

## **ENTREPRENEURSHIP EDUCATION AND ENTREPRENEURSHIP ABILITY OF FEDERAL TERTIARY INSTITUTIONS IN SOUTH WESTERN NIGERIA**

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**ABSTRACT:** The study examined the effect of entrepreneurship education on entrepreneurial ability. The study adopted survey research design. The population of the study consisted of 26,168 final year students of federal tertiary institutions in south-western Nigeria. The study adopted stratified sampling and random sampling techniques. The table of sample size determination was used to determine the sample size at 95% confidence level and 5% margin error to arrive at a sample size of 5234. The elements of population were final year students of the selected federal tertiary institutions in south-western Nigeria. structured questionnaire titled “Entrepreneurship Education and students’ Entrepreneurial ability” the study found that each of the entrepreneurship education variables significantly affects Entrepreneurial ability (Entrepreneurship curriculum;  $B = 1.204$ ,  $R^2 = 0.102$ ,  $F_{(1,1875)} = 212.605$ ,  $P < 0.05$ ) Entrepreneurship Teaching Methods  $B = 1.244$ ,  $R^2 = 0.759$ ,  $F_{(1,1875)} = 5895.815$ ,  $P < 0.05$ ) Entrepreneurship infrastructure  $B = -1.200$ ,  $R^2 = 0.679$ ,  $F_{(1,1875)} = 3958.345$ ,  $P < 0.05$ ) Entrepreneurship mentorship  $B = -1.027$ ,  $R^2 = 0.502$ ,  $F_{(1,1875)} = 1924.612$ ,  $P < 0.05$ ). The results indicated that demographic factors (Age, Gender, and family background) had no statistically significant combined moderating effect on the relationship between entrepreneurship education and entrepreneurial ability. Moderating effect of combined demographic factors on the relationship between entrepreneurship education and entrepreneurial ability;  $B = -0.384$ ,  $\Delta R = 0.000$ ,  $\Delta F = 0.121$ ,  $p > 0.05$  therefore Entrepreneurship education has positive significant effect on entrepreneurial ability of students of selected federal tertiary institutions in south-western Nigeria. The study concluded that entrepreneurship education positively affect entrepreneurial ability of federal tertiary institutions in south-western Nigeria. The study recommended that to promote entrepreneurial ability of selected federal tertiary institutions in south-western Nigeria. Entrepreneurship Infrastructures that can aid entrepreneurial ability of students should be put in place. Appropriate entrepreneurship teaching methods should be adopted and appropriate curriculum should be designed in entrepreneurship education.

**Keywords:** Entrepreneurship Curriculum, Entrepreneurship Teaching methods, Entrepreneurship Infrastructure, Entrepreneurial Mentorship, Demographic

**Word Count:** 285

### **I. Introduction**

Globally, entrepreneurship education has been identified as a process of providing individuals with the knowledge and skills required to recognize business creation opportunities and rudiments needed to act on them (Amah, & Amah-Cletus, 2024; Liangxing Leven Zheng, Piyush Sharma & Leung, 2024). It is a road map to developing entrepreneurial Federal tertiary institutions in South-Western Nigeria through an application of relevant and entrepreneurial-based educational instructions to pursue entrepreneurial activities (Ladokun & Ajayi, 2024) which is why it has come into being in Nigeria tertiary institution in order to curb the rising unemployment. The level of unemployment in Nigeria is 4.1% as at August 24th 2023 (National Bureau of Statistics (NBS) and being corroborated by the statistics of ILO that unemployment in Nigeria as at 2024 stands at 403 million persons. The age long white collar job mindset of Nigerians in the colonial era has been inherited from one generation to another in Nigeria which has turned higher education graduates into job seekers as against employers of labor Oyebanjo, Obadofin, Enitnwa, Oliseyenum and Ajayi (2024). This aggravates graduate unemployment especially, with huge turnout of educated individuals into the labor force on yearly basis. The problem is further worsened with the believe that higher education graduates in Nigeria are best suited for white-collar jobs as they regard white collar job more attractive than being self-employed which has resulted in (Osakede, Lawanson & Sobowale, 2017).

Nigeria as a developing economy is highly informal and has low absorption capacity for educated individuals into formal employment (Olusanya, 2024). This brought about the introduction of entrepreneurship education into the curriculum of higher education institutions. The introduction was based on the premise that entrepreneurship education will equip higher education institutions with both theoretical knowledge and the practical

knowledge which is supposed to bring creative potentials to a learner. Unfortunately in spite of the huge efforts of the government in designing viable entrepreneurship education curriculum in the higher education institutions in Nigeria entrepreneurial Federal tertiary institutions in South-Western Nigeria among higher institution undergraduates has declined (Owotunse, 2018). In consistent with the foregoing, it is important that those factors which arouse higher education institution students' entrepreneurial Federal tertiary institutions in South-Western Nigeria should be adequately understood and developed to implement effective strategies towards reducing graduate unemployment (Eretan, & omotoso, 2024).

In spite of the benefits the introduction of entrepreneurship education has offered to individuals, government and the society at large through Nigeria higher education, many graduates still remain unemployed for a long time after graduation the economic growth of our nation which has been poor lately vis-a-vis wealth creation. The growth of Nigeria as a developing nation has been rated by the World Economic Global Competitive Index (2015) who ranked Nigeria as 38th out 144 countries with \$286.5 billion US dollar using gross domestic product as an indicator. The Gross Domestic Product (GDP) in Nigeria has been fluctuating but was -13.4 as at January 2018 as indicated as sourced from the central bank of Nigeria statistical bulletin. This is an indication that wealth creation through entrepreneurship needs to be focused on. This calls for an understanding of the factors that promote entrepreneurial Federal tertiary institutions in South-Western Nigeria of higher education institution students through entrepreneurship education towards wealth creation in South-Western Nigeria.

This is indicated in the National Bureau of statistics time data which shows that the rate of unemployment per age group during the first quarter of 2017 age group 15 to 24 unemployment rate was 67.3%, 25 to 34 was 42.4% while 35 to 44 was 28.7%, 45 to 54 was 23.9 % and 55 to 64 was 28.4%. Higher education institution students fall between age group of 15 to 24 with unemployment rate of 67.3% and some fall under the age group of 25 to 34 with unemployment rate of 42.4%. This is also corroborated by data on unemployment rate by education group by third quarter of 2017 which indicates that unemployment rate of people with post-secondary education was 50.0%. In third quarter of 2018, the unemployment rate for young people aged 15 to 24, stood at 36.5%, and 24.4% for those aged 25 to 34, making the total youth unemployment rate 29.7% for Q3, 2018. This represents a 4.2 percentage point increase in the youth unemployment rate compared to Q3, 2017. These age groups, 15-24 years and 25-34 years combined represent the youth population in Nigeria and have a combined unemployment and underemployment rate of 55.4%. This indicates that graduates are more likely to face difficulties securing employment and are more likely to be completely idle. This is very worrisome and alarming. It is obvious that Nigeria needs more job creators to address the significant unemployment issues which has affected negatively.

A combined unemployment and underemployment rate of 55.7% as at second quarter 2020 was reported. Specifically, recent unemployment rate in Nigeria jumped to all-time record high of 27.1% in the second quarter of 2020, indicating that about 21,764,614 (21.7 millions) up from 23.1% in the third quarter of 2018. The data showed that the Nigerian youths between the ages of (15-34) are worst hit, with figures jumping from 29.7% in Q3 2018 up to 34.9% Q2 2020 (National Bureau of Statistics (NBS), 2020). This puts the efficacy of both entrepreneurial contents as contained in curriculum and administration of the contents, as being implemented in University Secondary Schools, in doubt. Therefore, this suggests the need to examine the implementations of entrepreneurial subjects in the tertiary education curriculum Aleru & Okere, (2024). The problem of non-functional entrepreneurship curriculum material is a problem that is faced by tertiary education institutions in Nigeria. This problem arises from the fact that the curriculum is too theoretical, which has resulted in a decreased degree of entrepreneurial skills among the students. According to Osakede, Lawanson, and Sobowale (2017), who argue that there is a lack of practical curricular capacity to provide support to the training of students in entrepreneurship education that is expected to awaken entrepreneurial potential, this is backed by the findings of the aforementioned study. Furthermore, Adefokun, Edebor, and Obara (2018) suggest that the content of the entrepreneurship curriculum in higher education is not sufficient for the aim of addressing the issue of graduate unemployment in Nigeria. It was also pointed out by Akinlabi (2019) that the curriculum of higher education is not supported by entrepreneurial infrastructure, which has a negative impact on the teaching of entrepreneurship education. As a result, this has a negative impact on the students' federal tertiary institutions in South-Western Nigeria to be entrepreneurial.

