide range of basic areas such as leadership, communication, managerial and financial that is important for business growth and productivity (Li, 2019). Additionally, Demiray, Burnaz and Li (2021) argued that entrepreneurial program study is best viewed as a uni-dimensional concept. In contrast Greene (2009) argues that entrepreneurial orientation may occur in different combinations. Kabede (2023) suggested that the dimensions of entrepreneurial study tend to vary independently.

Existing research further shows that each of these sub-dimensions may make unique contributions to the levels of a firm's entrepreneurial orientation. Research offers the unique contributions that risk taking, innovation and proactiveness offer to the entrepreneurial process. The basic premise underlying this argument is that each of these sub-dimensions of entrepreneurial study may have a differential relationship with entrepreneurial outcomes (Atrei, Sengupta, and Odetunde, 2023). The Ireland and Webb (2007) asserts that educational level influences the propensity for entrepreneurship.

According to the findings students with a higher academic performance are more likely to opt for white collar jobs rather than considering self-employment. At the other end of the spectrum, those with lower academic grade may see entrepreneurship as succour; a necessary alternative, especially where there is stiff competition in the labour market due to the escalating rate of unemployment.

Some key concepts taught in this entrepreneurship course are; teamwork skills, team development, creativity and innovation, innovation algorithm, customer driven product identification and development, information technology business creation, market analysis, niche marketing and selling, and competitive business plans (Kruege et al., 2013). Entrepreneurial education is frequently considered an effective strategy (Lee-Ross and Lashley, 2009) towards more innovation and its supposed benefits have been much praised by researchers and educators. Nonetheless, the impact of such education on intention to set up a business and be an entrepreneur is poorly understood at present and it has remained relatively untested. Entrepreneurial education has been argued as an effective way to promote and bolster the interest of entrepreneurship among university students (Gurmeet, 2011). Exposures to this knowledge may instil positive attitudes towards entrepreneurship among students (Turban and Sikdar, 2009). There is need for achievement as an impetus drive in undertaking obligated responsibilities perfectly and achieving success. That is, individual who possess a high level in need for achievement has the higher probability to involve them in entrepreneurial activity.

Various scholars have attempted to examine the influence of institutional factors on entrepreneurial engagements. For example, In Malaysia, Sim et al (2023) examined the relationship between university support for entrepreneurship and student participation in entrepreneurship. Specifically, this study examined whether the university's entrepreneurial environment mediates the relationship between university support for entrepreneurship and student entrepreneurial participation. Empirical data were collected from 195 students from three universities in Malaysia. The partial least squares procedure was used to test the proposed hypotheses. Consequently, it was found that the factors supporting university establishment did not have a direct effect on students' establishment intention. However, the business environment was found to mediate the relationship

between managerial support and students' conceptual development and entrepreneurial intention.

In a study conducted in Nigeria, Atrei, Sengupta, and Odetunde (2023) explored the potential impact of academic researchers' perceptions of departmental and university support on entrepreneurial motivation, entrepreneurial intention, and participation in academic entrepreneurship in contexts with weak or absent institutions. A conceptual model linking motivation, intention and perception of entrepreneurial commitment was developed and tested based on primary data collected from academic researchers in Nigeria. As a result, startup motivation had a strong influence on the researcher's startup intention, but the relationship between intention and commitment was found to be weak. Adopting a departmental entrepreneurial orientation had a positive impact on many of these latter relationships. In comparison, this study focuses on academic researchers in Nigeria, where there is a contextual gap.

Ogunsade, Obembe, Woldesenbet and Kolade (2021) researched on the role of institutional environment on entrepreneurial engagement of university students in Nigeria. The variables studied include societal values, job security, and class structure and ascription orientation. The research design used was exploratory qualitative approach where purposive and snowballing were the sampling techniques. The sample size was 289 respondents with data collected using interviews. The results show that institutional environmental factors have appositive relationship with entrepreneurial engagement of students. The findings also revealed that societal values and norms had a positive and significant influence on the entrepreneurial engagement of the university students. The findings showed that most of the university students were inclined for pursuing career opportunities in the formal sector rather than opting for engaging in entrepreneurial ventures. The contextual gap is that the study was conducted in Nigeria. The conceptual gap is that the variables studied include; societal values, job security, and class structure and ascription orientation. The methodological gap was that the study employed exploratory qualitative design.

In Nigeria, Ogunsabe, Obembe, Woldesenbet and Vershinina (2018) studied on the association between institutional factors and entrepreneurial engagement of youths. The

variables studied were regulative environment, self-employment, normative environment and cultural-cognitive environment. The study used quantitative research approach with primary data collected using survey questionnaires and a sample size of 482 respondents. To test the hypotheses, a three stage hierarchical regression analysis was conducted. The findings established that all the institutional factor variables had a positive impact on the entrepreneurial engagement of university students in Nigeria.

Nazri, Aroosha and Omar (2016) studied on factors affecting the entrepreneurial engagement of the youths in Maldives. The variables studied include enterprise education, perceived social norms, entrepreneurial motivation and innovativeness. The research design employed was cross-sectional quantitative survey with a sample size of 150 respondents. Questionnaires were used in data collection which was analyzed through descriptive and inferential statistics. The findings indicated that enterprise education, entrepreneurial motivation, perceived social norms and innovativeness had a positive and significant association with entrepreneurial engagement

2.2.4 Influence of economic factors on entrepreneurial engagements

Economists believe the current economy is good or bad for businesses. The 2018 SME Financial Report by Viffa Consult revealed that SMEs in Kenya make up 90% of all businesses and employ 80% of the population (Viffa Consult, 2018). Considering this statistic, it is clear that the country's economy is dependent on the participation of small and medium-sized enterprises and the number of business students in schools is decreasing. According to Santoro et al. (2020), limited employment by the government and large companies forces students to find self-employment to avoid stress after graduation. In this sense, the economic environment of the country often determines the participation of young people.

A study on entrepreneurship education in Kenya by Mburu (2019) found that there are positive aspects of business such as availability of credit facilities, business planning for products and services, and professional services supporting business students. Being able to make business financing options encourages students to start a business. Mulunda (2019) argued that both state and private school students are eligible for Youth

Entrepreneurship, the Uwezo Fund, and other transfers from the region. These financing options allow college students to apply for and get low-interest loans with repayment plans.

Reports by Mulunda (2019) and Mburu (2019) showed that Kenyan university students use student loans to finance their business activities. In essence, digital marketing is especially beneficial for many students in school as it is easy to access. In 2019, the Kenyan government launched the Digital Economy Initiative (Ministry of ICT, 2019) aimed at promoting online businesses where young people are already working. Kabede (2023) argued that with globalization and digital transformation, young people have the opportunity to invest in online commerce and make a profit. A report by Mburu (2019) points out that college students invest in online businesses and use the proceeds to build businesses that operate in the real place. Mulunda (2019) argued that the digital environment is also ideal for technology developers in the industry to deliver digital services. Innovation centres created by elite schools play an important role in helping students invest in the technology industry.

Santoro et al. (2020) also states that the purchasing power of the population encourages young people to enter the market. Good economic growth allows investors to get a return on investment. Students at the university understand that the Kenyan economy is growing rapidly and job opportunities are valuable for success. Kabede (2023) recommends that entrepreneurs look at the business and identify potential growth areas. In the case of college students, they often focus on the success of nearby businesses or businesses shared with friends or relatives. Tunio et al. (2020) pointed out that with globalization, young people still research foreign businesses and try to implement them in their own countries. For example, the growth of e-commerce in other countries has been good and some Kenyan students have entered the market or are new developers. Nsakhelai et al. (2021) also argued that legal restrictions in business life will set the entry level for young entrepreneurs. College students should be able to do business in a business with fewer legal or business restrictions. Satriadi et al. (2022) agreed that students' lack of knowledge or qualifications in complex industries such as manufacturing or professional services is also limited.

Many researchers have tried to examine the impact of business on corporate debt. For example, Ibrahim (2023) focused on the impact of entrepreneurship education on students' entrepreneurial intentions in Nigeria. A descriptive study design was chosen. A sample of 200 students was purposively selected from three universities (University of Base, University of Abuja and National Open University of Nigeria). A structured questionnaire was used to elicit responses from respondents. This tool has been approved by experts in the field of entrepreneurship education. The collected data were analyzed using descriptive and inferential statistics using the Statistical Package for the Social Sciences (SPSS). The results of the study showed that entrepreneurship education had no significant effect on students' entrepreneurial intention. The existence of entrepreneurial resources has a significant positive effect on students' entrepreneurial intention. This study concluded that entrepreneurship education is necessary but falls short of getting students to start a business. The study was in Nigeria and this was the contextual gap.

In Indonesia, Satriadi et al (2022) investigated the impact of entrepreneurial economic factors on student entrepreneurship participation. It was appropriate to use social media in the study, given that the respondents belong to the millennial generation. Quantitative methods were used. Data analysis used structural equation modeling (SEM) with partial least squares (PLS). Participants were students from universities in Malang and Surabaya, Indonesia, recruited through an online survey. The study sample consisted of 315 respondents. In this study, self-efficacy, creativity, attitude, culture and motivation were used as determinants of student entrepreneurship. As a result of the study, it was found that all six tested hypotheses have a significant impact in explaining the determinants of students' entrepreneurial intention. This study was conducted in Indonesia, which has a different business environment from Kenya.

In a study from South Africa, Nsakhelai et al. (2021) sought to identify the factors that hinder entrepreneurial intentions of young people at a South African university. This study used quantitative research methods, collecting data from 247 participants through structured questionnaires and analyzing them through factor analysis. The results of the analysis showed lack of business management capacity, economic risks and problems, financial difficulties, lack of support system, uncertain future and difficulty in finding

partners, bureaucracy and crime and lack of relevant information. It prevents potential young entrepreneurs from these universities from developing their entrepreneurial activities. The study was conducted in South Africa and is the contextual gap.

In Pakistan, Rakib et al. (2020) attempted to determine the impact of entrepreneurial economic creativity and self-efficacy on students' entrepreneurial intentions. A quantitative correlational research method was used in this study. The population of this study consisted of 360 students working in companies and 144 sample students from 2019. Random and proportional sampling methods were used to determine the sample. The method of data collection was carried out using a survey method. Data analysis methods using descriptive and inferential statistical analyzes were used. As a result, economic creativity and self-efficacy were found to partially and simultaneously influence students' entrepreneurial intention. This study was conducted in Pakistan, which has a different business environment from Kenya.

Jumamil, Depositario, and Zapata (2017) investigated factors influencing entrepreneurial participation among agriculture graduates in Malaysia. This study is based on Shaper's business model, Ajzen's theory of planning behaviour and Krueger's business model. This study collected data using a questionnaire with a sample size of 307 participants. Research has shown that economic factors such as ready access to markets, availability of raw materials and infrastructure are the most important factors of economic development. In addition, the development of business ideas is greatly encouraged when potential entrepreneurs are informed about financial support, development programs and business training. One of the differences below is that this research is in Malaysia, which is a highly developed economy. A different perspective, this research focuses on variables such as availability of raw materials and infrastructure, while current research is based on access to credit, business information and technology. The theoretical difference is that this research is based on Shaper's business model, Ajzen's theory of planning behavior, and Krueger's business model. The current research is based on Hoselitz's theory of leadership, entrepreneurial economics, needs theory, and organization's theory of doing business.

A study conducted in Mwendwa (2016) investigated the health effects of youth participation in agriculture in the Machakos Region. The variables examined included access to land, access to financial services, and access to business and extension services. The research design used is a descriptive research design and the target population consists of young people working in agriculture. The research is based on theory of thought and push-pull theory. Data were collected through questionnaires and analyzed using descriptive and inferential methods using SPSS. Statistical data are presented using tables, frequencies and percentages. The findings show that access to land is a barrier to youth labor market participation. Financial services have become more affordable and accessible for young entrepreneurs. Lack of business and business knowledge is a problem for young people to use outside of work. What sets this study apart from the others and the difference in the background is that this study was conducted in Nigeria. The difference is that the study uses a long-term study.

2.3 Theoretical Framework

Different theorists have come up with different models in an attempt to explain the factors that stimulate the entrepreneurial spirit. Theory analysis helped to understand the underlying scientific premise and evidence that motivates individuals to engage in entrepreneurship. As such, the theoretical basis of this research was anchored on three theories which include Hoselitz's socio-cultural theory, economic theory of entrepreneurship, need for achievement theory and institutional theory of entrepreneurship.

2.3.1 Hoselitz Socio-Cultural Theory

Hoselitz's socio-cultural theory was proposed by Hoselitz in 1995, based on Hofstede's concept of culture (Chetty, 2016). The theory assumes that cultural characteristics play a role in developing entrepreneurial skills. Therefore, the success of entrepreneurs is affected by the current culture. This means that entrepreneurs are able to drive business growth in a social environment. The theory states that the leadership characteristics that affect entrepreneurs include leadership, leadership, religious beliefs, constraints, and associated leadership practices. This means that most entrepreneurs have social or cultural ties based on their race, ethnicity or region (Narendra, 2023). Hoselitz

specifically explained the idea of "marginal" who are culturally and competitively better than others in society (Lounsbury & Glynn, 2019).

Hoselitz's theory of leadership suggests that an entrepreneur will be successful if he or she has the following three leadership traits. First, the concept of marginal masculinity allows people who may not be culturally appropriate, such as immigrants or minorities, to come forward in their own way. Meanwhile, Narendra (2023) examined the emergence of East Asians and find that despite being a minority, they perform well in business.

Within the scope of this study, university students studying business administration to increase their participation in business life have the potential to increase the growth of business trade if the business climate is good. Secondly, Hoselitz also believes that entrepreneurs are good because they have control or leadership skills acquired from the social environment (Bifulco, 2019). In addition, structure is an important resource for raising entrepreneurs through study or observation. Therefore, the children of families who were previously engaged in trade can find a job instead of working. This means that by studying business it is possible for college students to gain management and leadership that gives them knowledge and experience to promote economic development (Lounsbury & Glynn, 2019).

Third, Hoselitz also pointed to the influence of certain social relations on the market. Take India as an example, where certain classes such as Marwaris and Parsis are more involved in the labor market than other cultural classes (Narendra, 2023). In the context of this study, college students can be considered as members of the social class who have a business education that enables them to participate in good jobs. This theory is relevant to this study as it explains the relationship between cultural factors such as job training, social relationships and family history, and job involvement of university students.

2.3.2 Need for Achievement Theory

The need for achievement theory was proposed by McClelland in 1961. The theory is a continuation of Max Weber's work on social and economic issues in 1904 and 1970 (Perez- Fernandez et al., 2020). The theory suggests that people have a desire to achieve, and that desire is what drives their efforts. Concerning entrepreneurship, theory states that

the need to achieve is seen as a motivation to consistently complete the task (Lodokun & Adebuseye, 2022). This is important because entrepreneurs view the results and growth of their business as a measure of success, not just a goal. This means that entrepreneurs are driven by desire and hope for success, not money (Perez- Fernandez et al., 2020).

McClelland states that entrepreneurs have a desire to meet needs and are often very competitive if results are measurable. Entrepreneurs who want to be successful have many decisions to make; dedicated, focused, and unmotivated to achieve goals (Soomro & Shah, 2022). The theory also supports the idea that performance incentives can be offered to new entrepreneurs (Lodokun & Adebuseye, 2022). This means that through business education and training, business students can develop the mind-set to meet the needs of success. It is especially important for business educators to understand the need for psychological education and leadership training to develop the psychology of young entrepreneurs.

According to Soomro and Shah (2022), the psychological development of young entrepreneurs can increase the need for entrepreneurship. Need satisfaction theory further emphasizes the importance of entrepreneurship as a way of creating a sense of entrepreneurship and improving the need for satisfaction (Bux, 2016). This means that psychological factors such as young entrepreneurs' need for success, risk and business management exist and can be developed in business organizations to guide the needs for the success of this business bone. This theory is relevant to this study because it identifies psychological issues such as risk, need for achievement, and locus of control as important to students' work collaboration experiences

2.3.3 Economic Theory of Entrepreneurship

The economic theory of work was developed by Papanek in 1962 and then by Harris in 1970 (Baker & Welter, 2020). The theory states that business and economics are closely related. They added that the commercial and economic growth in the country is good only if the existing businesses are profitable. This also means that it will be very difficult for entrepreneurs to grow in a recession. Further, the theory states that economic activity determines the level of entrepreneurship in a region (Pacut, 2020).

When conditions are good, people expect to gain economic benefits by participating in work and vice versa (Santoro et al. (2020)). The theory also assumes that business support is created by financial support such as good tax policies, financial resources, infrastructure, capital, business knowledge and technology (Baker & Welter, 2020). This means that the investor takes risks because he lacks the ability to predict the future of the business. Motivation in the macro environment will lead to more joint ventures among entrepreneurs. It also shows that young entrepreneurs, like university students, can participate in entrepreneurship when the macro environment is good because there are fewer barriers to starting or doing business (Pakut, 2020).

According to Baker and Welter (2020), the main power of country entrepreneurship is the power of financial support. Therefore, there are many financial and economic factors that can encourage or hinder the growth of businesses, especially those run by young people. These factors include, but are not limited to, access to credit, ability to finance transactions, availability of low-cost loans, good financial performance, financial management and knowledge of finance and business and business. However, this lack of business relevance has become an obstacle for young entrepreneurs joining the business (Arend, 2023). Therefore, the economic theory of business is relevant to this study because there are good economic benefits and incentives, especially for young people doing business, because they are incentives for business cooperation. Therefore, business theory, such as business information, access to credit, and technology, is important for college students' participation in business.