In the process of providing the material of the curriculum for entrepreneurship education, the teaching approaches that have been used have not been successful in stimulating the entrepreneurial ability of students (Agogbua, and Mgbatogu, 2024) this is because of the fact that the majority of entrepreneurship educators use classroom delivery methods that are excessively conventional, this is supported by the findings of Fatoki (2014), who conducted a study that found that the lecture approach is the most common method utilized by instructors of entrepreneurship education at higher education institutions. Furthermore, the study found that this method does not

promote students to develop their entrepreneurial abilities. According to Princitta and Amirtha (2017), higher education institutions do not have the necessary infrastructure for entrepreneurship, which makes it difficult for students to develop their skills to be entrepreneurial. The Nigerian education system has a significant obstacle in the form of facilities and equipment for entrepreneurial infrastructure that are both obsolete and inadequate. According to the Federal Ministry of Education (2009), approximately 15-30% of the infrastructure is either not working, has become obsolete, or is in a state of disrepair. In addition, Fidelis, Ibrahim Ricardo, and Sanjay (2014) discovered that inadequate infrastructure has actually had a negative influence on the entrepreneurial capacity of students. There is a dearth of quality entrepreneurial infrastructure in tertiary education, which is a critical tool for the development of entrepreneurial capacity. However, whenever and wherever education is negatively impacted due to a lack of necessary infrastructures, the stated objectives are not always realized. In the study conducted by (Agborlarhor, 2016) it is posited that there is a lack of infrastructure support for tutoring entrepreneurial education in Nigerian higher education institutions, which results in material delivery that is very inefficient. This finding lends weight to the aforementioned assertion. Students thereby experience a decrease in their capacity for entrepreneurial endeavors. Mentorship is an essential component of entrepreneurial education, according to Hallam and St-Jean (2015), with a particular emphasis on educational programs in developing countries like Nigeria. The absence of mentorship among undergraduate students has led to an increase in the rate of unemployment among this population, which is detrimental to the economy of the nation. In addition, in spite of the methods that assistance is offered by this mentors, there has been a significant amount of failure in business ventures on the side of the insufficient number of graduates who were successful in establishing a company.(2018) Recber, Isiksal, and Koc (Onasanya, 2024).. This study objectively investigated the relationship between entrepreneurship education and entrepreneurial Federal tertiary institutions in South-Western Nigeria among students of selected federal tertiary education institutions in South Western Nigeria.

## **II. Research Objectives**

The main objective of this study is to examine the interaction between entrepreneurship education and entrepreneurial Federal tertiary institutions in South-Western Nigeria among students of Federal higher education institutions in South-West Nigeria.

The specific objectives are to:

- i. determine the effect of curriculum of entrepreneurship on entrepreneurship ability among students of selected federal Higher education institutions in South-West, Nigeria.
- ii. examine the effect of entrepreneurship teaching methods on entrepreneurship ability among students of selected federal higher education institutions in South-West Nigeria.
- iii. investigate the effect of entrepreneurship infrastructure on entrepreneurship ability among students of selected federal higher education institutions in South-West Nigeria.
- iv. investigate the effect of entrepreneurial mentorship on entrepreneurship ability among students of selected federal higher education institutions in South-West Nigeria.
- v. investigate the moderating effect of demographic factors on the relationship between entrepreneurship education and entrepreneurship ability among students of selected federal higher education institutions in South-West Nigeria.

## **III. Research Question**

The stated research objectives necessitated the following research questions:

- i. What is the effect of the entrepreneurship curriculum on the entrepreneurship ability among students of selected federal Higher education institutions in South-West, Nigeria
- ii. How does teaching methods of entrepreneurship affect the entrepreneurship ability among students of selected federal higher education institutions in South-West Nigeria?
- iii. What effect does the presence of entrepreneurship educational infrastructure have on entrepreneurship ability among students of selected federal higher education institutions in South-West Nigeria?
- iv. How does entrepreneurship mentorship affect entrepreneurship ability among students of selected federal higher education institutions in South-West Nigeria?
- v. How does the moderating effect of demographic factors affect the relationship between entrepreneurship education and entrepreneurship ability among students of selected federal higher education institutions in South-West Nigeria?

**Research Hypotheses**

The study was guided by the following hypotheses:

- H<sub>01</sub>: Entrepreneurship curriculum has no significant effect on entrepreneurship ability among students of **selected** federal higher education institutions in South-West, Nigeria.
- H<sub>02</sub>: Entrepreneurship teaching methods has no significant effect on entrepreneurship ability among students of **selected** federal higher education institutions in South-West, Nigeria.
- H<sub>03</sub>: Entrepreneurial infrastructure has no significant effect on entrepreneurship ability among students of **selected** federal higher education institutions in South-West, Nigeria.
- H<sub>04</sub>: Entrepreneurial Mentorship has no significant effect on entrepreneurship ability among students of **selected** federal higher education institutions in South-West, Nigeria.
- H<sub>05</sub>: Demographic factors have no significant effect on the relationship between entrepreneurship education and entrepreneurship among students of **selected** federal higher education institutions in South-West, Nigeria.

**Significance of the Study**

The government through this research would identify the basic and necessary inputs to make available to higher institutions of learning in order to make the products of those institutions in Nigeria relevant for entrepreneurship practices and skill acquisition in the competitive global economy, for the purpose of combating the problem of graduate unemployment in Nigeria. This research would provide useful insight to the government with regards to what possible entrepreneurial infrastructural support can be provided to higher education institution in South-Western Nigeria, in order to enhance the entrepreneurial Federal tertiary institutions in South-Western Nigeria of students towards the fulfillment of the purpose of the introduction of entrepreneurship as a compulsory course in higher institution in Nigeria towards unemployment reduction.

This study would provide empirical evidences that entrepreneurship education could affect entrepreneurial Federal tertiary institutions in South-Western Nigeria based on how specific education components like the curriculum, teaching methods used by tutors of entrepreneurship available entrepreneurship infrastructure, mentorship, and gender could arouse entrepreneurial Federal tertiary institutions in South-Western Nigeria of undergraduates. Findings from the study would enhance pedagogical practices in the teaching of entrepreneurship in the higher institution system which is an indicator of students' performance in entrepreneurship. This study would provide practical, useful and robust approaches to higher education institution policy makers in terms of entrepreneurship approaches. The application of the research findings to federal tertiary institutions in South-Western Nigeria would help in the making of more informed decisions on entrepreneurship education to increase the active participation of students and their entrepreneurial Federal tertiary institutions in South-Western Nigeria in establishing businesses after graduation. This research has the potential to provide important insight to stakeholders on the teaching of entrepreneurship. It would be of immense benefits as a good reference point for the government, on identifying what factors promote entrepreneurial Federal tertiary institutions in South-Western Nigeria of undergraduates. It would also provide useful practical information to higher education institutions' policy makers in making more informed decisions on entrepreneurship programmes in order to increase students' participation in future.

The study would help to advance scientific knowledge in the area of entrepreneurship research by reporting entrepreneurship education and entrepreneurial Federal tertiary institutions in South-Western Nigeria results in South-West, Nigeria. This study would provide empirical evidences for researchers, by filling the gap in existing literature although, there are studies in the area of entrepreneurship education but most of these studies concentrated on entrepreneurship and economic growth. Other researchers in entrepreneurship education would find the information useful for their studies. This study would also provide an insight on theories on entrepreneurship, and extensive information for researchers on how entrepreneurship Federal tertiary institutions in South-Western Nigeria is formed and provide significant implications for the teaching theories of entrepreneurship which would be useful for educators and teachers taking this course to enhance the entrepreneurship behavior of students. And finally, it would be of importance to the society in general because identifying what drives entrepreneurship is crucial to increasing the number of entrepreneurs thereby contributing to an entrepreneurially driven society. With this increase, comes increase in production of goods and services, employment and general wellbeing of society as well as an increase in the gross domestic product of the nation.

**IV. Literature Review****Entrepreneurship Education**

Entrepreneurship education is a form of instruction that imparts specific knowledge to students, fostering qualities such as risk-taking, invention, creativity, and pro-activeness with the aim of generating value (Ladokun &



Ajayi, 2024). Entrepreneurship education is a systematic program that aims to develop entrepreneurial skills and knowledge in individuals. It encourages individuals to cultivate traits such as risk-taking, invention, creativity, and pro-activity (Onasanya, 2024). It is referred to as the set of comprehensive training which lay emphasis on developing business strategies, obtaining money, and effectively managing the business to support its growth Oyebanjo, Obadofin, Enitinwa, Oliseyenum and Ajayi 2024; Muhammad, Mohd Noor, Arfan, 2016, Oluwaseyi, Dawodu, Peters, and Awobotu, 2016; European Union Commission (2010) outline the notion of entrepreneurship education. Education in entrepreneurship basically aims to cultivate personality traits and empower individuals to initiate their own business endeavors by teaching knowledge.

### **Entrepreneurship Curriculum**

The word curriculum is gotten from a Latin verb *curre* meaning "to run/to proceed as race or the course of race. Its first use in educational context was by *Professio Regia* which is a work by professor Petrus Ramus published posthumously in 1576 by Higher education institutions of Paris. The word curriculum is defined as carefully planned set of instruction which act as a guide in the process of teaching and learning to achieve a stated goal. It is important to run the race of curriculum for all students. Today, school documents, Newspaper articles, Committee reports and many academic textbooks refers to all subjects offered or prescribed by the institution as Curriculum of the school. (Kourilsky, 1995; OECD 2010). Innocent and Alice (2016) defined Curriculum as the bulk of the content of a course to be taught to students. While Fathi (2014) referred to it as educational content, objective performance goals, and unpredicted learning experiences

Educational institutions actualize what the society considers as desirable learning. Curriculum is regarded as one of the most important component used in the development of entrepreneurial spirit in the higher education institution students. It contributes an important role in the determination of the orientations and directions of activities which are carried out in higher education institutions and it is certain that the core principle of all educational institutions is not budget but the curriculum which is for the provision of learning and to arouse students' participation in the accomplishment of the objectives of higher education.

In consistence with the foregoing, Amanamah (2017) defines curriculum as an engine which propels education. He explains that as education is central to society so is curriculum the heart and life wire of education. From the institutional perspective Justinah and Hauwah (2016) suggest that higher education institutions curriculum should be made to reflect research about what works, and not what is popular today or tomorrow which means that the curriculum content should enable students to attain the society's expectations, and most importantly, their needs. Curriculum can be regarded as the overall content of an area of study that is to be imparted into the proposed learners. In south-western Nigeria, federal tertiary institutions design their curriculum to prepare learners for their intended outcomes. It is critical for developing entrepreneurial spirit in students and plays a vital role in determining the orientation and direction of activities in higher education institutions. The curriculum is central to society, and it should reflect research on what works rather than what is popular today or tomorrow. The proposed learners will receive the overall content of an area of study. However, the appropriateness of curriculum content in entrepreneurship education is challenging. Most Nigerian higher education institutions currently teach theoretically-based entrepreneurship courses, which do not produce competent graduates who can start businesses or create job opportunities. To produce dynamic graduates who can contribute to the nation's economic development, a curriculum should have a practical orientation.

### **Entrepreneurship Teaching Methods**

According to Mynavathi, Vinnarati, Muthur, Anson, Mary, and Shankar (2018), the term "*paidagogeia*" comes from the Greek language and refers to the instruction of children. This is where the concept of teaching methods originated. The approaches that are utilized in the process of assisting individuals in acquiring knowledge are referred to as teaching methods (Frode, Eirik, Ingrid, & Inger, 2016). Teaching methods are organized and logical, providing consistent lessons with goals and content that cater to the learner's needs. The primary goal of various teaching approaches is to consider the learner's feedback and implement principles and methods as needed. On the other hand, Kurakto and Morris (2018) demonstrated that teaching techniques are a practice-based premise of workable learning and teaching methods and practice, particularly in the context of an academic subject. Additionally, the submission that was made by Fernado (2018) takes into consideration culture and values in relation to teaching techniques. The author emphasized that when defining teaching methods, culture cannot be excluded because it illustrates how objects, procedures, and processes take place in a variety of other contexts. The author defined teaching methods as learning, teaching, and development that are influenced by the cultural, social, and political ideals of the society. In addition, Fatoki (2015) defined teaching methods as a method that is organized and logical, and it is utilized to give consistent lessons with goals and contents that should be targeted toward the needs of the learners. The feedback provided by the learner is taken into consideration by Fatoki (2015), which is the

primary goal of the various teaching approaches. The principles and methods that are utilized during the process of passing instructions are to be implemented as needed and depending on the course and topic that is to be taught, which will go a long way toward assisting in the achievement of the desired learning by students. Despite the fact that there is no one approach that is universally applicable to all situations associated with teaching methods, there are a number of approaches that are utilized. In order for a certain instructional approach to be suitable, it must be in accordance with the characteristics of the learner as well as the kind of learning that it is intended to accomplish. As a result, Fatoki's proposal is even more excellent to the ones that came before it. Various factors, including culture, values, and the needs of learners, influence teaching methods in entrepreneurship

### **Entrepreneurship Infrastructure**

According to Lemer (2013) the term 'infrastructure' was coined in the first half of the 20th century in reference to military installations. Infrastructure includes the basic installations and facilities that are required to operate a locality. The notion of infrastructures is place-specific, representing conditions as they exist within a specific geographic area. Infrastructure is more than physical facilities but it also represents a stream of services provided by these facilities. (Arab, Waseem, Umar, Hafeez, Muhammad, Ibrahim & Hamid, 2013). Entrepreneurial infrastructure is referred to as physical facilities of entrepreneurship, educational facilities or educational resources used to promote teaching and learning of entrepreneurship of federal tertiary institutions in South-Western Nigeria of federal tertiary institutions in South-Western Nigeria and adequacy of infrastructure will have profound impact on the quality of teaching learning process. Ekundayo (2010) describes entrepreneurial infrastructure as the material resources that facilitate effective teaching and learning of entrepreneurship in schools. Uche, Okoli and Ahunanya (2011) defined educational infrastructure as the physical infrastructures which contribute directly to the teaching and learning process of entrepreneurship in the educational system.

Entrepreneurship infrastructure, includes physical facilities and educational resources which plays a crucial role in promoting entrepreneurship education. In south-western Nigeria, the adequacy of infrastructure has a profound impact on the quality of teaching and learning processes. Entrepreneurial infrastructural facilities include lecture theaters, entrepreneurial centers, student hostels, roads, well-equipped classrooms, auditoria, studios, workshops, cafeterias, shops, clinics, staff quarters, information technology, utility production and distribution systems, portable water supply, water and sewer systems, and more. Research has shown a positive relationship between academic achievements and the quality of buildings, advanced laboratories, libraries, and other physical facilities. However, many higher education institutions in Nigeria are characterized by decayed infrastructure, a lack of equipment, limited time for teaching entrepreneurship education, and inadequate workshops. Infrastructure is likely to heighten awareness of entrepreneurship among youths and provide essential services to users, offering common access but low maintenance costs.

Ayeni (2012) sees entrepreneurship education infrastructure as the site, building, furniture and equipment that contribute to a positive learning of entrepreneurship for all students, he explains further that the avail federal tertiary institutions in South-Western Nigeria of learning facilities within an educational institution has positive relationship with the quality of teaching and learning activities which in turn leads to the attainment of goals set. Entrepreneurial infrastructural facilities are very compulsory components of any educational institution and are directly associated with better performance of students not only in academics but also in co-curricular activities. It tends to describe the practices that support learning of entrepreneurship in the environment. The practices referred to follow daily human action and are possibly transferred from daily activities to learning environments (Cynado, 2014). Entrepreneurial infrastructure comes under education infrastructure which is a type of social infrastructure. Thus entrepreneurial infrastructures are the system, facilities and structures put in place to facilitate entrepreneurial learning. A lot of studies have been carried out for nearly a century on how infrastructural facilities affect student learning outcomes and teacher instruction? In a higher education institution environment, infrastructure that are supposed to be on ground include but not limited to lecture theatres, Entrepreneurial centers, student hostels, roads, well equipped classrooms , auditoria, studios, workshops, cafeteria, shops, clinic, staff quarters, information technology, utility production and distributive systems, portable water supply, water and sewer systems, and more (Ebehikhalu & Dawam 2016).