2.3.4 Institutional Theory of Entrepreneurship

Institutional theory emerged in the mid-1970s thanks to the efforts of researchers like Meyer and Rowan, who introduced a new concept to the understanding of organizational structure. They argue that organizational structure has a direct impact on operational efficiency (Zhai & Su, 2019). The agency theory of entrepreneurship explains that firms must abide by existing rules to gain legitimacy in the business environment (David, Sine & Serra, 2018). Existing regulations may be designated as legal or illegal, as well as existing views on the nature of the business environment.

This theory further explains how entrepreneurship schools can help improve the economy. This is done by identifying the expectations that businesses must adhere to in order to be seen as participants in the construction industry (Zhai & Su, 2019). Businesses that fail to meet the organizational needs of their social context are at risk of failure as they are viewed as illegal and may not receive appropriate support from legal entities such as financial, regulatory and related entities. So the theory is that business-oriented companies can be successful by registering correctly, paying administrative rights like taxes, etc. explains the importance of following the organization's rules (David, Sine & Serra, 2018). Zhao and Li (2019) define schools as "shared beliefs and understandings about 'correct' methods and practices" (David, Sine & Serra, 2018). The theory states that there is a social change in the structure of the company that helps to improve the business success of the company more than the business of the company. This means that entrepreneurs must strive to align their business strategies with the standards and regulations applicable in the immediate market.

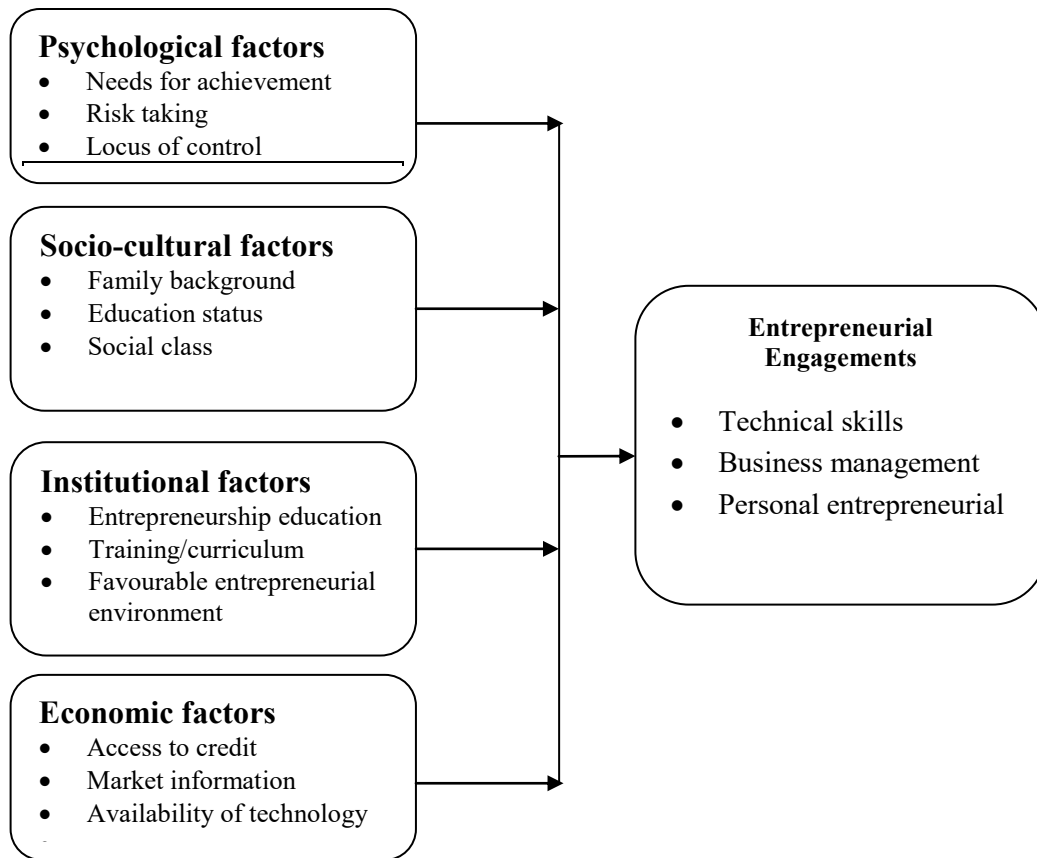
These strengths include the availability of schools that provide students with the necessary business education and training to use their entrepreneurial skills. The school also offers business services, innovation and more to foster student entrepreneurship. From this point of view, it can be said that some universities create an ideal environment that encourages entrepreneurial students. The theory is relevant to this study as it supports institutions such as business education, business services, and business environments that support student participation in college education.

2.4 Conceptual Framework

This study attempted to explain the factors that influence the entrepreneurial engagement of university graduates. These factors include; Psychological factors, socio-cultural factors, economic factors and institutional factors that surround entrepreneurs will also influence the entrepreneurial engagement of university graduates. These factors either promote or lead to graduate failure in business. Sociocultural factors influence the ability to start a business through education, training and social status. Students from affluent backgrounds are able to get financial support to start small businesses in college. However, they may not receive support from parents who may not be in a business

environment but have other careers. For students coming from less privileged social status, they may lack funds to start small businesses. Research shows that individuals whose parents are either self-employed or business owners, with the required entrepreneurial education and good social status, are more likely to become entrepreneurs than people from families without such entrepreneurial experience (Verheul & Thurik, 2010).

Economic factors play an important role in shaping youth entrepreneurial engagement and aspirations. This is through the development of a business environment that supports access to credit, the availability of market information and the availability of technology. Kruege et al. (2013) supported this claim by saying that economic background has a significant influence on entrepreneurial orientation. Nazri et al. (2016) reported that institutional factors are critical in explaining the entrepreneurial engagement of college students. Institutional factors such as entrepreneurship education, training/curriculum, as well as a favorable business environment explain the phenomenon of entrepreneurial engagement. Institutional factors influence the entrepreneurial engagement of university students. This is an ideal environment for business-oriented businesses to comply with institutional requirements through proper registration, payment of regulatory obligations such as levies and taxes among others. Liang, Lee, and Liang (2015) reported that psychological factors play a significant role in determining college students' entrepreneurial engagement. These variables include self-efficacy, metacognition, intrinsic motivation, and negative emotions. Others include the needs for achievement, risk taking, and locus of control. The conceptual framework in Figure 2.1 schematically depicts this interaction.



Independent variable

Dependent variable

Figure 2. 1 Conceptual framework

Source: Researcher

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methodology adopted for use in this study. The elements themselves discussed were research design, study location, target population, sampling procedures and sample size, research instruments, data collection procedures, ethical considerations, and data analysis.

3.2 Research design

Research design refers to the framework that guides the study (Cooper & Schindler, 2014). It constitutes the plan for data collection, measurement and analysis and enables the researcher to allocate the scarce resources through posing crucial choices in methodology. Research design refers to the overall approach or strategy that the researcher chooses to integrate the different components of the study in a coherent and logical way, thereby, ensuring that they effectively address the research problem (Sekaran & Bougie, 2016). According to Creswell (2014), there are three common types of research designs, exploratory research, descriptive and explanatory research that are explained below:

Formulating issues, elucidating ideas, and developing hypotheses are the objectives of exploratory research (Babin & Zikmund, 2015). Rather than testing hypotheses, exploratory research usually aims to generate them. Most exploratory study data are of a qualitative nature. Brainstorming meetings, expert interviews, and publishing a brief survey on a social media platform are a few examples (Sekaran & Bougie, 2016).

Research hypotheses that define the kind and direction of the correlations between or among the variables under study are what define explanatory studies (Babin & Zikmund, 2015). Since the aim of explanatory research is frequently to generalize the findings to the community from which the sample is taken, probability sampling is typically required. In an explanatory investigation, the investigator represents the forces behind a certain phenomenon's occurrence with ideas or hypotheses (Creswell, 2014).

Descriptive research design typically provides detailed descriptions of individuals, products, and situations. These studies often involve one or more research questions, but they are not typically guided by structured research hypotheses (Creswell, 2014). Descriptive research can gather both qualitative and quantitative data, although quantitative data is usually presented through frequency distributions and summary statistics, such as averages (Tashakkori & Teddlie, 2012).

Descriptive research design was used as the research method. Its purpose is to investigate and explain the phenomenon. It is useful as it helps the researcher to better understand the thoughts, beliefs and attitudes of the respondents regarding the research questions (Creswell, 2014). Descriptive research was required for this research project because it includes a description of respondents' thoughts and feelings regarding the link between psychological, psychological, institutional, socio-cultural and economic spheres and entrepreneurial engagement. Previous researchers, such as Mwamba (2019), have proposed and used descriptive research methods, which they say are suitable for assessing and analyzing the distribution of students' characteristics.

3.3 Location of study

This study was conducted in three districts of the Nairobi Metropolitan Region. The Nairobi Metropolitan Region consists of the counties of Nairobi, Kiambu and Kajiado. The site had six public colleges; University of Nairobi, Kenyatta University, Jomo Kenyatta University of Agriculture and Technology, Technical University of Kenya, Cooperative University and Multimedia University. This was because these universities have the highest concentration of student population in Kenya and the Nairobi metropolitan region is Kenya's business hub. Institutions made a better choice of location given that they offered business courses.

3.4 Target population

Merriam (1998) defines a target population as a group of individuals who share certain commonalities that distinguish them from other groups. Population can be people, services, content or other things studied. The basis of this definition is to ensure that the population of interest is homogeneous. The focus of this study is public university

students engaged in entrepreneurship in the Nairobi Metropolitan Area. The target population included 1006 public university students enrolled in incubation centres.

Table 3. 1 Target population

University	Registered students in incubation hubs
Kenyatta University	186
JKUAT	224
University of Nairobi	241
Cooperative University	124
TUK	145
Multimedia University	86
Total	1006

Source: Students in incubation centres (2021)

3.5 Sample size and sampling procedure

Purposive sampling was used to select undergraduate university students registered in university incubation centres. They were deliberately chosen because they were thought to have the necessary information to attract the attention of researchers. Second, stratified random sampling was used as a probabilistic method to allocate and select targets for each of the five targets at selected locations; University of Nairobi, Kenyatta University, Jomo Kenyatta University of Agricultural Sciences and Technology, Technical University of Kenya, Cooperative University of Kenya and Multimedia University. At each level, the list of selected members was created based on the stratum of the universities. Finally, the proportional stratified sampling model was adopted and the proportion of subdivisions of each stratum was chosen to be equal to the proportion of the total representative sample of respondents from each stratum of the five strata to ensure the reliability of the model. This was calculated as the proportion of university respondents.

3.5.1 Sample size

The sample size of the study was determined using Taro Yamane's (1967) simplified formula because it provides the researcher with a rationale for the source of the numbers

and also ensures consistent and unbiased sample estimates from different categories of respondents. The formula and results are given below.

Where:

n is the sample size

N is the population size – 1,006

E is the margin error – 5% or 0.05

$$\text{Thus, } n = \frac{1006}{1 + 1006(0.05)^2} = \underline{286}$$

The final sample size was 286 respondents

Table 3. 2 Sample size

University	Registered students in incubation hubs	Sample size
Kenyatta University	186	53
JKUAT	224	64
University of Nairobi	241	68
Cooperative University	124	35
TUK	145	41
Multimedia University	86	25
Total	1006	286

3.6 Research Instruments

Questionnaires were used in this study. Open-ended and closed-ended questions were used in the research. The main reason for choosing a closed questionnaire was to save time as it takes less time to complete and analyze. Open-ended questions, on the other hand, allow respondents to understand information to provide clear and concise information. The questionnaire was divided into five parts. The first section included demographic information such as gender, age, education, and whether the respondent had an enterprise, while the second section showed the psychological factors that affected entrepreneurial engagement. The third part contained questions about the socio-cultural aspects of the participants' entrepreneurial engagement in the business world. Chapters IV and V looked for information institutional and economic aspects. Following the recommendations of Creswell (2014), the questionnaire was piloted with 10% of the

respondents. Participants were a sample of 29 participants from Murang'a University and Kirinyaga University.

3.6.1 Validity

This study used three sets of validity measures to assess the validity of the instrument. These included construct, content and face validity. Construct validity assesses the extent to which the objective measures theoretically defined constructs. For the purpose of this study, the tool was developed from previous similar studies and modified to meet research objectives. Content validity was recognized from the supervisor's perspective. This included the supervisor's review and professional opinion to ensure that all learning variables are covered by the survey. Face validity was measured against the opinions of supervisors and experts when examining the tool to ensure that the experimental design was a good measure of construct.

3.6.2 Results of Face Validity

To measure the face validity of the instrument, the Cohen Kappa Index was adopted using the formula, Number of agreed raters per question divided by the total number of raters per question $\times 100\%$. The responses were broken down into two, agree and disagree. For Cohen Kappa Index, a percentage of 90-100 implies that the questions are valid and ought to be retained. The results indicated strength of agreement of 90-100 percent and the recommendation was that since the questions were valid they were to be retained for final data collection.

Table 3. 3 Cohen's Kappa Index

	Variable	Strength of Agreement	Remarks
1.	Psychological factors	0.911	Retain
2.	Socio-cultural factors	0.932	Retain
3.	Economic factors	0.907	Retain
4.	Institutional factors	0.941	Retain

3.6.3 Construct Validity

Principal component analysis was conducted to ascertain the variability of the variables and in the process minimize outliers from the data. This led to the adoption of factor

analysis to assess construct validity using factor loading associated with each variable. Usually, factor loading of less than 0.4 are regarded as trivial and this led to the researcher imposing a loading threshold of 0.4 (Nachmias & Nachmias, 2010). The results showed that all the factor loadings for the items of the four independent variables had scores of above 0.4 (0.457-0.876) and were deemed to have attained face validity.

Factor analysis	Factor Loading
Psychological factors	.457
Socio-cultural factors	.568
Economic factors	.776
Institutional factors	.876

3.6.4 Reliability

Reliability verifies that the instrument performs the same every time it is used. In this study, reliability was measured by measuring consistency with the Cronbach alpha statistic. Cronbach alpha measures in-device consistency. Cronbach's alpha (α) is a coefficient (a number between 0 and 1) used to measure the internal consistency or homogeneity or relevance of items in the test. It also measures how well the test item measures the behavior or property of the test. When Cronbach's alpha coefficient is used for reliability evaluation, it should be greater than 0.7 (Cronbach, 2004). The reliability of the validation tool for this study was 0.7. Cronbach α (α) is calculated as follows: where:

K = number of items in the tool

S^2 = variance of all scores

S^2 = variance of an item

Table 3. 4 Cronbach Alpha

Reliability Range	Characterization
0.0-0.20	Less reliable
0-6	Poor
.6-.7	Marginally Acceptable
.7-.8	Acceptable
.8-.9	Good
.9+	Very Good
.95+	Too Good

Source: Cronbach (2004)

The reliability results of the study showed that all items for the variables used had Cronbach Alpha scores greater than 0.7. This indicated that reliability was achieved for all variables.

3.6.5 Reliability Results

The instrument was examined using Cronbach Alpha. The alpha value ranged from 0.710 to 0.741. The average Cronbach Alpha was 0.726 which was deemed reliable. According to Heale and Twycross (2015) the alpha values are reliable when they are above 0.7 scores.

Table 3. 5 Reliability results

S/No.	Variable	No. of Items	Cronbach Alpha Value	Remarks
1	Psychological factors	10	0.722	Reliable
2	Socio-cultural factors	8	0.731	Reliable
3	Economic factors	7	0.710	Reliable
4	Institutional factors	7	0.741	Reliable
	Average	8	0.726	Reliable

3.7 Data Collection Procedures

Following the academic panel at the Laikipia University's approval of the research proposal, the researcher began gathering data by requesting an introduction letter from the institution and a permit from the National Commission of Science, Technology, and Innovation (NACOSTI). These documents were given to each respondent to verify and enable the collection of the required data from them. The enumerators who were tasked

to distribute the questionnaires to respondents received training from the researcher in interpersonal skills, including building rapport, persuading respondents to supply pertinent information, and asking clarifying questions when needed. They provided support during the data collection process. The visit and administer approach was employed to distribute questionnaires because it allowed respondents enough time to provide thoughtful answers. The investigator scheduled meetings with respondents and thereafter, all the filled questionnaires were collected for further analysis.

3.8 Data Analysis

Before the actual data analysis, data collected was entered into SPSS version 26.0. This research generated large amounts of data to answer specific questions. Data analysis involved the use of descriptive and inferential statistical techniques. Descriptive statistical data used measures of central tendency that were the mean, standard deviation, frequency and percentage. Descriptive statistics helped in explaining, visualizing and summarizing data in a meaningful way. For inferential statistics, was done through regression and correlation analysis. Correlation analysis was used to derive the direction and strength of independent variables on dependent variables. Correlation tests were performed at the 5% significance level. Before the actual data analysis, a collinearity test was performed to evaluate the suitability of the data for regression analysis. This included tests for normality, linearity, outliers, multicollinearity, covariance, and autocorrelation. The results were presented in pie-charts, bar-graphs and statistical tables.

3.8.1 Diagnostic Tests

Right after descriptive statistics, diagnostic tests were conducted. Among the diagnostic tests performed were those for normality, multicollinearity, linearity and Heteroscedasticity tests. The study used skewness and kurtosis to test for normality. According to Das and Imon (2016), the normality test establishes whether or not the data set is well modelled by a normal distribution. Kurtosis signifies the distribution's flattening, whereas skewness denotes an imbalance and departure from a normal distribution. According to Yazici and Yolacan (2007), the range of values for skewness and Kurtosis is ± 3 (SE), which is regarded as normal.