### **Entrepreneurship Mentorship**

The word "mentor" first appears in Greek mythology. Odysseus, the hero of Homer's Odyssey, left his son Telemachus to a tutor before setting sail on his legendary adventure. Mentorship is for guidance and support, networking opportunities, skill development, confidence building above all. Mentorship is defined as a supportive process where the mentor actively engages in the learner's educational journey, demonstrating a commitment to their

growth and development (Ayodele, 2017). In addition, the concepts seeding, catalyzing, and harvesting have been recognized as key aspects of mentorship (Kubberoed & Hagen, 2015). Sowing refers to a scenario in which mentors have the challenge of preparing the learner before they are ready to change. Despite this, the mentor endeavors to provide creative ideas to the mentee. Catalyzing happens when the mentee undergoes a significant amount of pressure and the mentor decides to immerse the learner in a transformative experience that might impact their identity and values. Furthermore, harvesting is employed to foster awareness of the knowledge gained via experience and to derive inferences from those experiences. It involves a developmental relationship where a more experienced entrepreneur (the mentor) provides guidance, support, and knowledge to a less experienced individual (the mentee).

Entrepreneurship mentorship is a powerful tool for personal and professional growth. It involves a developmental relationship where a more experienced entrepreneur (the mentor) provides guidance, support, and knowledge to a less experienced individual (the mentee). Mentorship is for guidance and support, networking opportunities, skill development, and confidence building above all.

### **Entrepreneurship Ability**

Entrepreneurial ability refers to the skills and traits that enable an individual to successfully start, manage, and grow a business. Ira, Sri, Issy, & Mursid, (2024). Key aspects of entrepreneurial ability are not only important for starting a business but also for sustaining and scaling it over time. Developing these skills can help entrepreneurs navigate the complexities of the business world and achieve their goals. Such skills are innovation and creativity skill, risk – taking ability, persistence and resilience, leadership and management skill, financial acumen skill, networking and relationship building skill. Entrepreneurial spirit and abilities The concept of entrepreneurial ability has been the subject of a great number of research; yet, there is no universally accepted definition of the term. The idea of entrepreneurial aptitude was initially presented by Chandler and Hanks (1994), who described it as the capacity to recognize, anticipate, and capitalize on opportunities. Most of the study that has been done on the individual level has focused on examining entrepreneurial capacity as entrepreneurial talent (Thompson 2004) or the traits of entrepreneurs that can be effective and successful in completing the work (Muzychenko 2008); While the organizational dimension describes entrepreneurial ability as the capacity of an organization to acquire resources in accordance with the identified market opportunities, and then to develop those opportunities and generate new markets, the entrepreneurial ability of an organization is different. (2006) According to Arthurs and Busenitz.(2015)An entrepreneur's personal life, opportunity, management, and relationships are the four primary components that comprise the concept of entrepreneurial ability. This is true regardless of the level at which the entrepreneur operates. The ability to be entrepreneurial is described as the product of internal operations, and it is the key to promoting internal operations, according to the management perspective. The ability to be entrepreneurial can be defined in a variety of ways, but first and foremost.

#### **Dimensions Measuring Individual Entrepreneurial Ability**

Author	Perspectives	Measure
Thomas 2000	Individual	opportunity competency, conceptual competency, strategic competence, organizational competency, relationship competency, commitment competency
Cynthia 2003)	Individual	knowledge ability, subject matter, tolerance, problem solving, communication, cooperation, motivation, derivation
Lans 2011)	Individual	Analytical ability, ability to pursue and network capacity

### **Entrepreneurship Curriculum and Entrepreneurship Ability**

Tabitha, Gicuru and Andrew (2016) examine the effect of entrepreneurship curriculum on entrepreneurial intention among University students pursuing entrepreneurship degree in Kenyan Universities. The study investigated the effect of entrepreneurship education of university undergraduates on their intention to become entrepreneurs. The study employed chi-square and Spearman's Rho Correlation. A sample size of 236 from a population of 478 was used for the study and the data was analysed with the use of SPSS and the study found that entrepreneurship curriculum is a positively related to entrepreneurial Ability. In the same vein, Hamid, Muhammad and Fariba, (2015) study the place of entrepreneurial curriculum components in higher education regarding students' intention at the University of Kashan. A sample size of 283 students were selected through the use of random sampling. The research instrument employed in this study is questionnaire. Data was analyzed at inferential level (t-test and multiple ANOVA) using SPSS. The study revealed that there is no significant difference between students' views on entrepreneurial curriculum components in terms of gender, field of study, academic degree and level, and GPA.

Innocent and Alice (2016) investigate the developing and implementing entrepreneurship curriculum in Nigerian library and information science programmes. The study found that Entrepreneurship curriculum in Nigeria Library and information science brings the right entrepreneurial mind-set on student. Chinonye and Akinbode (2014) look into the Entrepreneurship Curriculum and Pedagogical Challenges in Captivating Students' Interest towards Entrepreneurial intention. The study examines how entrepreneurial curriculum can identify and shape students opportunities, help them have access to business concepts, develop operational plans, funds and many more to provide students with another venue for examining entrepreneurial strategies and learning about the successes and failures of new ventures. The study found out that entrepreneurship curriculum is related to intention. Conversely, Parimala and Iiham (2016) studied Entrepreneurship curriculum and Entrepreneurial ability among Malaysian University students: using hypothesized model through Structural Equation Modelling found a significant negative relationship between Entrepreneurship curriculum and entrepreneurial ability.

#### **Entrepreneurship Teaching Method and Entrepreneurship Ability**

Viridu & Golden's study on practical teaching methods and entrepreneurial skills acquisition among business education students at Rivers State University found a high positive relationship between demonstration and group project strategies. The study used a correlational design and 111 instruments for data collection, with 107 successfully retrieved for analysis. In the same vein Mwasalwiba's 2010 study analyzed existing literature on entrepreneurship education, focusing on its alignment with generic objectives, target audience, teaching methods, and impact indicators. The findings suggest a shift towards a single framework, a shift from a start-up perspective to an attitude-changing perspective. However, there is a diversity in the target group, resulting in non-alignment between education and stakeholder goals. The study found that diverse teaching methods can help students develop entrepreneurial intention. Kurland (2003) found a positive association between teaching methods and entrepreneurial intention, while Amari and Abbes (2014) found a significant dependence between teaching methods and entrepreneurial intention. Ikandilo (2014) also examined the Influence of Curricula and Teaching Methods on Entrepreneurial ability of Undergraduate Female Students in Tanzania, and the study found that there is a positive significant relationship between teaching methods and entrepreneurial ability. While Parimala and Illam (2015) investigated Entrepreneurship Education and Entrepreneurial ability adopting Hypothesised Model through Structural Equation Modelling the study found that teaching methods is positively related to entrepreneurial ability of students.

#### **Entrepreneurship Infrastructure and Entrepreneurship Ability**

Terri, Gina, and Mark (2009) found that faculty perceptions of institutional support for academic entrepreneurship are less important than the institution's actual infrastructure strength in predicting entrepreneurial intentions. Bijaya (2016) found a significant relationship between schools' infrastructural facilities, learning environment, and students' outcomes, with a sample size of 320 from 3125 districts. Mutsotso and Nasongo (2013) revealed that lack of adequate infrastructural facilities negatively related to the quality of graduates produced. Agbonlahor (2016) studied the challenges of Entrepreneurial Education in Nigerian Universities, using structural functionalism as the theoretical underpinning. Internal challenges such as funding, relevance, and harmonization of curricula were found to be more invasive than external policy-related challenges, such as inadequate infrastructure. These limitations hinder the integration of entrepreneurship education in Nigerian universities, leading to high transaction costs and inefficient delivery. Terri, Gina, and Mark (2009) found that faculty perceptions of institutional support for academic entrepreneurship are less important than the institution's actual infrastructure strength in predicting entrepreneurial intentions. Arab, Waseem, Umar, Hafeez, Muhammad, Ibrahim & Hamid (2013) found a positive relationship between physical infrastructural facilities and student academic performance and personality development. Bijaya (2016) found a significant relationship between schools' infrastructural facilities, learning environment, and students' outcomes, with a sample size of 320 from 3125 districts. Mutsotso and Nasongo (2013) revealed that lack of adequate infrastructural facilities negatively related to the quality of graduates produced. Agbonlahor (2016) studied the challenges of Entrepreneurial Education in Nigerian Universities, using structural functionalism as the theoretical underpinning. Internal challenges such as funding, relevance, and harmonization of curricula were found to be more invasive than external policy-related challenges, such as inadequate infrastructure. These limitations hinder the integration of entrepreneurship education in Nigerian universities, leading to high transaction costs and inefficient delivery.