Through the use of tolerance and the Variance Inflation Factor (VIF), the study assessed multicollinearity among independent variables. Multicollinearity in a multiple regression model is defined as the presence of high correlation between two or more predictor variables, as stated by Long and Ervin (2000). The model's homoscedasticity refers to the consistency of the error variance and stochastic error. The existence of variation indicates the presence of heteroscedasticity. To address homoscedasticity, this study used the Breusch-pagan/Cook-Weisberg test. In contrast to the alternative hypothesis, which states that the error variances are a multiplicative function of one or more variables, the Breusch-pagan/Cook-Weisberg test determines whether the error variances in the null hypothesis are all equal. When the Prob> Chi-square value is more than 0.5, homoscedasticity is evident (Koenker, 1981).

All regression estimates, including regression coefficients, standard errors, and tests of statistical significance, may be biased if linearity is broken (Niermann, 2007). Regression analysis underestimate or overestimate the true relationship if the dependent and independent variables aren't linear, which increases the possibility of Type I and Type II errors (Hansen, 1999). True population values are frequently distorted by bias. The significance of the parameters estimated in the analysis is threatened when this assumption is broken (Hansen, 1999).

3.9 Ethical Considerations

Since research participants have moral and legal rights that ought to be upheld, ethical consideration is crucial. To improve research ethics, the investigator obtained a research permit from NACOSTI, which served as documentation that the study was being carried out lawfully. Additionally, the researcher ensured that every questionnaire had a copy of formal introduction letter and research permission from Laikipia University. Additionally, each respondent received a written guarantee of the confidentiality of the research process, which they read, signed and acknowledged as their agreement to take part in the study. In addition, the respondents were urged to take part in the study voluntarily and without being offered any inducements, rewards, or incentives.

Confidentiality, voluntary involvement, accountability, total responsibility, and transparency were upheld as the prerequisites for the respondents to take part in the research. In order to maintain confidentiality, neither the questionnaires nor the interviews asked respondents for their identity during the data collection process. The researcher used codes on the questionnaires to guarantee anonymity. The study acknowledged the writing and research efforts as well as includes the necessary certifications and certificates for each project. This was necessary to safeguard the integrity of the scientific method and aid in the prevention of copyright violations and research plagiarism. Lastly, during the research, practices and attitudes related to public relations and human rights were observed.

CHAPTER FOUR

RESULTS AND FINDINGS

4.1 Introduction

This chapter describes the results and findings, interpretation, and presentation of the data analysis. The chapter consists of the response rate, results of demographic data, descriptive data results and inferential data results. Finally, the chapter ends with a summary of the findings.

4.2 Response Rate

The researcher personally distributed the questionnaire to the participants. Selected subjects were informed about their rights when they first participated in the study. They learned about the right to consent and the assurance of anonymity, confidentiality and respect for information as a way of maintaining a good standard. After researchers write the questionnaire, respondents have 7 days to complete the questionnaire. Overall, it took more than 30 days to collect all the data.

The results in Table 4.1 showed that a total of 286 questionnaires were sent and 279 returned. Therefore, the overall response rate was 97.5%, which was very high compared to the normal response rate of 50-75% and is more than necessary to submit the questionnaire, as reported by Creswell (2014). The researchers achieved a high response rate by distributing the questionnaires personally to the respondents. After attainment of the high threshold of 97.5%, the responses were considered sufficient to continue with descriptive and inferential statistical analysis.

Table 4. 1 Response rate

Category	Frequency	Percentage
Responded	279	97.5
Did not respond	7	2.5
Total	286	100%

4.3 Demographic Characteristics

This section discusses the demographics of the general information about the respondents. This is in terms of gender, age, business operation, business type, business turnover and period of business operation.

4.3.1 Gender of the Respondents

Gender of the respondents was considered in order to comparatively ascertain the level of entrepreneurial engagement among the male and female students in public universities. The results are presented in Figure 4.1.

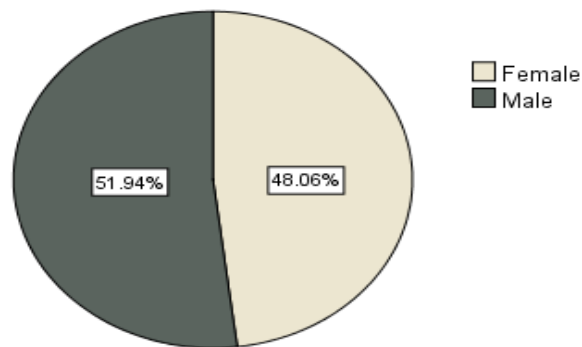


Figure 4. 1 Gender of respondents

According to the results, 145 respondents representing about (52%) of the population were males. Meanwhile, 134 participants comprising of 48% of the population were females. The findings show that male students in public universities maintain some form of enterprise activities compared to female students. Findings support Dutta (2016) that more male students are interested in entrepreneurship than female students. This means that strategies to encourage more female students should be developed to increase female their participation in business life.

4.3.2 Age of the Respondents

It was important to assess and attest the age where public university students have the highest prevalence towards entrepreneurial engagement. The respondents were asked to indicate their age categories, as shown on Table 4.2

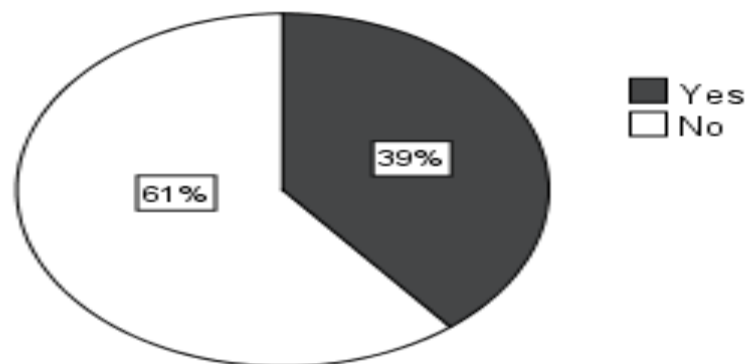
Table 4. 2 Age of respondents

Age	Total	Percentage
18 – 20 years	25	9
21 – 22 years	83	29
23 - 24 years	108	38
25-26 years	56	20
Above 27 years	7	3
	279	100

The results showed that most respondents (38%) were aged 23-24, followed by 21-22 (29%), 25-26 (20%), 18-20 (9%), and over 27 (3%). The results are in line with the GUESS (2016) global survey report covering 50 countries and show that an average of 22% of university students aged 18-30 are self-employed, with 8.8% already starting their own business. In addition, many young people between the ages of 21-26 are showing more interest in entrepreneurship and efforts should be made to encourage their participation in entrepreneurship. Statistics show that more and more Kenyan students are willing to start a business with the limited resources they have.

4.3.3 Business operation around university

It was important to assess whether university students operate businesses around the university since this is a clear indicator of entrepreneurial engagement among students in public universities. The results are presented in Figure 4.2.

**Figure 4. 2 Business around university**

According to the survey results, only about 110 students representing around 39 percent of the selected population started their own business around the university, while the majority 169, constituting about 61 percent started their own business

outside the precincts of the university. The results support the findings by Orugun's (2016) study. These findings established that students in Nigerian universities do not start doing business near the school due to poverty and lack of financial resources, high rent and high cost of doing business. This means that as economic changes such as poverty and unemployment put pressure on students, they tend to start jobs further away from university and in stressful areas.

4.3.4 Business type

It was important to assess the types of business operated by students around the universities since findings from Liang et al. (2015) and Ogundele et al. (2012) indicated that majority of business operated by students are retail and service small scale-oriented businesses. The results are shown in Figure 4.3.

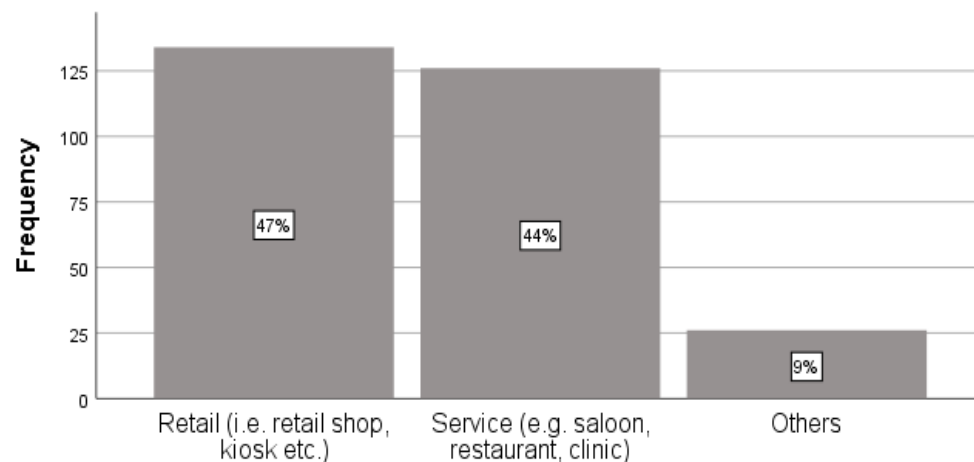


Figure 4. 3 Business type

From the results, 132 respondents representing around 47 percent in the study operated retail business, followed by 123 respondents amounting to about 44 percent of respondents with service business. Finally, 24 respondents approximating about 9 percent operated other types of businesses. The results agree with the study by Mueni (2016) that most of the enterprises started by students are small businesses which are retail and services oriented.

4.3.5 Business Turnover

It was important to assess business turnover in order to understand whether truly the students operated small-scale business category as witnessed from previous studies. The results are shown in Figure 4.4.

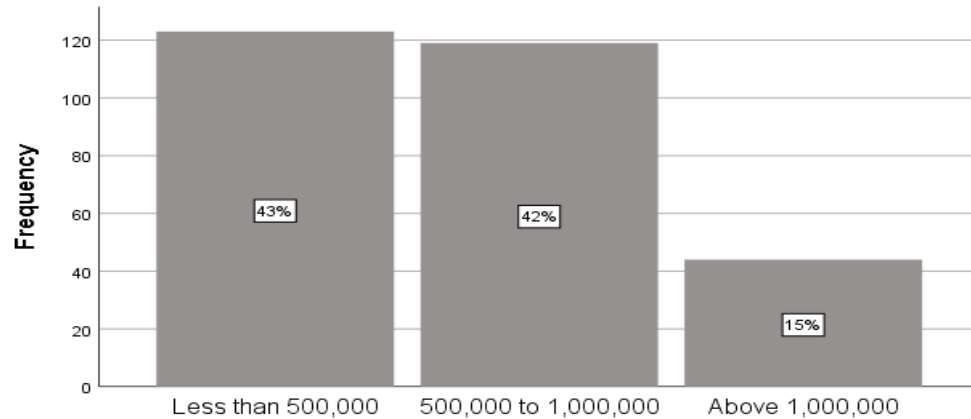


Figure 4. 4 Annual business turnover

As can be observed from figure 4.4, 121 of the respondents' representing about 43 percent confirmed that they operated businesses with an annual turnover of less than Kes 500,000. This was followed by 118 (42%) who were operating businesses whose turnover was between Kes 500,000 and KES 1,000,000. Finally, 40 (15%) of the respondents were operating businesses with a turnover of above 1,000,000. The results support the assertion by Bergmann et al. (2016) who noted that enterprises operated by undergraduate students have not registered promising performance since they rely on the limited knowledge owners have acquired in class and from observing business entities.

4.3.6 Period of operation in business

It was important to understand the length of business operations among public university students since scholars such as Nyambegera and Kilonzo (2014) indicated that majority of business operated by students die within the first two years. The results are presented in Figure 4.5.

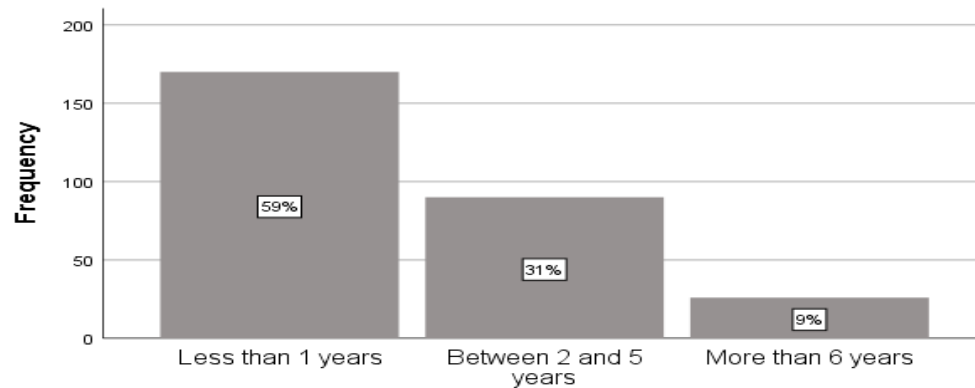


Figure 4. 5 Period in business

The results showed that 161 respondents representing about 59 percent of students who owned businesses had been in operation for less than 1 year, followed by 86 respondents representing about 31 percent of business that had operated between 2 and 5 years. Finally, 32 respondents amounting to nine percent of selected businesses were in operation for more than 6 years. The results are congruent with the findings by Dutta (2016) that although many small enterprises are operated by the youth, few get to maturity stage due to various challenges such as funding. This calls for more entrepreneurial engagement of the youths in entrepreneurship to inform more success of enterprises.

4.4 Descriptive Statistics of Variables

4.5 Psychological Factors on Entrepreneurial Engagement

4.5.1 Personality

The first objective of the study was to determine the influence of psychological factors on entrepreneurial engagements by university students in public universities in Nairobi Metropolitan region. The level of agreement of respondents was sought on the extent their personality affect the decision to engage in entrepreneurial activities. The results are presented in Figure 4.6.

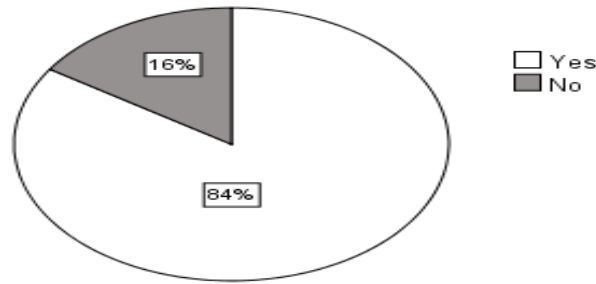


Figure 4. 6 Personality

It can be observed from Figure 4.6 that 235 respondents representing about 84 percent of the sampled respondents affirmed that personality affects their decision to engage in entrepreneurial activities. Only about 44 respondents representing about 16 percent reported that personality did not affect their decision to engage in entrepreneurial activities. Scholars have associated entrepreneurial behaviours with personality. The results agreed with Cope (2005) argument that despite the training and experience individuals have on the subject of running a business venture, the aspect of personality still plays a critical role into motivating them to become entrepreneurs. The findings also support Liang et al. (2015) and Davidsson and Henrekson (2002) statements that personality traits such as emotional intelligence is critical for entrepreneurs who have to deal with diverse challenges every day and manage to have everything in control. This implies that personality traits skewed towards entrepreneurship are critical for of young entrepreneurs to engage in entrepreneurial activities.

4.5.2 Personality trait extent

The extent of the influence of personality traits on entrepreneurial engagement was sought from the respondents using the scale of great extent, moderate extent, little extent and no extent. The results are displayed in Figure 4.7.

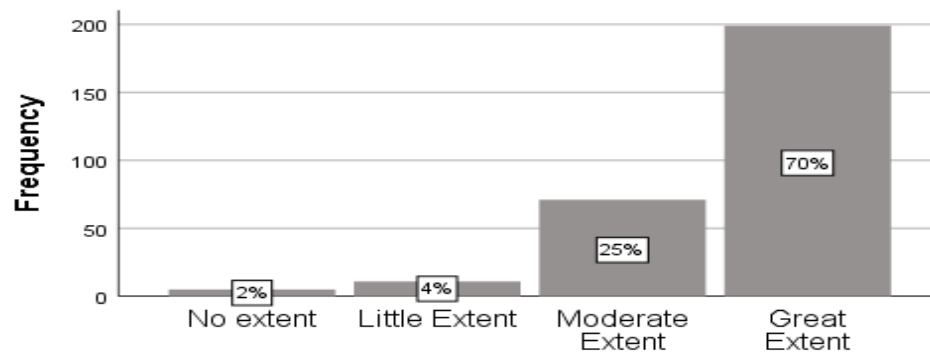


Figure 4. 7 Extent of personality traits

It is observed from Figure 4.7 that 195 respondents constituting about 70 percent stated that personal behaviour often influences their business investment. This result is consistent with the results of research by Rokhman and Ahamed (2017) in Indonesia who believe that personality traits such as need for achievement, risk and locus of control are important for Indonesian university students' participation in entrepreneurship. This means that the right attitude and values towards entrepreneurship should be instilled in young people so that they can pursue entrepreneurship.

4.5.3 Extent of psychological factors affect entrepreneurial engagements

Respondents were asked to rate psychological factors on a scale of 1 to 5 where 5- Very great extent, 4- Great extent, 3- Moderate extent, 2- Little extent and 1 - No extent. High scores (>2.5) were associated with high effects of psychological factors on entrepreneurial engagement while low scores (<2.5) were associated with low effects of psychological factors on entrepreneurial engagement. The scale was three (3) representing moderate extent of agreement. Mean and standard deviation were then computed for the variable as given in Table 4.3.