#### **Entrepreneurship Mentorship and Entrepreneurship Ability**

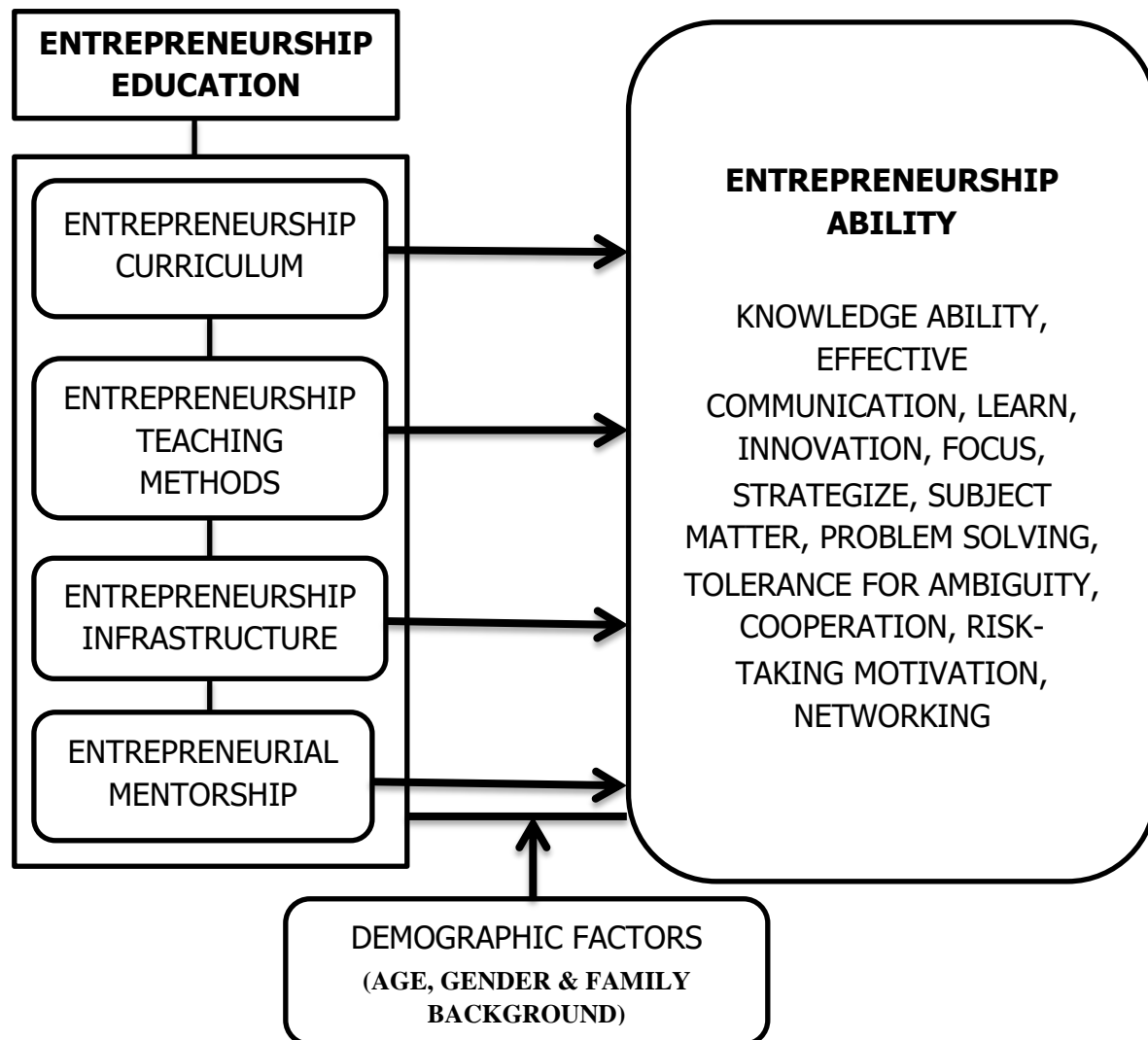
Mentorship programs significantly impact entrepreneurial learning and attitude towards entrepreneurship. They positively affect students' entrepreneurial activities and attitude, activating skills and developing an attitude towards entrepreneurship. However, some studies show a negative relationship between mentorship and entrepreneurial



learning. Policymakers and universities are increasingly focusing on fostering entrepreneurial learning through mentorship programs.

**Demographic factors (Age, Gender & Family Background)**

The first usage of gender was in the 1970 when the American and English feminists used it in gender and gender relations. Recber, Isiksal and Koc (2018) referred to gender as the condition of being male, female, or neuter and it implies the psychological, behavioral, social, and cultural aspects of being male or female, that is masculinity or femininity. Gender refers to the different roles and responsibilities attributed to male and female which goes beyond the biological definition of sex as male and female to the ways in which these biological definitions are constructed in a social context and are historically and culturally contingent (Karimi, Biemans, Lans, Chizari, Mulder, & Mahdei, 2016) contributing to the concept of gender.



(Author's Research Model, 2024)

## **V. Theoretical Review**

### **Theory of Entrepreneurial Event**

The proponents of the theory of Entrepreneurial Event are Shapero and Sokol (1982). The model is aimed at explaining the processes that leads to entrepreneurial event as framework used specifically for determining entrepreneurial Federal tertiary institutions in South-Western Nigeria (EA), rather than predict any Federal tertiary institutions in South-Western Nigeria. The theory of the entrepreneurial event assumes that two prerequisites should be met before starting a new business. Firstly, an individual must perceive the idea of starting a business as credible, that is, he or she finds this idea as both attractive and achievable. Secondly, starting a business is initiated by some type of displacing event which can take the form of neutral, negative or positive experiences. Neutral events may take the form of graduating from higher education institutions. Negative events may include losing one's job, or getting a divorce. Whereas, positive events may include receiving an inheritance or venture capital from a stakeholder (Krueger, 2007; Shapero & Sokol, 1982). The displacement experienced will bring about a change in Federal tertiary institutions in South-Western Nigeria, and if the individual views the idea of starting a business as credible, he or she will act upon this feeling. This is known as the Entrepreneurial Event, where perceived feasibility, perceived desire federal tertiary institutions in South-Western Nigeria and propensity to act influence the Federal tertiary institutions in South-Western Nigeria and in turn the Federal tertiary institutions in South-Western Nigeria of an individual to start a business (Shapero & Sokol, 1982).

## **VI. Methodology**

The study is a descriptive research which adopted primary source of data with questionnaire as the research instrument to collect data on entrepreneurship education and entrepreneurial ability. This study had a target population of 26,168 which consist of students of from students from selected federal tertiary institution in south-western Nigeria. The study had a sample size of 5234 using proportionate sampling method for quality representation. The variables of the study are; Entrepreneurship education (independent Variable) proxy by entrepreneurship curriculum, teaching methods of entrepreneurship, entrepreneurial infrastructure, Entrepreneurial mentorship, Entrepreneurial Federal tertiary institutions in South-Western Nigeria (Dependent variable). Gender (Moderating variable). The target population for this study comprised of all the duly registered final year students of all federal, universities, polytechnics and colleges of education in South-Western Nigeria as at 2023/2024 session. The choice of final year students is based on the premise that they would have been exposed to entrepreneurship education in their respective institutions in the previous levels of study.

The statistical instrument adopted in the analysis of the hypotheses was linear regression and hierarchical regression with the aid of statistical Package for Social Science (SPSS version 21.0). the data was first subjected to content and construct validity of the instrument in order to ensure accuracy of what the instrument was supposed to measure being captured. After which Cronbach's alpha was adopted for the reliability of the items of the study.