Table 4. 3 Psychological factors

	No extent (%)	Little Extent (%)	Moderat e Extent (%)	Great Extent (%)	Very Great Extent (%)	Mea n	Std. Devatio n
My Attitude	3(1)	6(2)	100(36)	128(46)	42(15)	3.71	0.778
My personality	0(0)	3(1)	56(20)	126(45)	95(34)	4.11	0.772
Fear of failure	0(0)	3(1)	56(20)	134(48)	84(30)	4.08	0.745
Passion to engage in business	0(0)	6(2)	45(16)	134(48)	95(34)	4.14	0.746
Self- confidence	0	6(2)	47(17)	145(52)	78(28)	4.07	0.732
Average						4.02	0.75

The overall summary average mean score for psychological factors was mean of 4.02 and $SD=0.75$. The mean of 4.02 indicated that respondents showed a high support for influence of psychological factors on entrepreneurial engagement. The results agree with Kerr, Kerr and Xu (2018) identified four key psychological characteristics of

entrepreneurs, which include self-efficacy, innovativeness, locus of control, and need for achievement, that influence young people's entrepreneurial engagement.

It is evident from Table 4.7 that 134 of respondents largely constituting of about 48 percent and another 34 percent very strongly agreed with the statement "passion for entrepreneurship". This is supported by a higher mean of 4.14 ($SD = 0.746$). This suggests that the respondents showed high passion for entrepreneurship, which increased their entrepreneurial engagement. This was followed by the statement "my personality", which had 126 respondents translating to 45 percent agreed to a great extent while another 95 or about 34 percent agreed to a very high extent. The results were supported by a high mean score of 4.11 ($SD = 0.772$). This suggests that the respondents exhibited high personality to engage in entrepreneurship, which increased their entrepreneurial commitment.

Additionally, the statement "fear of failure" had had 134 respondents in agreement translating to about 48 percent concurrence to a large extent with another 84 or 30 percent posting agreement to a very large extent. The results were supported by a mean of 4.08 ($SD = 0.745$). This indicated that the respondents had a high fear of failure as a motivation for entrepreneurship, which increased their entrepreneurial commitment. The statement "self-confidence" had 145 respondents or about 52 percent agreement to a great extent and 78 which was about 28 percent to a very high extent. The results are supported by mean of 4.07 ($SD=0.732$). This suggests that the respondents had self-confidence in entrepreneurship, which increased their entrepreneurial engagement. The findings support Mueni's (2016) contention that passion for participating in business is an important driver for youth to engage in business.

Meanwhile, the statement "my attitude" had 128 respondents agreeing to a great extent which was about 46 percent with a relatively mean of 3.71 ($SD = 0.778$). This showed that the respondents indicated that a high individual approach supports their entrepreneurial commitment. However, the findings do not agree with Goethner, Obschonk, Silbereisen, and Cantner (2017) in a study in Germany, which showed that entrepreneurial attitude, has the most significant effect on entrepreneurial engagement of

science students. Thus, it is imperative that young entrepreneurs need psychological factors such as needs for achievement, risk-taking, and locus of control in order to fully engage and engage in entrepreneurship.

4.5.4 Socio-Cultural Factors

The second objective was to assess the influence of socio-cultural factors on entrepreneurial engagements by university students in public universities in Nairobi Metropolitan region. The respondents were asked to indicate whether family, social or cultural background affects their decision to engage in entrepreneurial activities. The results are presented in Figure 4.8.

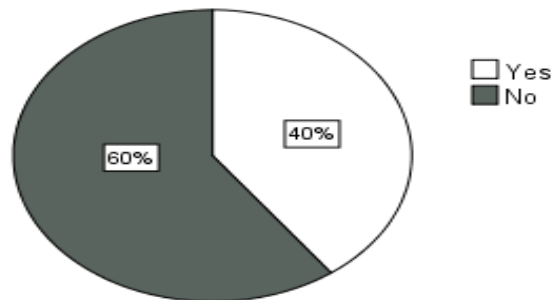


Figure 4. 8 Socio-cultural factors

The results show that most of the respondents representing 167 or 60 percent agreed while 112 representing 40 percent disagreed with the statement that family, social or cultural background does not affect their decision to engage in entrepreneurial activities. The results contrast the findings by Prasad and Haran (2010) that exposure to family business constitutes important intergenerational influence on intentions to entrepreneurship. It also disagrees with Dondo (2013) who found that that family and community socio-economic background has an important influence in the orientation towards entrepreneurship. The implication is that socio-cultural factors play a significant role in enhancing entrepreneurial engagement of the youths and efforts should be put in place to support and mentor them in entrepreneurial activities.

Extent socio-cultural factors affect entrepreneurial engagements

The respondents were requested to indicate the extent their socio-cultural background influence level of entrepreneurial engagement using the scale of great extent, moderate extent, little extent and no extent. The results are shown on Figure 4.9.

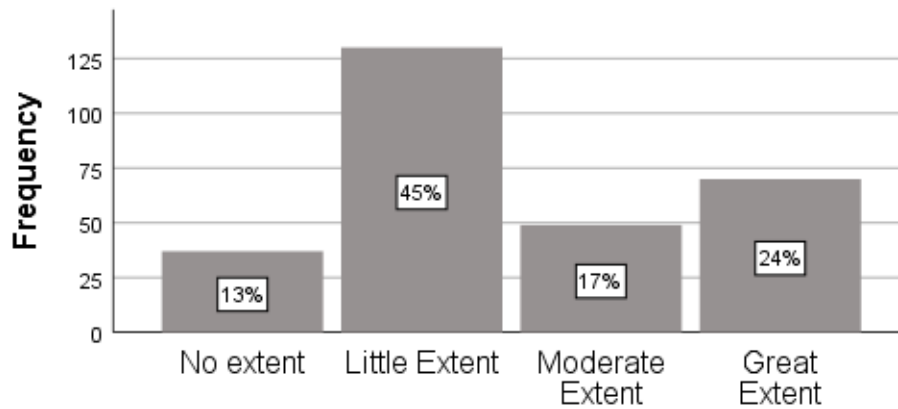


Figure 4. 9 Extent of socio-cultural factors

The results showed that 126 respondents translating to around 45 percent stated that social culture influenced their business investment to some degree. Another 67 or 24 percent had agreement to a great extent. These results are contrary to Fossen and Kritikos (2010), whose results were that social culture elements play an important role in the formation of business intentions for work and career choices among young people. Entrepreneurship can be seen as a result of social interaction. Since the family is the first social actor, it may be tempting to think that successful entrepreneurs are motivated by the family. In line with this, McMullen and Shepherd (2006) concluded that the work background of the family and society has a significant impact on entrepreneurial engagement of youths. This, compared with what has been written about the importance of cultural leadership for the participation of young entrepreneurs, shows that entrepreneurship must be strong at home and at universities to encourage participation of young entrepreneurs.

4.5.5 Extent of socio-cultural factors affect entrepreneurial engagements

Respondents were asked to rate socio-cultural factors on a scale of 1 to 5 where **5-** Very great extent, **4-** Great extent, **3-** Moderate extent, **2-** Little extent and **1 -** No extent. High scores (>2.5) were associated with high effect of socio-cultural factors on entrepreneurial engagement while low scores (<2.5) were associated with low effects of socio-cultural factors on entrepreneurial engagement. The scale was three (3) representing moderate extent. Mean and standard deviation were then computed for the variable as given in Table 4.4.

Table 4. 4 Socio-cultural factors

Socio-cultural factors	No extent (%)	Little Extent (%)	Moderate Extent (%)	Great Extent (%)	Very Great Extent (%)	Mean	Std. Deviation
Role modeling as a result of successful business	3(1)	6(2)	181(65)	59(21)	34(12)	3.57	0.663
Counseling sessions created interest in entrepreneurship	3(1)	3(1)	170(61)	56(20)	47(17)	3.27	0.689
This is a sure way of creating employment in my family	3(1)	6(2)	176(63)	53(19)	42(15)	3.02	0.684
Entrepreneurship is our family culture	3(1)	3(1)	173(62))	59(21)	45(16)	3.20	0.673
Admiration and passion as a result of a thriving family business	0(0)	3(1)	162(58))	42(15)	72(26)	3.08	0.675
Need of bringing professionalism in our family business	3(1)	8(3)	156(56)	56(20)	59(21)	3.30	0.769
I have been forced to join the programme	3(1)	11(4)	142(51)	67(24)	59(21)	3.19	0.804
Average						3.25	0.71

The overall average mean score for the sociocultural factors was 3.25 and SD=0.71. A mean of 3.25 indicated that the respondents showed an average support for influence of socio-cultural factors on entrepreneurial engagement. This is further supported by the standard deviation (SD=0.71) which shows almost consistent responses from the respondents. The results are consistent with Hawke (2013) and Stevenson and Onge (2005), who point out that social norm, affect participation in enterprises. This suggests that youths are more likely to start a business after graduation if their parents are in business. In addition, parents are seen as role models who set standards, values and behaviours in their daily lives by using appropriate technology in their business. This suggests that young people should observe and assimilate some of their parents' hidden values on a daily basis, which will shape their future entrepreneurship practices.

The statement “role modeling as a result of successful business” had 181 respondents translating to about 65 percent support to a moderate agreement and a mean of 3.57 and (SD = 0.663). A mean of 3.57 (SD=0.663) indicated that respondents showed moderate extent of high support for effect of role modeling due to successful business influence on entrepreneurial engagement. This was followed by the statement by “counseling sessions created interest in entrepreneurship” with 170 respondents or about 61 percent agreement to the level of moderate extent. In addition, the statements “this is a sure way of creating employment in my family with 176 respondent or 63 percent agreement and 173 or about 62 percent followed with moderate agreement.

Meanwhile, the statements “admiration and passion as a result of a thriving family business” with by 162 respondent which was about 58 percent and the statement "the need to bring professionalism to our family business", which had 156 respondent supporting or 56 percent moderate agreement with a mean of 3.30 and SD = 0.769. This indicated that the respondents were moderately motivated to inculcate professionalism to engage in entrepreneurship, which increased their entrepreneurial engagement.

The results agreed with the findings of Yonekur (2012) and Stevenson and Onge (2005) that many undergraduates want post-commencement support that is available after trying out skills acquired in earlier training. Role modeling and mentoring, entrepreneurial culture, entrepreneurial consulting and professionalism in family business are some methods of providing such support, which can be very effective as they address the specific problems faced by the individual entrepreneur. Support can include individual and group help focused on specific issues, with mentors serving as role models.

The results support Ogundele et al. (2012) claim that entry into family businesses motivates entrepreneurs and thus provides employment and other opportunities to realize entrepreneurial ambitions. This means that parental entrepreneurial involvement is strongly correlated with children's business interests, which ultimately act as a source of future employment prospects for children. A parent should always understand the importance of their entrepreneurial involvement as a source of future influence on their children's entrepreneurial intentions.

4.5.6 Institutional Factors

The third objective was to evaluate the influence of institutional factors on entrepreneurial engagements by university students in public universities in Nairobi Metropolitan region.

Institutional effect on decision to engage in entrepreneurial activities

The respondents were asked to state whether their institution affects their decision to engage in entrepreneurial activities. The results are displayed on Figure 4.10.

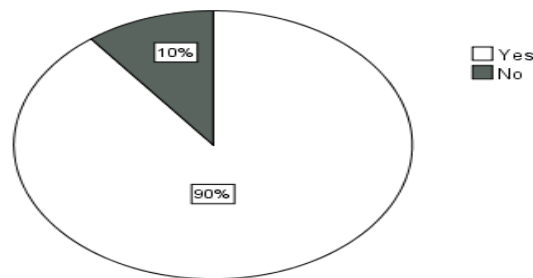


Figure 4. 10 Institutional factors

The results indicated that 251 of the respondents representing around 90 percent reported that institution affect their decision to engage in entrepreneurial activities. The results agree with findings by Gurmeet (2011) and Turban and Sikdar (2009) that entrepreneurial education, training/curriculum and favourable entrepreneurial environment are effective ways to promote and bolster the interest of entrepreneurship among university students. The findings also support Nazri, Aroosha and Omar (2016) who indicated that entrepreneurship education, entrepreneurial motivation, perceived social norms and innovativeness had a positive and significant association with entrepreneurial engagement This means that exposures to this entrepreneurship knowledge may instil positive attitudes towards entrepreneurship among students.

Extent institutional affects entrepreneurial engagements

The respondents were requested to indicate the extent their institutional influence level of entrepreneurial engagement using the scale of great extent, moderate extent, little extent and no extent. The results are shown in Figure 4.11.

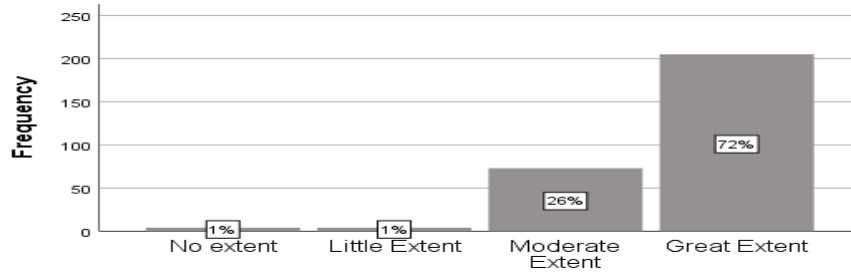


Figure 4. 11 Extent of institutional factors on entrepreneurial engagement

From the results, it is evident that 201 of the respondents representing about 72 percent reported that institution influence their entrepreneurial engagement to a great extent. The results agree with Ogunsabe et al. (2018) who established that to a great extent, all the institutional variables such as entrepreneurial education, training/curriculum and favourable entrepreneurial environment had a positive impact on the entrepreneurial engagement of university students in Nigeria. The results also agreed with Nazri, Aroosha and Omar (2016) findings that enterprise education, entrepreneurial motivation, perceived social norms and innovativeness had a positive and significant association with entrepreneurial engagement. This implies that stakeholders should continuously engage in enhancing the institutional factors among university students as a mechanism for endearing them into entrepreneurship.

Rating of Institutional Factors

Respondents were asked to rate institutional factors on a scale of 1 to 5 where **5-** Very great extent, **4-** Great extent, **3-** Moderate extent, **2-** Little extent **and 1 -** No extent. High scores (>2.5) were associated with high effect of institutional factors on entrepreneurial engagement while low scores (<2.5) were associated with low effects of institutional factors on entrepreneurial engagement. The scale was three (3) representing moderate extent. Mean and standard deviation were then computed for the variable as given in Table 4.5.

Table 4. 5 Institutional factors

Institutional Factors	No exten t (%)	Little Extent (%)	Moderat e Extent (%)	Great Extent (%)	Very Great Extent (%)	Mea n	Std. Deviat ion
Time constrain delays venturing in entrepreneurship	0(0)	3(1)	7(27)	165(59)	34(12)	3.81	0.668
Limited pocket money	0(0)	3(1)	42(15)	184(66)	47(17)	4.00	0.607
My peers discourage me to venture in business	0(0)	6(2)	53(19)	159(57)	61(22)	3.99	0.716
Lack of role models as my lecturers are yet to venture in business	0(00)	6(2)	56(20)	162(58)	59(21)	3.97	0.710
The current curricula is much focused in first venturing into a white colour job	0(0)	3(1)	47(17)	167(60)	61(22)	4.02	0.670
My entrepreneurial knowledge enhances my success in my enterprise	3(1)	1(3)	61(22)	117(42)	81(29)	3.93	0.903
The current business competition is favourable to my entrepreneurial activities	0(0)	8(3)	56(20)	151(54)	61(22)	3.94	0.768
I possess strong entrepreneurial knowledge to succeed in my business	0(0)	6(2)	59(21)	148(53)	64(23)	3.98	0.747
Average						3.95	0.72

The overall summary average mean for institutional factors was 3.95 and SD=0.72 indicating that the respondents showed a moderate influence of institutional factors that increased entrepreneurial engagement. The results agree with Lee-Ross and Lashley (2009) that institutional factors such as entrepreneurship education are often seen as an effective strategy towards more innovation and its supposed benefits have been highly praised by researchers and educators as influencing youth entrepreneurship.

The statement "the current curriculum is very focused on putting white people to work for the first time" had 167 respondents or about 60 percent agreement to great extent and 61 respondents or 22 percent concurrence to a very great extent. This is supported by a mean of 4.02 and SD = 0.670 that indicated that the respondents showed a high level of agreement that institutional factors that influenced their entrepreneurial engagement. The

statement "limited pocket money" had 184 respondents or about 66 percent agreement to a great extent and 47 of respondents translating to around 17 percent in the very great extent range. The results were supported by a mean of 4.00 and $SD = 0.607$ indicating that respondents had difficulty engaging in business, which discouraged them from doing business. The statement "my colleagues discourage me from starting a business" attracted 159 respondents or around 57 percent agreement level to a large extent by while 159 respondents or about 57 percent showing agreement of a very large extent. The results were supported by a mean of 3.99 and $SD = 0.716$ indicating that the respondents were moderately discouraging for friends to venture into business and this derailed their entrepreneurial engagement.

The statement "I have strong business knowledge to succeed in my business" had 148 respondents or 53 percent in agreement to a great extent while another 64 respondents or 23% had a support of very great extent. The results were supported by a mean of 3.98 and $SD = 0.747$ showing that the respondents had the moderate necessary entrepreneurial knowledge that acted as a motivation for their entrepreneurial engagement. Meanwhile, 162 respondents representing around 58% agreed to great extent while 59 respondents or about 21 percent showed a very great extent with the statement "lack of role models because my tutors are just getting into business". The results were supported by mean of 3.97 and $SD = 0.710$ that indicated that lack of role models moderately discouraged respondents from engaging in entrepreneurial activities. The results complement Ireland and Webb's (2007) findings that, given the educational system's formal employment orientation, students with higher academic performance, role models, entrepreneurial knowledge, financial support, and supportive peers are more likely to engage in entrepreneurship.

Meanwhile, the statement "time constraints on extending business in business" had 165 respondents or about 59 percent level of agreement to great extent while another 34 respondents or about 12 percent posted agreement of a very great extent. This shows a lower mean score (mean = 3.81 and $SD = 0.668$). A mean of 3.81 indicated that respondents indicated a moderate level of institutional factors that influenced their entrepreneurial engagement. This is also shown by the standard deviation ($SD=0.72$),

which shows a consistent level of support for the statement by the respondents. The results support the propositions of Gurmeet (2011) and Turban and Sikdar (2009) that although entrepreneurship education has been claimed to be an effective way to encourage and strengthen interest in entrepreneurship among university students, a large percentage of them take an unnecessarily long time to engage in entrepreneurial activities. This shows that more emphasis is needed; attention and drive to ensure that youth are involved in entrepreneurship as early as possible.

4.5.7 Effects of economic factors on entrepreneurial engagement

The fourth objective was to investigate the influence of economic factors on entrepreneurial engagements by university students in public universities in Nairobi Metropolitan region. The level of agreement of respondents was sought on the extent to which economic factors affect their decision to engage in entrepreneurial activities. The results are shown in Figure 4.12.

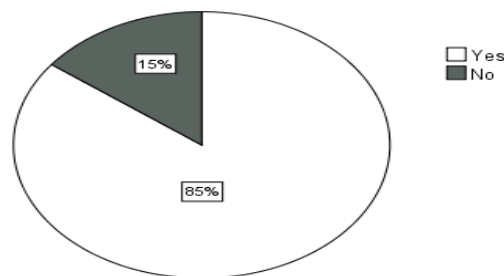


Figure 4. 12 Economic factors

From the results, 237 of the respondents representing 85 percent reported that economic factors significantly affected their decision to engage in entrepreneurial activities. The results agree with Nyambegera and Kilonzo (2014) that the economic environment of a country highly determines the level of entrepreneurial engagement amongst the youths. This is since favourable economic variables such as availability of loan facilities, ready market for goods and services, and affordable professional services motivate students to start businesses. This implies that favourable economic factors motivate students to engage in entrepreneurship.

Extent economic factors influence entrepreneurial engagement

The respondents were requested to indicate the extent the economic factors influence level of entrepreneurial engagement using the scale of great extent, moderate extent, little extent and no extent. The results are displayed in Figure 4.13.

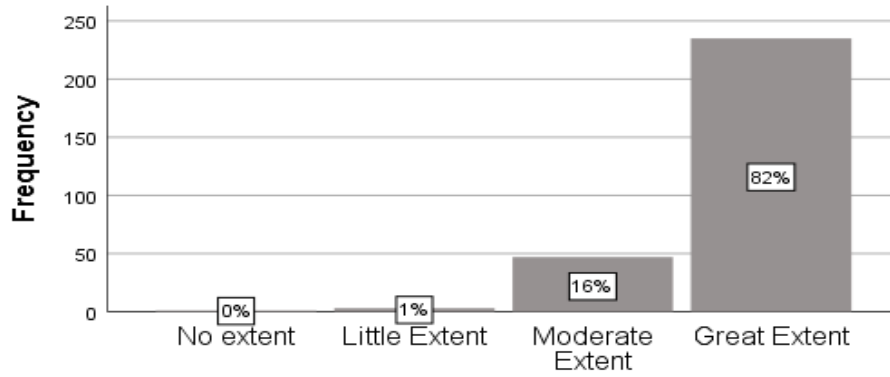


Figure 4. 13 Extent of economic factors and entrepreneurial engagements

From the results, it is apparent that 229 of the respondents representing 82 percent reported that economic factors influence their entrepreneurial engagement to a great extent. The results support the findings by Keter (2012) that university students engaging in enterprises observe the economy as the motivating factor before identifying potential areas for investment with potential for growth. In the case of university students, they are often motivated by the performance of businesses around their environment or those belonging to their friends or relatives. This shows the importance of supportive economic environment as a motivating springboard for students' engagement in entrepreneurship.

Rating of economic factors

Respondents were asked to rate economic factors on a scale of 1 to 5 where 5- Very great extent, 4- Great extent, 3- Moderate extent, 2- Little extent and 1 - No extent. High scores (>2.5) were associated with high effect of economic factors on entrepreneurial engagement while low scores (<2.5) were associated with low effects of economic factors on entrepreneurial engagement. The scale was three (3) representing moderate extent. Mean and standard deviation were then computed for the variable as in Table 4.6.

Table 4. 6 Economic factors

	No extent (%)	Little Extent (%)	Moderat e Extent (%)	Great Extent (%)	Very Great Extent (%)	Me an	Std. Deviation
Availability of accessible credit	0(0)	3(1)	50(18)	123(44)	100(36)	4.45	0.772
Availability of affordable credit	0(0)	8(3)	59(21)	142(51)	67(24)	3.96	0.703
Availability of market information	1(1)	6(2)	53(19)	137(49)	84(30)	4.06	0.706
Adequate knowledge of markets	1(1)	3(1)	59(21)	154(55)	64(23)	4.39	0.750
Availability of supportive technology	3(1)	8(3)	53(19)	131(47)	84(30)	4.04	0.718
Ability to afford technology	3(1)	3(1)	47(17)	195(70)	34(12)	3.91	0.634
Average						4.02	0.75

The overall aggregate mean score of economic factors was 4.02 and SD=0.75 that indicated that respondents showed a high level of support for economic factors that influenced their entrepreneurial engagement. The results are consistent with the findings of Nyambegera and Kilonza (2014) that the economic environment of a country largely determines the level of entrepreneurial engagement among the youth. This is because the availability of affordable business financing option motivates students to start business.

The statement "availability of affordable credit" had 144 respondents or about 51 percent agreement to great extent and 67 respondents translating to 24 percent to a% very great extent. This shows a mean of 4.45 and SD = 0.772). A mean of 4.45 showed that about 51 percent of respondents had a high level of availability of affordable credit that strengthened their entrepreneurial commitment. This is also supported by the standard deviation (SD=0.772), which showed similar observations of the respondents. The statement "adequate knowledge of markets" had 154 respondents which was about 55 percent agreement to a large extent while 64 respondents or about 23 percent agreed to a very large extent. The results were supported by a mean of 4.39 and SD = 0.750 that

indicated that the respondents had the strength of adequate market knowledge as a driver of their entrepreneurial engagement.

The statement "availability of market information" attracted 137 respondents or about 49 percent with agreement of a very great extent and 87 respondents or about 30 percent agreeing with a very great extent. The results were supported by a mean of 4.06 and $SD = 0.706$ that indicated that the respondents had the advantage of available market information for their entrepreneurial engagement. The statement "availability of assistive technology" had 131 respondents or about 47 percent agreement to a large extent and 84 respondents which was about 30 percent to a very large extent. The results were supported by a mean of 4.04 and $SD = 0.718$ that suggested that the respondents had access to enabling technologies as a motivation for their entrepreneurial engagement.

The statement "availability of affordable credit" had 142 respondents in support or about 51 percent agreement to a large extent and 67 respondents or about 24 percent agreement to a very large extent. The results were supported by a mean of 3.96 and $SD = 0.703$ that suggested that the respondents had access to affordable credit as a motivation for their entrepreneurial engagement. The statement "availability of affordable technology" had 195 respondents or about 70 percent% agreement to a large extent while another 34 respondents or 12 percent agreeing to a very large extent. The results were supported by a mean of 4.04 and $SD = 0.718$ that showed that the respondents had access to enabling technologies as a motivation for their entrepreneurial engagement.

The results support the findings of Jumamila, Depositario, and Zapata (2017), who demonstrated that economic factors such as access to credit, presence of ready markets, availability of raw materials, and infrastructure were the most important predictors of entrepreneurial engagement. In addition, the growth of entrepreneurial ideas among young people is highly motivated when potential entrepreneurs are informed about the availability of financial support, incubation programs and entrepreneurial training. The results also complement the findings of Mwendwa (2016) that lack of market and technological information was a barrier for youth to use external markets and to engage in entrepreneurial activities. It follows that access to credit, availability of market

information and availability of technology is a prerequisite for entrepreneurial involvement of university students.

4.5.8 Entrepreneurial Engagements

Respondents were asked to rate Entrepreneurial Engagements on a scale of 1 to 5 where 5- Very great extent, 4- Great extent, 3- Moderate extent, 2- Little extent and 1 - No extent. Mean and standard deviation were then computed for the variable as given in Table 4.7. High scores (>2.5) were associated with high effect of entrepreneurial engagement while low scores (<2.5) were associated with low effects of entrepreneurial engagement. The scale was three (3) representing moderate extent.

Table 4. 7 Entrepreneurial engagement

	No extent (%)	Little Extent (%)	Moderate Extent (%)	Great Extent (%)	Very Great Extent (%)	Mean	Std. Deviation
Availability of technically skilled entrepreneurs	0(0)	3(1)	53(19)	159(57)	61(22)	3.99	0.708
Availability of skilled employees	3(1)	3(1)	42(15)	165(59)	67(24)	4.03	0.734
Availability of experienced entrepreneurs	3(1)	0(0)	56(20)	165(59)	59(21)	3.98	0.706
Adequate networking skills	3(1)	0(0)	47(17)	151(54)	78(28)	4.08	0.721
Availability of managerial skills	3(1)	6(2)	47(17)	154(55)	67(24)	4.01	0.754
Adequate planning skills	3(1)	2(6)	50(18)	148(53)	73(26)	4.02	0.765
Innovative entrepreneurs	3(1)	62	61(22)	148(53)	61(22)	3.93	0.783
Moderate risk taking entrepreneurs	3(1)	0(0)	47(17)	167(60)	61(22)	4.01	0.706
Proactive entrepreneurs	3(1)	3(1)	39(14)	181(65)	53(19)	3.99	0.691
Average						4.00	0.730

The overall summary average mean score for entrepreneurial engagement was 4.00 and SD=0.730. A mean of 4.00 indicated that respondents endorsed that psychological, sociocultural, institutional, and economic factors influence entrepreneurial engagement. This is also shown by the standard deviation (SD=0.730), which shows a consistent level of support for the statement by the respondents. The results support the findings of

Mulund (2019) and Mburu (2019) that institutional, psychological, socio-cultural and economic factors are among the main factors influencing university students towards entrepreneurship.

It was evident that 151 respondents representing about 54 percent agreed to a great extent with the statement "adequate networks skills" while 78 respondents or about 28 percent agreed to a great extent. He had a higher mean of 4.08 and $SD = 0.721$ that indicated that respondents strongly supported that adequate networking skills influence entrepreneurial engagement. With the statement "availability of qualified employees" attracting 165 respondents or about 59 percent who agreed to a large extent while 67 of respondents or about 24 percent to a very high extent. The results were supported by a mean of 4.03 and $SD = 0.734$ that indicated that the respondents had qualified employees available as motivation for their entrepreneurial engagement. The statement "adequate planning ability" attracted 148 respondents representing about 53 percent agreement to a great extent while 73 respondents or about 26 percent agreement to a very high extent. The results were supported by a mean of 4.02 and $SD = 0.765$ that portrayed the respondents had sufficient planning skills for their entrepreneurial involvement.

The statement "availability of managerial skills" attracted 154 respondents or about 55 percent agreement to a high degree while 67 respondents representing around 24 percent agreed to a very high degree. The results were supported by a mean of 4.01 and $SD = 0.754$ that suggested that the respondents have the necessary managerial skills to succeed in their entrepreneurial endeavors. Meanwhile, 167 respondents or about 53 percent agreed to a large extent and 61 respondents or about 26 percent agreed to a very high extent with the statement "entrepreneurs taking moderate risk". The results were supported by a mean of 4.01 and $SD = 0.706$ portraying that the respondents had moderate risk-taking skills for their entrepreneurial engagements. Also, 159 respondents representing 57 percent agreed to a large extent while 61 percent or around 22 percent agreed to a very high extent to the statement "availability of technically competent entrepreneurs". The results were supported by a moderate mean of 3.99 and $SD = 0.708$ indicating that the respondents had access to technically proficient entrepreneurs for their entrepreneurial engagements.

The statement "proactive entrepreneurs" had 181 respondents or about 65 percent with high agreement and 53 respondents representing about 19 percent with a very high agreement. The results were supported by a mean of 3.99 and $SD = 0.691$ that indicated that the respondents had moderate proactive skills for their entrepreneurial engagements. The statement "availability of experienced entrepreneurs" attracted 165 respondents or about 59 percent with a high agreement and 59 percent or about 21 percent with very high agreement. The results were supported by a mean of 3.98 and $SD = 0.706$ suggested that the respondents had moderate access to experienced entrepreneurs for their entrepreneurial engagements. Finally, the statement "innovative entrepreneurs" had 148 respondents representing 53 percent with high agreement and 61 respondents representing 22 percent with very high agreement. The results were supported by a mean of 3.93 and $SD = 0.783$ suggesting that respondents had moderate access to innovative entrepreneurs as a force for their entrepreneurial engagement.

The results complement the findings of Antonites et al. (2007) that entrepreneurship education programs help develop attitudes and skills, such as networking, that are conducive to starting one's own business and also provide the knowledge and experience to start and manage a business. The results support the findings of Fossen and Kritikos (2010) and McMullen and Shepherd (2006), who argued that the social context plays an important role in shaping career aspirations and legitimizing students' various entrepreneurial career choices. Thus, the presence of role models motivates students to engage in entrepreneurship and is considered the result of a social influence process. This shows that family and community socio-economic background has a significant influence on university students' entrepreneurship orientation.

4.6 Test on Assumption of Classical Linear Regression Model

For the purpose of determining whether the study variables had attained the assumption of classical linear regression model, several diagnostic tests were undertaken. Linear regression analysis is a powerful statistical model when estimated correctly. The model predicts the dependent variable by seeking patterns exhibited by the independent variable. The use of linear regression analysis requires some assumptions to be met for the model to remain appropriate in prediction of the data (Hayes, 2015). The diagnostic tests

conducted included normality test, linearity, and multicollinearity, normality and heteroscedasticity tests.

4.6.1 Multicollinearity test

Multicollinearity was attained on the data by analyzing the VIF (variance inflation factor) and measuring the tolerance (1/VIF). If the VIF value exceeds 3, the independent variables are considered collinear (Schwarz, Schwarz, & black, 2014). Also, the tolerance of the independent variable is measured by $1 - R^2$. Values close to 1 indicate little or no diversity, while values close to 0 indicate that convergence may be a threat (Belsley, Kuh, & Welsch, 2004). Table 4.8 shows the VIF values from 1.442 to 1.537, with a tolerance of 0.650 to 0.702, implying that multilink is not an issue with the data.

Table 4. 8 Test for multicollinearity

Model	Collinearity Statistics	
	Tolerance	VIF
Psychological	0.650	1.537
Socio-cultural	0.702	1.424
Institutional	0.693	1.442
Economic	0.681	1.469

a. Dependent Variable: Engagement

4.6.2 Linearity test

Linearity test was conducted using regression coefficients and the null hypothesis was rejected if the p-values are less than 0.005. The results are in table 4.9.

Table 4. 9 Linearity test

Variable	Beta coefficients	p-values
Psychological	.286	.006
Socio-cultural	.192	.000
Institutional	.062	.001
Economic	.235	.002

The results show that all the variables had beta coefficients of above 0.05. This implies that all the variables portrayed linearity and were significant as shown by their p-values which were less than 0.005. Therefore, the entire null hypotheses were rejected.

4.6.3 Test for Normality using Shaphiro-wilk Test

Shaphiro wilk test is a robust test for normality that generates a p value that indicates whether the probability estimation follows normal distribution. Shaphiro wilk test is performed on all the predictors and the dependent constructs. The test concludes that data is normal if the p-value is not less than .05 (Shapiro & Wilk, 1965).

Table 4. 10 Normality test

Variables	Shapiro-Wilk Statistic	Df	Sig.
Psychological	.994	278	.183
Social-cultural	.989	278	.053
Institutional	.992	278	.096
Economic	.997	278	.769
Engagement	.998	278	.955

a. Lilliefors Significance Correction

Table 4.10 indicates that the significance levels of all the variables were more than .05, which is a clear indication that all the variables were normally distributed and therefore other statistical analysis would be carried out on the data.

4.6.4 Test for Heteroscedasticity

Heteroscedasticity test was conducted by use of the Breusch-Pagan / Cook-Weisberg test. The results are shown in table 4.11.

Table 4. 11 Heteroscedasticity test

Ho	Variables	Chi2(4)	Prob > Chi2
Constant Variance	Psychological, institutional, economic	socio-cultural, 1.835	0.8789

In the results presented in Table 4.11, the chi-square value was small, that is, 1.835, indicating Heteroscedasticity was not a problem. A large chi-square value, greater than 9.21 (Sazali et al., 2009), would indicate that Heteroscedasticity was present.

4.7 Correlation matrix

The strength of the linear relationship among independent and dependent variables was measured using Pearson correlation coefficient. The independent variables psychological,

socio-cultural, institutional and economic factors were correlated against the dependent variable, entrepreneurial engagement. The results are shown in Table 4.12.