The population of the study comprised of the final year students who registered and sat for entrepreneurship lectures and exam at Federal Colleges of Education, Federal Polytechnics and Federal Universities in South-Western Nigeria.

### **Sample and Sampling Procedure**

**Stage 1:** The first stage was the purposive selection of three institutions from each of the university, polytechnic and college of education categories using earlier years of establishment as the threshold. The selected institutions from the university category are Obafemi Awolowo University, Ile-Ife, (1962) University of Lagos, Lagos State (1962) and Federal University Abeokuta. While in the Polytechnic category Yaba College of Technology, Lagos State (1947), Federal Polytechnic, Ilaro, Ogun State (1979) and Federal Polytechnic, Ede were selected (1977) from the Federal college of education category, Federal College of Education Abeokuta, Ogun State (1976), Federal College of Education, (Technical) Akoka, Lagos (1967) and Federal College of Education, SP. Oyo were selected.

**Table 3.1**

	<b>Institution</b>	<b>Population</b>	<b>Sample</b>
1	University of Lagos, Lagos Nigeria	7938	1588
2	Federal University of Agriculture, Abeokuta.	2324	465
3	Obafemi Awolowo University	5029	1006
4	Federal Polytechnic, Ilaro	2700	540
5	Federal Polytechnic, Ede	2032	406

6	Yaba College of Technology, Yaba Lagos.	2833	567
7	Federal College of Education SP. Oyo	1740	348
8	Federal College of Education, Abeokuta	1152	230
9	Federal College of Education, Technical Akoka.	420	84
	<b>Total</b>		<b>5234</b>

**Stage 2:** As indicated above stratified random sampling technique was adopted to demarcate the institutions into nine (9) strata having three institutions from each of the strata. Proportionate sampling technique was further adopted using twenty percentage (20%) of the size of each of the stratum. Furthermore, simple random sampling technique will be used to select the respondents from each stratum.

**Model specification**

**Independent variables**

EE=Entrepreneurship Education

$X = (x_1, x_2, x_3, x_4)$

$X = (EC, ETM, EI, EM)$

EC= Entrepreneurship Curriculum

ETM =Entrepreneurship Teaching Methods

EI= Entrepreneurship Infrastructure

EM= Entrepreneurial Mentorship

**Dependent Variable**

EI=Entrepreneurship Ability

Moderating Variables

$Z = z_1, z_2, z_3$

Where

$Z_1 = \text{Ag: Age}$

$Z_2 = \text{Gd: Gender}$

$Z_3 = \text{Family Background}$

Functional relationships

$Y = f(XZ)$

$Y = f(x_1) \dots \dots \dots i$

$Y = f(x_2) \dots \dots \dots ii$

$Y = f(x_3) \dots \dots \dots iii$

$Y = f(x_4) \dots \dots \dots iv$

$Y = f(X) (z_1, z_2, z_3) \dots \dots \dots v$

Regression Model

$EA = \alpha_0 + \beta_1 x_1 + \mu_i \dots \dots \dots i$

$EA = \alpha_0 + \beta_2 x_2 + \mu_i \dots \dots \dots ii$

$EA = \alpha_0 + \beta_3 x_3 + \mu_i \dots \dots \dots iii$

$EA = \alpha_0 + \beta_4 x_4 + \mu_i \dots \dots \dots iv$

$EA = \alpha_0 + \beta_5 EE + \beta_6 DF(Ag + Gd + Fb) + \beta_7 EEDF + \mu_i \dots \dots v$

$EA_{fti}/fti = EE_{fti}/fti \dots \dots \dots vi$

Where fti= Federal Tertiary Institution

The sample size is five thousand two hundred and thirty four (5234) arrived at from the population of twenty six thousand, one hundred and sixty eight thousand (26,168).from the three categories as shown in table 3.2. Furthermore, considering attrition, 30% of the sample was added to the main sample size to cover up for attrition which will amount to 5234+1570 which will give us an adjusted sample size of six thousand eight hundred and four (6804)

**Table 3.2**

**Sample size according to category (Selected Institutions)**

	Category	Population	Sample Size
1	Federal Universities	15291	3059
2	Federal Polytechnics	7565	1513
3	Federal Colleges of Education	3312	662
	<b>Total</b>	<b>26168</b>	<b>5234</b>

**Source: Researchers' computation**

**Table 3.3: Validity Test.**

	Variables	No of Items	KMO & Bartlett's test
1	Entrepreneurship curriculum	14	0.700 (000)
2	Entrepreneurship Teaching methods	14	0.684 (000)
3	Entrepreneurship Infrastructure	8	0.711 (000)
4	Entrepreneurial Mentorship	10	0.663 (000)
5	Entrepreneurship Ability	15	0.759 (000)

**Source: Computed from pilot study**

**Table 3.4: Reliability Test**

S/N	Variables	No of items	Cronbach's Alpha
1	Entrepreneurship curriculum	14	0.950
2	Entrepreneurship Teaching methods	14	0.717
3	Entrepreneurship Infrastructure	8	0.716
4	Entrepreneurial Mentorship	10	0.907
5	Entrepreneurship Ability	15	0.949

## **VII. Data Presentation**

Inferential statistic (linear regression) was employed to predict the impact of the independent variable on the dependent variable. In this section, the respondents indicated their perception and level of agreement with questions related to entrepreneurship curriculum and entrepreneurial Ability in Federal tertiary institutions in South-Western Nigeria.

**Table 4.1 Model Summary for Regression Analysis for influence of Entrepreneurship curriculum on Entrepreneurship Ability among students of selected federal Higher education institutions in South-Western Nigeria of students**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
1		B	Std. Error	Beta		
	(Constant)	-33.120	5.925		-5.590	.000
	Entrepreneurship Curriculum	1.204	.083	.319	14.583	.000

R = 0.319  
 $R^2 = 0.102$   
 $F(1,1875) = 212.615; , p < 0.05$

**Dependent Variable: Entrepreneurship Ability**

Here the study revealed that entrepreneurship curriculum has positive and significant influence on entrepreneurial Federal tertiary institutions in South-Western Nigeria of students of selected federal tertiary institutions in South-



Western Nigeria ( $\beta_1 = 1.204$ ,  $t = 14.583$ ,  $p < 0.05$ ). The R-squared value reveals that entrepreneurship curriculum explained 10.2 percent of the variance in entrepreneurial Federal tertiary institutions in South-Western Nigeria of students of selected tertiary institutions in South-Western Nigeria ( $R^2 = 0.102$ ,  $F = 212.615$ ;  $p < 0.05$ ), while 89.2% of the variations are explained by other factors not included in the model. The F-ratio is 212.615, and its p-value was 0.000 which is less than the critical value. This implies that entrepreneurship curriculum have significant influence on entrepreneurial Federal tertiary institutions in South-Western Nigeria of students at  $p < 0.05$ . From the results in Table 4.1, the established regression equation was:

$$EA = -33.120 + 1.204EC$$

Where:

EA = Entrepreneurship Ability

EC = Entrepreneurship Curriculum

From the above regression equation, taking all factors constant at zero, Entrepreneurial Ability Federal tertiary institutions in South-Western Nigeria of students was -33.120. The regression coefficient of Entrepreneurship Curriculum was 1.204, which implies that a unit increase in Entrepreneurship Curriculum would lead to 1.204 increases in entrepreneurship ability of students of Federal tertiary institutions in South-Western Nigeria. The significant value is less than 0.05. Overall, the result in Table 4.1. reveals that Entrepreneurship Curriculum highly affected the entrepreneurial ability of students of selected Federal tertiary institutions in South-Western Nigeria. Therefore, the null hypothesis one ( $H_{01}$ ) which states that Entrepreneurship curriculum has no significant effect on entrepreneurial ability of students in selected Federal tertiary institutions in South-Western Nigeria.

The finding of hypothesis one revealed that entrepreneurship curriculum has a significant influence on entrepreneurship ability of students of selected federal tertiary institutions in South-western Nigeria. The result is supported by Tabitha, Gicuru and Andrew (2016); Chinonye and Akinbode (2014); Innocent and Alice (2016) who also worked same line of research.