Table 4. 12 Correlation matrix

	Engagement	Psychological	S/cultural	Institutional	Economic
Engagement	1				
Psychological	.467**	1			
Socio-cultural	-.218**	.393**	1		
Institutional	.389**	.427**	.516**	1	
Economic	.683**	.475**	.386**	.416**	1

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

The results show that institutional factors had a positive and significant correlation with entrepreneurial engagement ($r=0.389$, $p \leq .001$). The correlation between economic factors and entrepreneurial engagement was positive and significant ($r=0.683$, $p \leq .001$). Psychological factors had a positive and significant correlation with entrepreneurial engagement ($r=0.467$, $p \leq .001$). Finally, sociocultural factors had a negative and significant relationship with entrepreneurial engagement ($r=-0.218$, $p \leq .001$). The findings showed that of the three independent variables; psychological, socio-cultural, economic and institutional had a positive effect on the entrepreneurial engagement of university students; while socio-cultural had minimal significance for undergraduates' entrepreneurial engagement.

4.8 Regression Model

4.8.1 Model summary

The regression model was on the factors influencing entrepreneurial engagement among public university students in the Nairobi Metropolitan Region of Kenya. The R^2 for the regression model between social, economic, institutional and psychological factors and entrepreneurial engagement among students in public universities was assessed from the results in Table 4.13.

Table 4. 13 Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.714 ^a	.510	.503	.37837

a. Predictors: (Constant), Psychologicall, Social, Institutional, Economic

The results established that adjusted $R^2=0.503$ meaning that combined effect of social, economic, institutional and psychological factors jointly explain 50.3% variation in the entrepreneurial engagement among students in public universities while the remaining variation is explained by the other factors not included in the study and the error term. The results agree with the assertion by Mburu (2019) some of the core factors influencing university students to pursue entrepreneurship include psychological, socio-cultural, insitutional and economic factors.

4.8.2 Analysis of Variance (ANOVA)

The ANOVA test was conducted to establish whether the model was a good fit. From the results in Table 4.14, the regression model was a good fit as indicated by a significant F-statistic ($F(4,285)=73.234, p(0.000) < 0.05$).

Table 4. 14 ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	41.938	4	10.484	73.234	.000 ^b
	Residual	40.229	274	.143		
	Total	82.167	278			

a. Dependent Variable: Engagement

b. Predictors: (Constant), Psychological, Socio-cultural, Institutional, Economic

The results show that no significant differences were revealed among the selected factors influencing entrepreneurial engagement. A value of $p=0.000 < 0.05$ is an indicator that at least one variable significantly affects the entrepreneurial engagement of undergraduates in public universities in the Nairobi Metropolitan Region.

4.8.3 Regression coefficient

a) Psychological factors and entrepreneurial engagement

The first objective was to establish the influence of psychological factors on entrepreneurial engagement of public university students in Nairobi metropolitan region. This was guided by the hypothesis;

H0₁: psychological factors have no significant influence on entrepreneurial engagement of public university students in Nairobi metropolitan region

Table 4. 15 Psychological factors and entrepreneurial engagement

Source	SS	Df	MS	Number of obs = 279		
Model	.099547192	1	.099547192	F (1, 279)	=	94.69
residual						
total						
	.403252805	277	.001033982	Prob > F	=	0.0000
	.502799997	278	.001285933	R-squared	=	0.1980
				Adj R-squared	=	0.1959
				Root MSE	=	0.03216
Entrep. engagemen	Coef.	Std. Err.	T	P> t	[95% Conf. Interval]	
t						
	.0277476	.0028279	9.81	0.000	0.0221877	0.0333074
_Cons	.0804949	.0107019	7.52	0.000	0.0594543	0.1015355

From the regression results in Table 4.15, psychological factors explained 19.59% variance of entrepreneurial engagement (adjusted $R^2 = 0.1959$, $F(1, 278) = 94.69$, $p < 0.001$). Additionally, psychological factors significantly predicted entrepreneurial engagement $\beta = 0.027$, $t(278) = 9.81$; $p < 0.001$). The resultant simple linear regression is shown;

$$Y = 0.080 + 0.027X^1 + \varepsilon$$

Where: Y is the entrepreneurial engagement

X1 is Psychological factors

ε is the error term

It follows that the null hypothesis is rejected and alternative hypothesis accepted that psychological factors have a positive and significant influence on the entrepreneurial engagement of university students in public universities in the Nairobi Metropolitan Region.

It is thus evident that psychological factors influence entrepreneurial engagement of public university students in Nairobi metropolitan region. This further means that inculcating psychological factors such as self-efficacy, innovativeness, locus of control, and need for achievement is a sure way to enhance entrepreneurial engagement among college students. The results support the findings of Kerr, Kerr, and Xu (2018), who identified psychological factors such as self-efficacy, innovativeness, locus of control, and need for achievement as critical to enhancing entrepreneurial engagement. The findings also agree with the findings of Rokhman and Ahmed (2017) that psychological factors such as need for achievement, risk propensity, and locus of control are significant indicators of entrepreneurial involvement among college students in Indonesia.

b) Social factors and entrepreneurial engagement

The second objective was to establish the influence of social factors on entrepreneurial engagement of public university students in Nairobi metropolitan region. This was guided by the hypothesis;

H0₂: social factors have no significant influence on entrepreneurial engagement of public university students in Nairobi metropolitan region

Table 4. 16 Social factors and entrepreneurial engagement

Source	SS	Df	MS	Number of obs	=	279
Model residual total	.163856882	1	.163856882	F (1, 279)	=	188.54
	.338943115	277	.000869085	Prob > F	=	0.0000
	.502799997	278	.001285933	R-squared	=	0.3259
				Adj R-squared	=	0.3242
				Root MSE	=	0.0294
					8	
Entrepreneurial engagement	Coef.	Std. Err.	T	P> t	[95% Conf. Interval]	
	.0283999	.0020683	13.73	0.000	.0243335	0.0324663
_cons	.080182	.0077265	10.38	0.000	.0649912	0.0953728

The results in Table 4.16 indicated that social factors explained 32.42% variance of entrepreneurial engagement (adjusted $R^2 = 0.3242$, $F (1, 278) = 188.54$, $p < 0.001$).

Additionally, social factors significantly predicted entrepreneurial engagement $\beta=0.028$, $t(278)=13.73$; $p<0.001$). The resultant simple linear regression is shown;

$$Y = 0.080 + 0.028X^1 + \varepsilon$$

Where: Y is the entrepreneurial engagement

X1 is social factors

ε is the error term

It follows that the null hypothesis is rejected and alternative hypothesis accepted that social factors have a positive and significant influence on the entrepreneurial engagement of university students in public universities in the Nairobi Metropolitan Region.

This implies that socio factors have a positive influence on the entrepreneurial engagement of public university students in Nairobi metropolitan region. It follows that through sociocultural factors such as family background, education, and social class, college students have a high probability of accelerating engagement of university students in entrepreneurial activities. The results contradict the findings of Dondo (2013) that sociocultural factors such as a family with a previous entrepreneurial background and a higher propensity for entrepreneurship often influence and motivate siblings to immerse themselves in entrepreneurship. The results agreed with Khuong and An's (2016) findings that socio-cultural factors have minimal significance for university students' entrepreneurial engagement.

c) Institutional factors and entrepreneurial engagement

The third objective was to establish the influence of institutional factors on entrepreneurial engagement of public university students in Nairobi metropolitan region. This was guided by the hypothesis;

H0₃: institutional factors have no significant influence on entrepreneurial engagement of public university students in Nairobi metropolitan region

Table 4. 17 Institutional factors and entrepreneurial engagement

Source	SS	Df	MS	No. of observ.	=	279
Model residual total		1	.182346	F (1, 278)		
	0.182346621		621		=	221.92
		277	.000821	Prob > F		
	0.320453376		675		=	0.0000
	0.502799997	278		R-squared	=	0.3627
				Adj R-squared	=	0.361
				Root MSE	=	0.0286
					6	
Entrepreneurial engagement	Coef.	Std. Err.	T	P> t	[95% Conf. Interval]	
ETP	0.0308638	.0020718	14.90	0.000	.0267904	0.0349371
_cons	0.0726124	.0076349	9.51	0.000	.0576018	0.0876231

The results in Table 4.17 indicated that institutional factors explained 36.1% variance of entrepreneurial engagement (adjusted $R^2 = 0.361$, $F(1, 278) = 221.91$, $p < 0.001$). Additionally, institutional factors significantly predicted entrepreneurial engagement ($\beta = 0.0308$, $t(278) = 14.90$; $p < 0.001$). The resultant simple linear regression is shown;

$$Y = 0.080 + 0.0308X^1 + \varepsilon$$

Where: Y is the entrepreneurial engagement

X1 is institutional factors

ε is the error term

It follows that the null hypothesis is rejected and alternative hypothesis accepted that institutional factors have a positive and significant influence on the entrepreneurial engagement of university students in public universities in the Nairobi Metropolitan Region.

The implication for the study is that institutional factors positively influence the entrepreneurial engagement of public university students in Nairobi metropolitan region. This shows that the presence of supportive institutional factors such as entrepreneurship education, training/curriculum, and a favorable entrepreneurial environment has a high tendency to motivate university students to pursue entrepreneurship. The results agree with Ogunsabe et al. (2018) to find that institutional factor variables had a positive impact on entrepreneurial engagement of university students in Nigeria. The results also

support Otuki's (2013) finding that institutional factors such as technical skills and entrepreneurial education increase the level of entrepreneurial involvement.

d) Economic factors and entrepreneurial engagement

The fourth objective was to establish the influence of economic factors on entrepreneurial engagement of public university students in Nairobi metropolitan region. This was guided by the hypothesis;

H0₄: Economic factors have no significant influence on entrepreneurial engagement of public university students in Nairobi metropolitan region

Table 4. 18 Economic factors and entrepreneurial engagement

Source	SS	Df	MS	No. of obser.	=	279
Model	0.17419487	1	.17419487	F (1, 278)	=	206.74
Residual		277	.00084257	Prob > F		
Total	0.328605127		7		=	0.0000
	0.502799997	278	.00128593	R-squared		
			3		=	0.3464
				Adj R-squared	=	0.3448
				Root MSE	=	0.0290
					3	
Entrepreneurial engagement	Coef.	Std. Err.	T	P> t	[95% Conf. Interval]	
EMP		.002188	14.38	0.000		
	0.0314653	4			.0271628	0.0357677
_cons		.007324	11.07	0.000		
	0.0811021	5			.0667017	0.0955025

It is imperative from the results in Table 4.18 that economic factors explained 34.48% variance of entrepreneurial engagement (adjusted $R^2 = 0.3448$, $F(1, 278) = 206.74$, $p < 0.001$). Additionally, economic factors significantly predicted entrepreneurial engagement $\beta = 0.0314$, $t(278) = 14.38$; $p < 0.001$). The resultant simple linear regression is shown;

$$Y = 0.080 + 0.031X^1 + \varepsilon$$

Where: Y is the entrepreneurial engagement

X1 is economic factors

ϵ is the error term

It follows that the null hypothesis is rejected and alternative hypothesis accepted that economic factors have a positive and significant influence on the entrepreneurial engagement of university students in public universities in the Nairobi Metropolitan Region.

The implication for the study is that economic factors influence the entrepreneurial engagement of public university students in Nairobi metropolitan region. This also shows that the provision of economic factors such as access to credit, availability of market information and affordability has a high potential to help university students engage in entrepreneurial activities. The results are consistent with the findings of Nyambegera and Kilonza (2014) who identified the significant role of economic factors such as favorable economic variables such as availability of credit facilities, ready market for goods and services and available professional services that motivate students to start businesses. The results also agree with the findings of Oruguna (2016) which revealed the presence of a strong and positive correlation between economic factors such as unemployment and poverty and entrepreneurial engagement among the youth.

4.9 Optimal Model

The study investigated selected factors influencing entrepreneurial engagement among public university students in the Nairobi Metropolitan Region of Kenya. This was guided by the following hypothesis;

H0₅: There are no factors influencing entrepreneurial engagement among public university students.

Table 4. 19 Optimal model

Source	SS	Df	MS	Number of obs	=	279
Model		4		F (4,279)	=	
residual total			.0623856			95.3
	0.249542652	274	63	Prob > F	=	3
			.0006544			0.00
	0.253257345		12			
	0.502799997	278	.0012859	R-squared	=	00
			33			0.49
				Adj R-squared	=	63
						0.49
				Root MSE	=	11
						0.02
						558
E.E.	Coef.	Std. Err.	T	P> t	[95% Conf. Interval]	
Psyc.			4.61	0.00		
	0.0115963	.0025164		0	.0066488	0.0165438
Social			2.69	0.00		
	0.007046	.0026175		7	.0018996	0.0121924
Institutional			5.59	0.00		
	0.0146002	.0026116		0	.0094656	0.0197348
Economic			5.80	0.00		
	0.0146362	.0025247		0	.0096723	0.0196001
_cons			1.49	0.13		
	0.0142576	.0095792		7	-.0045761	0.0330914

The regression results as shown in Table 4.18 indicated that all the predicting factors (institutional, psychological, socio-cultural and economic) explained 49.11% variance of entrepreneurial engagement (adjusted $R^2 = 0.49.11$, $F(4, 279) = 95.33$, $p < 0.001$). It was also established that as a combined model, psychological factors significantly influenced entrepreneurial engagement ($\beta_1 = 0.001$, $p < 0.001$). Similarly, social factors ($\beta_2 = 0.007$, $p < 0.007$), institutional factors ($\beta_3 = 0.014$, $p < 0.001$) and economic factors ($\beta_4 = 0.014$, $p < 0.001$).

The resulting multi linear regression model is shown as;

$$Y = 0.011 + X_1 + 0.007X_2 + 0.014X_3 + 0.014X_4 + \varepsilon$$

Where:

Y= entrepreneurial engagement

X1 is psychological factors

X2 is social factors

X3 is institutional factors

X4 is economic factors

ϵ is error term

This indicated that psychological, socio, institutional and economic factors have a positive and significant relationship with entrepreneurial engagement. The results agree with the finding of Mburu (2019) that institutional, psychological, socio-cultural and economic factors are among the main factors influencing university students towards entrepreneurship. The results further agreed with Khuong and An's (2016) findings that psychological, socio, institutional and economic factors significantly predicted university students' entrepreneurial engagement.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the findings, conclusions and recommendations, and areas for further research. These are discussed in relation to the specific aims of the study.

5.2 Summary of the Findings

The purpose of this study was to explore the selected factors that influence entrepreneurial engagement among public university students in the Nairobi metropolitan region of Kenya. Specifically, the study explored specific psychological, socio-cultural, economic and institutional factors effecting university students' entrepreneurship engagement. Descriptive research design was used as the research method. Specific areas studied were Nairobi, Kiambu and Kajado counties in the Nairobi metropolitan area. There were six public universities in the area; University of Nairobi, Kenyatta University, Jomo Kenyatta University of Agriculture and Technology, Kenya Technical University, Cooperative University and Multimedia University. The target population is public university students registered in incubation centres in public universities the Nairobi Metropolitan Area. The target population included 1006 school students enrolled in incubation centres or facilities.

Students were selected through purposive sampling from universities incubation centres registered with the establishment of the university. Stratified random sampling was used to select the target population in each of the five tiers of the target population, such as the University of Nairobi, Kenyatta University, Jomo Kenyatta University of Agriculture and Technology, Kenya Technical University, Cooperative University, and Multimedia University. At each level, the list of selected members was created as per the group of universities.

Finally, the proportional stratified sampling model was adopted and the ratio of subdivisions of each stratum was chosen to be equal to the ratio of all representatives of respondents from each stratum of the five strata to ensure the reliability of the model. This was calculated as the proportion of university respondents. The sample size of this

study was determined using Taro Yamane's (1967) simple sample and the sample size was 286 respondents. In this study, data were collected using open-ended and closed-ended questionnaires. Reliability was measured by measuring the consistency in the Cronbach alpha statistic. This study used three sets of performance measures to assess the instrument's accuracy. These included construct, content and face validity. Before data analysis, data collection was cleared and data entered into SPSS version 26.0. Data analysis included the use of descriptive and inferential statistical methods.

Descriptive statistics used means, standard deviations, frequencies, and percentages. Inferential statistics was based on correlation and regression to examine the relationship between independent and dependent variables. Responses showed that 279 of the 286 questionnaires were returned. The overall response rate was 97.5%. Demographic data showed that 142 male students (52%) were more active than 134 females (48%) in this study. Most respondents (38%) were between the ages of 23-24 and 61% had a job outside of university. In addition, 47% of businesses run by university students were retail businesses with an average annual turnover of less than KSh 500,000. Finally, the majority of businesses (59%) have been operating for less than a year.

5.2.1 The influence of psychological factors on entrepreneurial engagement

The findings indicated that personality influences business decisions of university students while entrepreneurial attitude is very important for young entrepreneurs to participate in entrepreneurship. In addition, entrepreneurial personality traits influenced the entrepreneurial activities of university students. This means that young people should prudently use entrepreneurship skills when starting a business. Further, young entrepreneurs need psychological qualities such as a sense of achievement, a sense of adventure and control in order to be successful and participate in the enterprise. Additionally, psychological factors significantly predicted entrepreneurial engagement $\beta=0.027$, $t(278)=9.81$; $p<0.001$). It was evident that psychological factors influence entrepreneurial engagement of public university students in Nairobi metropolitan region. This further means that inculcating psychological factors such as self-efficacy, innovativeness, locus of control, and need for achievement is a sure way to enhance entrepreneurial engagement among college students.