**Table 4.2 Model Summary for Regression Analysis for effect of Entrepreneurship Teaching Methods on Entrepreneurship Ability among students of selected among students of selected federal Higher education institutions in South-Western Nigeria of students**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-12.465	.906		-13.756	.000
	Entrepreneurship Teaching Methods	1.244	.016	.871	76.784	.000
R = 0.871; R <sup>2</sup> = 0.759; F(1,1875) = 5895.815, $p < 0.05$						

**Dependent Variable: Entrepreneurship Ability**

In order to test the hypothesis two, linear regression analysis was used. Table 4.2 illustrates regression analysis to show effect of teaching methods on entrepreneurship Ability of students of selected Federal tertiary institutions in South-Western Nigeria. The analysis indicated that Teaching methods have no significant effect and entrepreneurial ability of students of selected Federal tertiary institutions in South-Western Nigeria. The data for teaching methods and entrepreneurship curriculum were created by summing responses of all items for each of the variable. The results of the regression are presented in Tables 4.2. The table shows the Unstandardized coefficient of Entrepreneurship teaching methods to be 1.244 ( $\beta_2 = 1.244$ ,  $p = 0.000$ ) meaning that Entrepreneurship teaching methods have statistically significantly effect on entrepreneurship Ability of students of selected Federal tertiary institutions in South-Western Nigeria. This is further shown as  $F = 5895.815$  and p-value of 0.000 which is less than the adopted level of significance of (0.05). This shows that Entrepreneurship teaching methods were significant predictor of entrepreneurial ability of Federal tertiary institutions in South-Western Nigeria according to graduate students. The Table shows that there is a high correlation ( $R = 0.871$ ) between Entrepreneurship teaching methods and entrepreneurship ability of students of selected Federal tertiary institutions in South-Western Nigeria. Further evidenced is the fact that the percentage of variance in entrepreneurship ability of Federal tertiary institutions in South-Western Nigeria explained by Entrepreneurship teaching methods is about 75.9%. This shows that Entrepreneurship teaching method account for 75.9% of the variations in entrepreneurship ability of students of

selected Federal tertiary institutions in South-Western Nigeria. The resulting regression model from the analysis was given by:

$$EA = -12.465 + 1.244TM \dots\dots\dots \text{Equation (4.2)}$$

Where:

EA = Entrepreneurship Ability

ETM = Entrepreneurship Teaching Methods

From the regression model, taking all factors constant at zero, Entrepreneurship ability of students of selected Federal tertiary institutions in South-Western Nigeria of students was -12.465. The regression coefficient of Entrepreneurship teaching methods was 1.244, which implies that a unit increase in teaching methods would lead to 1.244 increases in entrepreneurial Federal tertiary institutions in South-Western Nigeria of students. The significant value is less than 0.05. Therefore, the null hypothesis two ( $H_{02}$ ) which states that teaching methods has no significant effect and entrepreneurship ability of students of selected Federal tertiary institutions in South-Western Nigeria.

The finding of this study is consistent with the study of Kurland (2003) that the methods of teaching of entrepreneurship have positive association with entrepreneurship ability. In the same vein Amari and Abbes (2014) assessed the influence of individual factors on the entrepreneurship ability, the study found that there is a significant relationship between teaching methods and entrepreneurship ability also in the order of the study of Marshall, Eastman, Rajesh, Stanley and Boatwright (2011).

**Table 4.3: Model Summary for Regression Analysis for influence of Entrepreneurship Infrastructure on Entrepreneurial Ability among students of selected federal Higher education institutions in South-Western Nigeria of students**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	114.182	1.040		109.786	.000
	University Infrastructure	-1.200	.019	-.824	-62.915	.000
R = 0.824; R <sup>2</sup> = 0.679; F(1,1875) = 3958.345, p<0.05						

**Dependent Variable: Entrepreneurship Ability**

To test the hypothesis three, linear regression analysis was used. The data for Entrepreneurship infrastructure and entrepreneurship Ability were created by summing responses of all items for each of the variable. The results of the regression are presented in Tables thus

Table 4.3 shows the results of regression analysis between entrepreneurship infrastructure and entrepreneurial ability. It is indicated in the table that entrepreneurship infrastructure has negative and significant effect on entrepreneurial ability of students of selected Federal tertiary institutions in South-Western Nigeria in ( $\beta_3 = -1.200$ ,  $t = -62.915$ ,  $p = 0.000$ ). The result is attributed to the fact that there is ineffective and inadequate provision of entrepreneurship infrastructural facilities in some of the federal tertiary institutions in South-Western, Nigeria of study such as irregular electricity power supply, poor funding, and so on which are stumbling blocks to teaching and learning process despite the reality that there are funds allocated to the provisions of these infrastructure. The table shows that entrepreneurship infrastructure affects entrepreneurial ability of Federal tertiary institutions in South-Western Nigeria with F-statistics of 3958.345 and P-values of 0.000 which is less than the significance level of 0.05 adopted for this work. Furthermore, the Table indicates that entrepreneurship infrastructure are responsible for 67.9% variance in entrepreneurial ability of students of Federal tertiary institutions in South-Western Nigeria. The resulting regression model from the analysis was given by:

$$EA = 114.182 - 1.200EI \dots\dots\dots \text{Equation (4.3)}$$

Where:

EA = Entrepreneurship Ability

EI = Entrepreneurship Infrastructure

From the regression model, taking all factors constant at zero, Entrepreneurial ability was 114.182. The regression coefficient of Entrepreneurship Infrastructure was -1.200, which implies that a unit increase in entrepreneurship Infrastructure would lead to 1.200 decrease in entrepreneurial ability of Federal tertiary institutions in South-

Western Nigeria. The significant value is less than 0.05. Based on these findings, the null hypothesis three ( $H_{03}$ ) which states that entrepreneurship infrastructure has no significant effect on entrepreneurial ability of students of selected Federal tertiary institutions in South-Western Nigeria is hereby not rejected. The result agreed with the study of previous researchers like the study of Arab, Waseem, Umar, Hafeez, Muhammad, Ibrahim and Hamid (2013); Terri, Gina and Mark (2009) who found that Universities do not have adequate facilities. The result is attributed to the fact that there is ineffective and inadequate provision of infrastructural facilities in some Universities such as functional entrepreneurial centres irregular electricity power supply, criminal wastages of resources by many leaders, poor funding, and so on which are stumbling block to teaching and learning process despite the reality that there are funds allocated to the provisions of these infrastructure

To test hypothesis four, the researcher used linear regression analysis. The data for Entrepreneurial mentorship and entrepreneurship Federal tertiary institutions in South-Western Nigeria were created by summing responses of all items for each of the variable. The results of the regression are presented in Table 4.4

**Table 4.4 Model Summary for Regression Analysis for effect of Entrepreneurial Mentorship on Entrepreneurship Ability among students of selected federal Higher education institutions in South-Western Nigeria of students**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	118.730	1.568		75.741	.000
	Entrepreneurial Mentorship	-1.027	.023	-.712	-43.870	.000
R = 0.712; R <sup>2</sup> = 0.502; F <sub>(1,1875)</sub> = 1924.612, p<0.05						

**a. Dependent Variable: Entrepreneurship Ability**

The regression analysis of Entrepreneurial Mentorship and Entrepreneurship ability is presented in Table 4.4 The result of the regression analysis indicated that Entrepreneurial Mentorship has negative and significant effect on Entrepreneurial ability of students of selected Federal tertiary institutions in South-Western Nigeria of students of selected federal tertiary institution in South-Western Nigeria with  $\beta_4 = -1.027$ , t-statistics of -43.870 and P-value of 0.000 which is lower than the level of significance 0.05 adopted for the study. The Table shows that Entrepreneurial Mentorship have significant effect on entrepreneurial ability ( $R^2 = 0.502$ ;  $F = 1924.612$ ,  $p < 0.05$ ). In addition, the Table shows that Entrepreneurial Mentorship contributes 50.2% variance in entrepreneurship ability of students of selected Federal tertiary institutions in South-Western Nigeria. The regression model explaining the variance in entrepreneurship ability of students of selected Federal tertiary institutions in South-Western Nigeria. Entrepreneurial Mentorship was stated as follows:

$$EA = 118.730 - 1.027EM \text{ ..... Equation (4.4)}$$

Where;

EA = Entrepreneurship Ability

EM = Entrepreneurial Mentorship

According to the regression model above, taking all factors constant at zero, Entrepreneurial mentorship was 118.730. The unstandardized coefficient of Entrepreneurial Mentorship was -1.207, which implies that a unit increase in entrepreneurship mentorship would lead to 1.207 decreases in entrepreneurial ability of students of selected Federal tertiary institutions in South-Western Nigeria. The significant value is less than 0.05. Therefore, the null hypothesis four ( $H_{04}$ ) which states that Entrepreneurial Mentorship has no significant effect on entrepreneurial Federal tertiary institutions in South-Western Nigeria of students of selected federal tertiary institutions in South-Western Nigeria. The result of hypothesis four revealed that Entrepreneurial Mentorship has significant effect on entrepreneurial ability of students of selected federal tertiary institutions in South-Western Nigeria. The finding is supported by the previous researchers such as Hamid and Aliyu (2017), Nasiru, Keat and Bhatti (2015), and Saadat, Shumaila and Mirella, (2014). Hamid and Aliyu (2017) found that entrepreneurship mentorship is very important to developing entrepreneurial ability.