5.2.2 The influence of socio factors on entrepreneurial engagement

The findings indicated that family, social or cultural backgrounds do not affect the decision to start a business among university students. It is seen that social culture plays an important role in increasing the participation of young entrepreneurs, and efforts should be made to encourage and direct their participation in business life. In addition, culture and tradition influence their business investment to some degree. This suggests that although the results are comparable to those noted about the importance of cultural leadership for youth engagement in business, entrepreneurship education needs to be strengthened at home and at universities to encourage young people to do business.

Meanwhile, social factors significantly predicted entrepreneurial engagement $\beta=0.028$, $t(278) = 13.73$; $p < 0.001$). It follows that socio-cultural factors had a positive and significant influence on the entrepreneurial engagement of university students in public universities in the Nairobi Metropolitan Region. This implies that socio-cultural factors positively influenced entrepreneurial engagement of public university students in Nairobi metropolitan region. It follows that through socio factors such as family background, education, and social class, college students have a high probability of accelerating engagement of university students in entrepreneurial activities.

5.2.3 The influence of institutional factors on entrepreneurial engagement

Findings showed that institutional factors affect to a very great extent the decision to engage in entrepreneurship among university students. This implied that enhancement of business knowledge can create a positive attitude of students towards engaging in entrepreneurship. Additionally, stakeholders in the universities must continually strengthen the engagement of university student towards entrepreneurship as a strategy to promote university student participation. Meanwhile, institutional factors significantly predicted entrepreneurial engagement $\beta=0.0308$, $t(278) = 14.90$; $p < 0.001$). It follows that institutional factors had a positive and significant influence on the entrepreneurial engagement of university students in public universities in the Nairobi Metropolitan Region. The implication for the study is that institutional factors influence the entrepreneurial engagement of public university students in Nairobi metropolitan region. This shows that the presence of supportive institutional factors such as entrepreneurship

education, training/curriculum, and a favorable entrepreneurial environment has a high tendency to motivate university students to pursue entrepreneurship.

5.2.4 The influence of economic factors on business engagement

The findings indicated that engagement in entrepreneurship among university students is influenced by the economic factors. This shows that there are many economic benefits to encouraging students to start their own businesses. Similarly, business activities of university students are to a very great extent affected by the economy. This shows the importance of supporting economic environment, which motivates students to participate in the business world. Further, economic factors significantly predicted entrepreneurial engagement $\beta=0.0314$, $t(278)=14.38$; $p<0.001$). This suggests that economic factors had a positive and significant effect on the entrepreneurial engagement of university students in public universities in the Nairobi Metropolitan Region. The implication for the study is that economic factors influence the entrepreneurial engagement of public university students in Nairobi metropolitan region. This also shows that the provision of economic factors such as access to credit, availability of market information and affordability has a high potential to help university students engage in entrepreneurial activities.

5.3 Conclusions

The conclusions of the study are discussed in this section. The conclusions are based on the specific objectives.

5.3.1 Influence of psychological factors on entrepreneurial engagements

The first objective was to determine the impact of psychological factors on entrepreneurship engagement among university students at public universities in the Nairobi Metropolitan Area. Findings showed that psychological factors were effective in determining enterprise engagement of university students. This study concluded that university students need to be exposed and trained to develop and work on psychological factors such as self-efficacy, innovativeness, locus of control and the need for achievement in order to participate in the business world.

5.3.2 Influence of socio factors on entrepreneurial engagements

The second objective was to evaluate the influence of sociocultural factors on entrepreneurship engagement among university students at public universities in the Nairobi metropolitan region. The results of the research showed that social cultural factors had a significant positive effect on the entrepreneurship engagement of university students. The study concluded that investing in the development and improvement of family culture, understanding social and enterprise support, and using good family patterns are important for enhancing and encouraging university students' enterprise participation.

5.3.3 Influence of institutional factors on entrepreneurial engagements

The third objective was to evaluate the influence of institutional factors on entrepreneurial engagements by university students in public universities in Nairobi Metropolitan region. The results of the study showed that the regression coefficient of the relationship between institutional factors and entrepreneurial engagement is positive and significant. This study concluded that instilling in young people values such as entrepreneurship education, teaching/curriculum and a conducive work environment is important as an ability to increase students' enterprise engagement in public universities.

5.3.4 Influence of economic factors on entrepreneurial engagements

The fourth objective was to investigate the influence of economic factors on entrepreneurial engagements by university students in public universities in Nairobi Metropolitan region. The results of the study showed that economic factors had a positive and significant effect on the entrepreneurial engagement of university students. The study concluded that there is a need to provide youths and specifically university students with easy and affordable access to credit, use business knowledge, and help them to participate in the business world.

5.4 Recommendations

5.4.1 Influence of psychological factors on entrepreneurial engagements

The study recommended that university should continuously invest in practical entrepreneurship education as an effective and practical strategy to teach university students about topics such as self-efficacy, innovation, control and the need for achievement.

5.4.2 Influence of socio-cultural factors on entrepreneurial engagements

Based on the findings, it is recommended to the parents, family members and university educators to overcome the socio-cultural factors that inhibit entrepreneurial engagement such as family background and education status as platforms for enhancement university students into engaging in entrepreneurial activities.

5.4.3 Influence of institutional factors on entrepreneurial engagements

Entrepreneurship education should be imparted into learners as early as the formative primary school level and right up to the university level. This is an important avenue of elevating the power of entrepreneurship education, training/curriculum and favourable entrepreneurial environment for heightening the entrepreneurial engagement of university students.

5.4.4 Influence of economic factors on entrepreneurial engagements

There is need for aggressive campaigns through media and other platforms to militating about the importance of ensuring access to credit, availability of market information and availability of technology among others are easily available for university students to engage in entrepreneurial activities.

5.5 Areas for Further Studies

The purpose of this study was to examine selected factors influencing entrepreneurial engagements by public university students in Nairobi Metropolitan region, Kenya. There is need to escalate similar studies to other public and private universities and especially those found in rural set ups for correlation of the findings.

The exploratory power of the variables studied to examine factors influencing entrepreneurial engagement was rather low. This means that other variables not studied could have significant influence on entrepreneurial engagement of university students. Additionally, the relationship between the studied variables may not even be linear. Therefore, further research should be undertaken to include more variables and more rigorous methods in order to effectively analysis the factors influencing entrepreneurial engagement of university students.

REFERENCES

- Adiza, G. R., Alamina, U. P., & Aliyu, . I. S. (2020). The influence of socio-cultural factors on the performance of female entrepreneurs. *International Journal of Financial, Accounting, and Management*, 2(1), 13–27. <https://doi.org/10.35912/ijfam.v2i1.161>
- Adiza, G. R., Alamina, U. P., & Aliyu, I. S. (2020). The influence of socio-cultural factors on the performance of female entrepreneurs. *International Journal of Financial, Accounting, and Management*, 2(1), 13-27.
- Arend, R. J. (2023). Entrepreneurship: A theory for no theory for now. *Strategic Organization*, 21(2), 403-415.
- Athreye, S., Sengupta, A., & Odetunde, O. J. (2023). Academic entrepreneurial engagement with weak institutional support: roles of motivation, intention and perceptions. *Studies in Higher Education*, 48(5), 683-694.
- Babin, B. J., & Zikmund, W. G. (2015). *Exploring marketing research*. Cengage Learning.
- Baker, T., & Welter, F. (2020). *Contextualizing entrepreneurship theory* (p. 188).
- Bergmann, H., Hundt, C., & Sternberg, R. (2016). What makes student entrepreneurs? On the relevance (and irrelevance) of the university and the regional context for student start-ups. *Small Business Economics*, 47(1), 53-76.
- Bifulco, F. (2019). 10 Entrepreneurial Behaviour in the International Development of Small Firms. *Entrepreneurship and SME Research: On its Way to the Next Millennium*, 149.
- Binyanya, B., Wandolo, M., & Mugambi, R. (2021). Effect of Skills Training on Entrepreneurial Ventures among Food and Beverage Diploma Graduates from Tertiary Institutions in Nairobi City County, Kenya. *Journal of Hospitality and Tourism Management*, 4(1), 56-71.
- Block, J., Sandner, P., & Spiegel, F. (2015). How do risk attitudes differ within the group of entrepreneurs? The role of motivation and procedural utility. *Journal of Small Business Management*, 53(1), 183-206.
- Bosma, N. (2005). *Success and Risk Factors in the Pre-startup Phase*. *Small Business Economics*, 24, 365-380.
- Brijlal, P. (2011). Entrepreneurial perceptions knowledge: A survey of final year university students. *African Journal of Business Management*, 5 (3): 818-825.

- Bruton, G. D., Ahlstrom, D., & Li, H. L. (2010). Institutional theory and entrepreneurship: where are we now and where do we need to move in the future? *Entrepreneurship theory and practice*, 34(3), 421-440.
- Bryniak, K. (2020). *Predicting Work Engagement: A Quantitative Analysis of Entrepreneurial Psychological Capital* (Doctoral dissertation, Grand Canyon University).
- Bux, S. (2016). *The effect of entrepreneurship education programmes on the mind-set of South African youth* (Doctoral dissertation, University of Pretoria).
- Chetty, P. (2016). Cultural theories of entrepreneurship. Retrieved from <https://www.projectguru.in/publications/cultural-theories-of-entrepreneurship/>
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Los Angeles: SAGE Publication.
- Das, K. R., & Imon, A. H. M. R. (2016). A brief review of tests for normality. *American Journal of Theoretical and Applied Statistics*, 5(1), 5-12.
- David, R. J., Sine, W. D., & Serra, C. K. (2018). Institutional theory and entrepreneurship: Taking stock and moving forward. *The SAGE handbook of organizational institutionalism*, 671-688.
- Davidsson, P., and Henrekson, M. (2002). Determinants of the prevalence of start-ups and high-growth firms. *Small Business Economics*, 19(2), 81-104.
- Demiray, M., Burnaz, S., & Li, D. (2021). Effects of institutions on entrepreneurs 'trust and engagement in crowd funding. *Journal of Electronic Commerce Research*, 22(2), 95-109.
- Doğan, E. (2015). The effect of entrepreneurship education on entrepreneurial engagement of university students in Turkey. *Istanbul University Econometrics and Statistics e-Journal*, (23), 79-93.
- Dugassa, T. (2012). Impact of entrepreneurship education on entrepreneurial intention of business and engineering students in Ethiopia. *African Journal of Economic and Management Sciences* 3 (2), 258-277.
- Dutta, S. (2016). Entrepreneurship and Sociocultural Factors. *South Asia Research*, 36(1), 41-60.
- Engidaw, A. E. (2021). Exploring entrepreneurial culture and its socio-cultural determinants: in case of Woldia University graduating students. *Journal of Innovation and Entrepreneurship*, 10(1), 1-15.

- Fikirini, G. K. (2017). *Factors determining the choice of entrepreneurship among tertiary institutions unemployed graduates in Kitengela Township–Kenya* (Doctoral dissertation, University of Nairobi).
- Frederick, G. & Myers, K. (2006). *Institutions Entrepreneurship and Sustainability*. New York: Washington, Publishers.
- Giwa, A. H., & Babakatun, A. M. (2019). Effect of Socio-cultural Factors on Women Entrepreneurship Development in Kaduna State. *Journal of Human Resource Management*, 7(3), 57-65.
- Goethner, M., Obschonka, M., Silbereisen, R. K., & Cantner, U. (2017). Scientists' transition to academic entrepreneurship: Economic and psychological determinants. *Journal of economic psychology*, 33(3), 628-641.
- GOK. (2011). *Youth Enterprise Development Fund Status Report*. Nairobi: Government Printer.
- Grebel, T., Pyka, A., & Hanusch, H. (2003). An evolutionary approach to the theory of entrepreneurship. *Industry and innovation*, 10(4), 493-514.
- Gürol, Y., & Atsan, N. (2006). Entrepreneurial characteristics amongst university students: Some insights for entrepreneurship education and training in Turkey. *Education+ Training*, 48(1), 25-38.
- Hansen, B. (1999). Testing for linearity. *Journal of economic surveys*, 13(5), 551-576.
- Heale, R., & Twycross, A. (2015). Validity and Reliability in Qualitative Studies. *Journal of Business Statistics* 18 (1), 66-67
- Hitt, A., Camp, M. & Sexton D. L. (2002). *Strategic Entrepreneurship: Creating A New Mindset*, Blackwell Publishers, Great Kingdom
- Huil, M. (2014). *Critical View on Leibenstein's X-Efficiency Theory* (Bachelor's thesis, University of Twente).
- Ibrahim, G. M. (2023). Entrepreneurship education and entrepreneurial intention of undergraduate students in selected universities in Abuja. *Nigerian Journal of Management Sciences Vol*, 24(2b).
- Jumamil, A. J., Depositario, D. P. T., & Zapata Jr, N. R. (2017). Factors influencing the entrepreneurial engagement of UPLB Agri-based graduates. In *DLSU Research Congress*.
- Kao, R. (2005). Small Business Management: A Strategic Emphasis. *Journal of Small Business and Entrepreneurship*, Vol.3 No 4, Canada.

- Karimi, S., & Reisi, S. (2023). Satisfaction of Psychological Needs and Entrepreneurial Success: Mediating Effects of Well-Being and Work Engagement (Case study: Nahavand County, Iran). *J. Agric. Sci*, 25, 4.
- Kebede, G. F. (2023). Entrepreneurship and the promises of inclusive urban development in Ethiopia. In *Urban Forum* (Vol. 34, No. 1, pp. 1-30). Dordrecht: Springer Netherlands.
- Kenya National Bureau of Statistics (2013). International Centre for Economic Growth, *National Micro and Small Enterprises Baseline Survey*. Nairobi: ICEG.
- Kerr, S. P., Kerr, W. R., & Xu, T. (2018). Personality traits of entrepreneurs: a review of recent literature. *Foundations and Trends® in Entrepreneurship*, 14(3), 279-356.
- Khuong, M. N., & An, N. H. (2016). The factors affecting entrepreneurial engagement of the students of Vietnam national university—a mediation analysis of perception toward entrepreneurship. *Journal of Economics, Business and Management*, 4(2), 104-111.
- Kinuthia, J. N., & Akinnusi, D. M. (2014). The magnitude of barriers facing e-commerce businesses in Kenya. *Journal of Internet and Information Systems*, 4(1), 12-27.
- Kisubi, M. K., & Korir, M. (2021). Entrepreneurial training and entrepreneurial intentions: A mediated mediation analysis of entrepreneurial self-efficacy and attitude of undergraduate finalists in Uganda. *SEISENSE Journal of Management*, 4(3), 73-84.
- Koenker, R. (1981). A note on studentizing a test for heteroscedasticity. *Journal of econometrics*, 17(1), 107-112.
- Koria, M., Osorno, R. H., Telalbasic, I., Ramírez Vázquez, D. D. C., & Chirchir, E. (2020). An innovation intermediary for Nairobi, Kenya: Designing student-centric services for university-industry collaboration. *African Journal of Science, Technology, Innovation and Development*, 1-13.
- Kruege, J., Reilly, M. & Carsrud A. (2013). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5), 411-432
- Kume, A., Kume, V., & Shahini, B. (2013). Entrepreneurial characteristics amongst university students in Albania. *European Scientific Journal, ESJ*, 9(16), 34.
- Ladokun, I. O., & Adebuseye, A. O. (2022). Need for achievement and entrepreneurial intention among undergraduate students in tertiary institutions in Southwest, Nigeria. *Advance Journal of Business and Entrepreneurship Development*, 6(2).
- Leibenstein, H. (1977). X-Efficiency Theory, Conventional Entrepreneurship, and Excess Capacity Creation in LDCs. *Economic Development and Cultural Change*, 25, 288.

- Leibenstein, H. (1987). Entrepreneurship, entrepreneurial training, and X-efficiency theory. *Journal of Economic Behaviour & Organization*, 8(2), 191-205.
- Li, J., Qu, J., & Huang, Q. (2018). Why are some graduate entrepreneurs more innovative than others? The effect of human capital, psychological factor and entrepreneurial rewards on entrepreneurial innovativeness. *Entrepreneurship & Regional Development*, 30(5-6), 479-501.
- Li, T. (2019). Engagement in international entrepreneurship: interactive effects of resource-based factors and institutional environments. *Journal of Global Entrepreneurship Research*, 9, 1-17.
- Liang, C. T., Lee, J. L., & Liang, C. (2015). Interaction of psychological factors in shaping entrepreneurial engagement among computer and electrical engineering students. *European Scientific Journal, ESJ*, 9(16), 67-68.
- Linna, P. (2012). Base of the pyramid (BOP) as a source of innovation: Experiences of companies in the Kenyan mobile sector. *International Journal of Technology Management & Sustainable Development*, 11(2), 113-137.
- Littunen, H. (2000). Entrepreneurship and the characteristics of the entrepreneurial personality. *International Journal of Entrepreneurial Behaviour & Research*, 6(6), 295-310.
- Long, J. S., & Ervin, L. H. (2000). Using Heteroscedasticity consistent standard errors in the linear regression model. *The American Statistician*, 54(3), 217-224.
- Lounsbury, M., & Glynn, M. A. (2019). *Cultural entrepreneurship: A new agenda for the study of entrepreneurial processes and possibilities*. Cambridge University Press.
- Low, A. (2010). *Asian Graduates Entrepreneurs in Small and Medium Sized Businesses in Australia*. *Entrepreneurship and Regional Development*, 22 (1), 97-111.
- Maslakçı, A., Sürücü, L., & Şeşen, H. (2022). Relationship between positive psychological capital and entrepreneurial intentions of university students: the mediating role of entrepreneurial self-efficacy. *World J Entrep Manag Sustain Dev*, 18, 305-319.
- Mburu, S. (2019). Students sinks HELB money into sugarcane farming. Retrieved from <https://www.standardmedia.co.ke/business/article/2001320615/students-sinks-helb-money-into-sugarcane-farming>
- McFarlane, J. (2016). Economic theories of entrepreneurship. *Enterprise: Concepts and*, (15-34).
- Meng, J., & Berger, B. K. (2019). The impact of organizational culture and leadership performance on PR professionals' job satisfaction: Testing the joint mediating effects of engagement and trust. *Public Relations Review*, 45(1), 64-75.

- Merriam, S.B., (1998). *Qualitative Research and Case Study Applications in Education*. San Francisco: Jossey-Bass Publishers.
- Moa-Liberty, A. W., Tunde, A. O., & Tinuola, O. L. (2016). The influence of self-efficacy and socio-demographic factors on the entrepreneurial engagement of selected Youth Corp members in Lagos, Nigeria. *Bulletin of Geography. Socio-economic Series*, (34), 63-71.
- Morris, M. H., Shirokova, G., & Tsukanova, T. (2017). Student entrepreneurship and the university ecosystem: A multi-country empirical exploration. *European Journal of International Management*, 11(1), 65-85.
- Mueni, K. V. (2016). *Factors Determining Entrepreneurial Intentions among University Students in Kenya: A Case of USIU-Africa* (Doctoral dissertation, United States International University-Africa).
- Mulunda, L. (2019). Engineer who built real estate company with student loan. Retrieved from <https://businesstoday.co.ke/engineer-built-real-estate-company-using-helb-loan/>
- Mwendwa, J. (2016). *Influence of social economic factors on youth engagement in agricultural project activities in Yatta Sub-County, Machakos County Kenya* (Doctoral dissertation, University of Nairobi).
- Nachmias, C. & Nachmias, D. (2010). *Research methods in the social sciences*: London:
- Narendra, T. R. R. (2023). *Attitudes and Intentions of Undergraduate Students towards Entrepreneurship as a Career Option in Oman* (Doctoral dissertation, Mizoram University).
- Nazri, M. A., Aroosha, H., & Omar, N. A. (2016). Examination of factors affecting youth's entrepreneurial engagement: A Cross-Sectional Study. *Information Management and Business Review*, 8(5), 14-24.
- Ndemo, B., & Weiss, T. (2017). *Digital Kenya: An entrepreneurial revolution in the making* (p. 509). Springer Nature.
- Niermann, S. (2007). Testing for linearity in simple regression models. *AStA Advances in Statistical Analysis*, 91, 129-139.
- Njeru, P. W., & Wanderi, M. P. (2021). Unemployment Intervention in Africa: A Case Study on Mount Kenya University's Graduate Enterprise Academy. In *Enterprise and Economic Development in Africa*. Emerald Publishing Limited.
- Nsahlai, V. K., Zogli, L. K. J., Lawa, E., & Dlamini, B. I. (2021). An Exploration of Factors that Discourage South African University Students' Entrepreneurial Intention. *Insights into Economics and Management Vol. 11*, 28-39.

- Nyambegera, S. & Kilonzo, P.(2014). Determinants of entrepreneurial intention among university business students in Kenya: lessons from Kenyatta University. *Int. J. Entrepreneurship and Small Business*, 2(2), 231-250.
- Ogundele, O. J. K., Idris, A. A., & Ahmed-Ogundipe, K. A. (2012). Entrepreneurial succession problems in Nigeria's family businesses: A threat to sustainability. *European Scientific Journal*, 8(7), 208-227.
- Ogunsade, A. I., Obembe, D., Woldesenbet, K., & Kolade, S. (2021). Entrepreneurial attitudes among university students: the role of institutional environments and cultural norms. *Entrepreneurship Education*, 1-22.
- Ogunsade, I. A., Obembe, D., Woldesenbet, K., & Vershinina, N. (2018). *Institutional Factors and Youths Entrepreneurial engagement: Evidence from Nigeria*. London, Worth Publishers
- Orugun, J. J. (2016). Poverty Issue and the Entrepreneurial Engagement of Small Scale Enterprises in Nigeria: An Empirical Study. *Journal of Entrepreneurial Development*, 8(19), 23-24.
- Otuki, N. (2013). Varsities' incubation hubs key to Kenya growth. Retrieved from <https://www.businessdailyafrica.com/news/Varsities-incubation-hubs-key-to-Kenya-growth/539546-1759036-v80e8p/index.html>
- Pacut, A. (2020). Drivers toward social entrepreneurs engagement in Poland: An institutional approach. *Administrative Sciences*, 10(1), 5.
- Pérez-Fernández, H., Cacciotti, G., Martín-Cruz, N., & Delgado-García, J. B. (2022). Are interactions between need for achievement and social networks the driving force behind entrepreneurial Intention? A trait activation story. *Journal of Business Research*, 149, 65-76.
- Peterman, N. E., & Kennedy, J. (2003). Enterprise education: Influencing students' perceptions of entrepreneurship. *Entrepreneurship theory and practice*, 28(2), 129-144.
- Prasad, F., & Haran, K. (2010). An exploratory study for measuring consumers awareness and perceptions towards halal food in Pakistan. *Interdisciplinary journal of contemporary research in business*, 3(2).
- Rakib, M., Tawe, A., Azis, M., Syam, A., & Sanusi, D. A. (2020). Determinants of entrepreneurial intention: Empirical study of student entrepreneurs. *Academy of Entrepreneurship Journal*, 26(3), 1-12.
- Republic of Kenya (2012). *A policy framework for science, technology and innovation*. Sessional paper no.1. Retrieved from https://www.strathmore.edu/wp-content/uploads/2016/10/sti_final_policy_draft-1.pdf

- Rokhman, W., & Ahamed, F. (2015). The role of social and psychological factors on entrepreneurial engagement among Islamic college students in Indonesia. *Entrepreneurial Business and Economics Review*, 3(1), 30.
- Ryan, R. M. (1995). Psychological needs and the facilitation of integrative processes. *Journal of personality*, 63(3), 397-427.
- Sahu, D. K., Pawar, S., Gaur, P., & Jain, S. K. (2023). Academic's Motivation for Entrepreneurial Engagement: A Systematic Literature Review. *Journal of Operations and Strategic Planning*, 6(2), 191-210.
- Santoro, G., Bertoldi, B., Giachino, C., & Candelo, E. (2020). Exploring the relationship between entrepreneurial resilience and success: The moderating role of stakeholders' engagement. *Journal of Business Research*, 119, 142-150.
- Satriadi, S., Almaududi Ausat, A. M., Heryadi, D. Y., Widjaja, W., & Sari, A. R. (2022). Determinants of Entrepreneurial Intention: A Study on Indonesian Students. *BISNIS & BIROKRASI: Jurnal Ilmu Administrasi dan Organisasi*, 29(3), 3.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach* (5th Ed.). Chichester, UK: John Wiley & Sons.
- Siegel, D. S., & Wright, M. (2015). Academic entrepreneurship: time for a rethink?. *British Journal of Management*, 26(4), 582-595.
- Sieger, P., Fueglistaller, U., & Zellweger, T. (2016). *Student entrepreneurship 2016: Insights from 50 countries*. Retrieved from http://www.guesssurvey.org/resources/PDF_InterReports/GUESSS_2016_INT_Report_final5.pdf
- Sim, M. S. C., Galloway, J. E., Ramos, H. M., & Mustafa, M. J. (2023). University's support for entrepreneurship and entrepreneurial intention: the mediating role of entrepreneurial climate. *Journal of Entrepreneurship in Emerging Economies*, 15(2), 360-378.
- Sine, W. D., & David, R. J. (2010). *Institutions and entrepreneurship*. Emerald Group Publishing Limited.
- Singh Sandhu, M., Fahmi Sidique, S., & Riaz, S. (2011). Entrepreneurship barriers and entrepreneurial inclination among Malaysian postgraduate students. *International Journal of Entrepreneurial Behavior & Research*, 17(4), 428-449.
- Singh, B., Verma, P., & Rao, M. K. (2017). Influence of individual and socio-cultural factors on entrepreneurial intention. In *Entrepreneurship education* (pp. 149-169). Springer, Singapore.

- Soomro, B. A., & Shah, N. (2022). Entrepreneurship education, entrepreneurial self-efficacy, need for achievement and entrepreneurial intention among commerce students in Pakistan. *Education+ Training*, 64(1), 107-125.
- Stevenson, L., & St-Onge, A. (2005). Support for growth-oriented women entrepreneurs in Ethiopia, Kenya and Tanzania. *International, labor office and Africa development bank, job creation and enterprise department. Tunis: AfDB*.
- Sun, H. J., & Yoon, H. H. (2022). Linking organizational virtuousness, engagement, and organizational citizenship behavior: The moderating role of individual and organizational factors. *Journal of Hospitality & Tourism Research*, 46(5), 879-904.
- Thornton, P. H., Ribeiro-Soriano, D., & Urbano, D. (2011). Socio-cultural factors and entrepreneurial activity: An overview. *International small business journal*, 29(2), 105-118.
- Timmons, J.A & Spinelli, S. (2007). *New venture creation: entrepreneurship for the 21st century*. Boston: McGraw Hill. Mc Clelland, D.C (1965). *Human Motivation*, Cambridge: Cambridge University Press
- Tolbert, P. S., David, R. J., & Sine, W. D. (2011). Studying choice and change: The intersection of institutional theory and entrepreneurship research. *Organization Science*, 22(5), 1332-1344.
- Tongco, M. D. C. (2007). Purposive sampling as a tool for informant selection. *Ethnobotany Research and applications*, 5, 147-158.
- Torres, P., Augusto, M., & Quaresma, R. (2023). The influence of institutional and in-group collectivism practices on next-generation engagement in the family business. *International Journal of Entrepreneurial Behavior & Research*.
- Tulker, D. and Selcuk, S. S. (2009). Which factors affect entrepreneurial intention of university students? *Journal of European Industrial Training*, 33 (2), 142-159.
- Tunio, M. N., Chaudhry, I. S., Shaikh, S., Jariko, M. A., & Brahmi, M. (2021). Determinants of the sustainable entrepreneurial engagement of youth in developing country—an empirical evidence from Pakistan. *Sustainability*, 13(14), 7764.
- United Nations Development Programme (2013). *Kenya's Youth Employment Challenge*. New York: UNDP.
- Veciana, J. M., Aponte, M., & Urbano, D. (2005). University students' attitudes towards entrepreneurship: A two countries comparison. *The International Entrepreneurship and Management Journal*, 1(2), 165-182.

- Verheul, I. & Thurik, R. (2010). *Start-up Capital: Does Gender Matter?* Small Business Economics, 16 (4).
- Viffa Consult (2018). 2018 Kenyan SME Survey. Retrieved from <http://viffaconsult.co.ke/wp-content/uploads/2018/07/2018-SME-Finance-Survey-Report.pdf>
- Wachira, K. (2017). *The Role of University based Business Incubators Strategy on Enterprise Growth in Kenya* (Doctoral dissertation, COHRED, JKUAT).
- Wärneryd, K. E. (1988). The psychology of innovative entrepreneurship. In *Handbook of economic psychology* (pp. 404-447). Springer, Dordrecht.
- Watiri, M. S. (2012). Factors that influence student participation in entrepreneurship among university students; the case of Strathmore University undergraduate students. *Entrepreneurial Business and Economics Review*, 3(1), 44-46.
- Yazici, B., & Yolacan, S. (2007). A comparison of various tests of normality. *Journal of Statistical Computation and Simulation*, 77(2), 175-183.
- Zhai, Q., & Su, J. (2019). A perfect couple? Institutional theory and entrepreneurship research. *Chinese Management Studies*, 13(3), 616-644.
- Zhang, B., Xu, Q., Han, S., & Jiao, L. (2020). Analysis on influences of college students' psychological capital in entrepreneurial learning engagement. *Frontiers in Psychology*, 11, 2029.
- Zhao, E. Y., & Li, Y. (2019). Institutions and entrepreneurship: Broadening and contextualizing the institutional theory in entrepreneurship research. *Quarterly Journal of Management*, 4(2), 15-25.

APPENDICES

APPENDIX I: QUESTIONNAIRE

Dear Interviewer:

I am a student at Laikipia University, doing research on selected factors that affect the entrepreneurial engagement of students in public universities in Nairobi metropolitan region of Kenya. This research will inform the business community, policy makers and the public about the above research. To complete this research, I kindly request you to fill out this questionnaire.

Information provided will be used for educational purposes only and will therefore be treated with utmost confidentiality. Thank you for participating and making this work a success.

Thank you

.....

LEAH WANGUI MUTHUI

MBA STUDENT

APPENDIX II: QUESTIONNAIRE

Please supply the required data by filling in the blanks where space is provided or by ticking [✓] against the most appropriate answer

SECTION A: RESPONDENT BACKGROUND INFORMATION

1. Gender

Female [] Male []

2. How old are you?

18 – 20 years []

21 – 22 years []

23 - 24 years []

25-26 years []

Above 27 years []

3. Do you operate a business around/near the University

Yes [] No []

4. If yes above, what type of business are you in?

Retail (i.e. retail shop, kiosk etc.) []

Service (e.g. saloon, restaurant, clinic) []

Others (please specify).....

5. What is the size of your business as regards to annual sales volume?

Less than 500,000 []

500,000 to 1,000,000 []

Above 1,000,000 []

6. For how long have you been operating this business?

Less than 1 years []

Between 2 and 5 years []

More than 6 years []

SECTION B: PSYCHOLOGICAL FACTORS ON ENTREPRENEURIAL ENGAGEMENTS

1. Does your personality affect your decision to engage in entrepreneurial activities?

Yes ☐

No ☐

Explain your answer

.....

.....

.....

2. To what extent do your personality traits influence your entrepreneurial engagement?

Great extent ☐

Moderate extent ☐

Little extent ☐

No extent ☐

3. To what extent does the following combination of key psychological factors affect entrepreneurial engagements by university graduates in Kenya? A scale of 1-5 where; 5 Very great extent, 4 Great extent, 3 Moderate extent, 2 Little extent and 1 No extent

Psychological factors	1	2	3	4	5
My attitude					
My personality					
Fear of failure					
Passion to engage in business					
Self-confidence					

SECTION C: SOCIO-CULTURAL FACTORS ON ENTREPRENEURIAL ENGAGEMENTS

4. Does your family, social or cultural background affect your decision to engage in entrepreneurial activities?

Yes ☐

No ☐

Explain your answer

5. To what extent does your socio-cultural background influence your entrepreneurial engagement?

Great extent ☐

Moderate extent ☐

Little extent ☐

No extent ☐

5. To what extent do you agree with the following statements on family background influence on entrepreneurial engagements by university graduates? A scale of 1-5 where; 5 Very great extent, 4 Great extent, 3 Moderate extent, 2 Little extent and 1 No extent

Socio-cultural factors	1	2	3	4	5
Role modelling as a result of successful business					
Counselling sessions that made me have interest in entrepreneurship					
This is a sure way of creating employment in my family					
Entrepreneurship is our family culture					
Admiration and passion as a result of a thriving family business					
Need of bringing professionalism in our family business					
I have been forced to join the programme					

SECTION D: INSTITUTIONAL FACTORS ON ENTREPRENEURIAL ENGAGEMENTS

Does your institution affect your decision to engage in entrepreneurial activities?

Yes ☐

No ☐

Explain your answer.....

6. To what extent do the institutional policies, structures, and programs influence your entrepreneurial engagement?

- Great extent ☐
- Moderate extent ☐
- Little extent ☐
- No extent ☐

7. As an entrepreneur to what extent have you been affected by the following institutional factors? A scale of 1-5 where; 5 Very great extent, 4 Great extent, 3 Moderate extent, 2 Little extent and 1 No extent

Institutional factors	1	2	3	4	5
Time constrain delays venturing in entrepreneurship					
Limited pocket money					
My peers discourage me to venture in business					
Lack of role models as my lecturers are yet to venture in business					
The current curricula is much focused in first venturing into a white colour job					
My entrepreneurial knowledge enhances my success in my enterprise					
The current business competition is favourable to my entrepreneurial activities					
I possess strong entrepreneurial knowledge to succeed in my business					

SECTION E: ECONOMIC FACTORS ON ENTREPRENEURIAL ENGAGEMENTS

8. Do economic factors affect your decision to engage in entrepreneurial activities?

- Yes ☐
- No ☐

Explain your answer.....

9. To what extent do economic factors influence your entrepreneurial engagement?

- Great extent ☐
- Moderate extent ☐
- Little extent ☐

10. To what extent does the following combination of key forces affect entrepreneurial engagements by university graduates in Kenya? A scale of 1-5 where; 5 Very great extent, 4 Great extent, 3 Moderate extent, 2 Little extent and 1 No extent

Economic factors	1	2	3	4	5
Availability of accessible credit					
Availability of affordable credit					
Availability of market information					
Adequate knowledge of markets					
Availability of supportive technology					
Ability to afford technology					

ENTREPRENEURIAL ENGAGEMENTS

11. Which of the following combination of key entrepreneurial engagements forces are possessed by university graduates in Kenya? A scale of 1-5 where; 5 Very great extent, 4 Great extent, 3 Moderate extent, 2 Little extent and 1 No extent

Entrepreneurial engagement	1	2	3	4	5
Availability of skilled entrepreneurs					
Availability of skilled employees					
Availability of experienced entrepreneurs					
Adequate networking skills					
Availability of managerial skills					
Adequate planning skills					
Innovative entrepreneurs					
Moderate risk taking entrepreneurs					
Proactive entrepreneurs					

THANK YOU FOR YOUR TIME AND PARTICIPATION

RESEARCH PERMIT

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