**Table 4.5 Regression Results for the combined moderating Effect of Demographic Factors on the Relationship between Entrepreneurship Education and Entrepreneurship Ability among students of selected federal Higher education institutions in South-Western Nigeria of students**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.351 <sup>a</sup>	.123	.123	25.858	.123	263.573	1	1875	.000
2	.481 <sup>b</sup>	.231	.230	24.229	.108	87.860	3	1872	.000
3	.481 <sup>c</sup>	.232	.229	24.235	.000	.121	1	1871	.728
a. Predictors: (Constant), Entrepreneurship Education									
b. Predictors: (Constant), Entrepreneurship Education, Gender, Family Background, Age									
c. Predictors: (Constant), Entrepreneurship Education, Gender, Family Background, Age, Entrepreneurship Education*Age*Gender*Family Background									

**Dependent Variable: Entrepreneurship Ability**

Table 4.5 illustrates the summary of the moderating effect of demographic factors (Age, Gender, family background) on the relationship between entrepreneurship education and entrepreneurial ability of students of selected Federal tertiary institutions in South-Western Nigeria. Demographic factors (Age, Gender, family background) have no significant moderating effect on Entrepreneurship education and entrepreneurial ability of selected Federal tertiary institutions in South-Western Nigeria of students of selected federal tertiary institutions in South-Western Nigeria. Hypothesis five ( $H_{05}$ ) was tested using moderated (hierarchical) multiple regression analysis. Stone and Hollenbeck (1998) in their study recommended that multiplying the proposed moderator by the independent variable created linear-by-linear interaction terms. After entering the proposed main effects into the equation, the multiplicative terms were added. The regression weights for the multiplicative/interaction terms were then examined for significance. The regression weights were then compared when entrepreneurship education was controlled and when it is present. The difference was attributed to the moderating effect of entrepreneurship education. In the regression model, entrepreneurial ability of students of selected Federal tertiary institutions in South-Western Nigeria was the dependent variable; entrepreneurship education was independent variable and demographic factors (Age, Gender, and family background) were the moderating variables.

The results show that the correlation coefficient (R) of Entrepreneurship Education is 0.351, when the parameter of demographic factors (Age, Gender, and family background) is added it increases to 0.481, with addition of the parameter of the interaction of entrepreneurship education and demographic factors it remains constant at 0.481. The correlation between entrepreneurship education, demographic factors and entrepreneurial ability of students of Federal tertiary institutions in South-Western Nigeria is low. The results further indicate that there are different variations in entrepreneurial ability of students of selected Federal tertiary institutions in South-Western Nigeria accounted by entrepreneurship education and demographic factors. The coefficient of determination,  $R^2 = 0.229$  explains that 22.9% of the variations of entrepreneurial Federal tertiary institutions in South-Western Nigeria have been explained by the variables of entrepreneurship education, demographic factors and the interaction of entrepreneurship education and demographic factors. 77.1% of the variations are explained by other factors, which are not part of this study.

The conclusion is that the regression model for the entrepreneurial ability of students of Federal tertiary institutions in South-Western Nigeria does not have a good fit. When parameter of demographic factors is added, the change of the coefficient of determination ( $\Delta R^2$ ) increases by 10.8%. With a further addition of the parameter of the interaction of entrepreneurship education and demographic factors the percentage of variable entrepreneurial Ability accounted for reduction to 0.000. The corresponding F-ratio for the model, entrepreneurship education F-ratio is 263.573. When the parameter of demographic factors is added, the change in F-ratio is 87.860, with a further addition of the parameter of the interaction of entrepreneurship education and demographic factors the change in F-ratio is .121. The corresponding p-value for the model, entrepreneurship education is significant ( $p < 0.05$ ). When the parameter of demographic factors is added model two is also significant ( $p < 0.05$ ), with a further addition of the interaction of entrepreneurship education and demographic factors Model 3 is not significant ( $p > 0.05$ ). The results indicate that demographic factors (Age, Gender, and family background) has no statistically significant combined effect on the



relationship between entrepreneurship education and entrepreneurial Federal tertiary institutions in South-Western Nigeria.

**Table 4.6: Regression Coefficients for the Combined Effect of Demographic Factors on the Relationship between Entrepreneurship Education and Entrepreneurship Ability among students of selected federal Higher education institutions in South-Western Nigeria of students**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	133.787	5.023		26.637	.000
	Entrepreneurship Education	.338	.021	.351	16.235	.000
2	(Constant)	135.474	5.416		25.013	.000
	Entrepreneurship Education	.289	.020	.300	14.577	.000
	Age	-17.439	1.143	-.312	-15.263	.000
	Gender	6.108	1.177	.105	5.191	.000
	Family Background	-.629	1.126	-.011	-.559	.576
3	(Constant)	132.812	9.370		14.174	.000
	Entrepreneurship Education	.286	.022	.297	12.848	.000
	Age	-16.728	2.340	-.300	-7.150	.000
	Gender	6.658	1.969	.115	3.382	.001
	Family Background	-.024	2.072	.000	-.011	.991
	Entrepreneurship Education*Age*Gender*Family Background	-.001	.003	-.021	-.348	.728
<b>a. Dependent Variable: Entrepreneurship Ability</b>						

From the regression analysis in Table 4.6, the regression equation (Using standardized coefficient) established was:

$$EA = 132.812 + .297EE - .300Age + .115Gender - .011FB - .348EE*DF$$

Where:

EI = Entrepreneurship Ability

EE = Entrepreneurship Education

FB = Family Background

DF = Demographic Factors (Age, Gender and Family Background)

EE\*DF = Interaction of Entrepreneurship Education and Demographic Factors

The moderated regression results shows that combined demographic factors have no statistically significant moderating effect on the relationship between Entrepreneurship Education and Entrepreneurial ability of students of selected Federal tertiary institutions in South-Western Nigeria Therefore, the null hypothesis five ( $H_{05}$ ) which states that Based on these findings, the null hypothesis five ( $H_{05}$ ) which states that combined demographic factors (Age, Gender, family background) have no significant moderating effect on Entrepreneurship education and entrepreneurial ability of students of Federal tertiary institutions in South-Western Nigeria is hereby not rejected. Hence, we conclude that the relationship between Entrepreneurship education and entrepreneurial Ability of students of selected Federal tertiary institutions in South-Western Nigeria does not depends on combined demographic factors. The finding of hypothesis five showed that combined demographic factors (Age, Gender, family background) have no significant moderating effect on Entrepreneurship education and entrepreneurial ability of students of selected federal tertiary institutions in south-western Nigeria. The finding is in contrast with several studies particularly outside Nigeria. For example, Indira (2014) found that there is a significant positive relationship between demographic family business, prior employment experience, parental occupation, parental education, and family business background and entrepreneurial intention. While Age, gender, and income bracket were negatively related to entrepreneurial intention. Also, Camen, Juan, and Jose (2016) revealed that perceptual factor mediate the relationship between gender and the entrepreneurial intention of non-entrepreneurs, while the mediating impact disappears when people become entrepreneur.

The finding is however consistent with Ahmed (2010), Ishfaq, Muhammad, Zafar, Muhammad, Ahmad, Wasim, and Naveed (2010); Mohammad, Shariq and Samir (2016); Raposo, do Paço, and Ferreira (2008) found out that one cannot differentiate entrepreneurial ability on the bases of age, gender and background the study concluded that there is no significant relationship between demographics factors and entrepreneurial ability of students and several other empirical Studies have highlighted gender differences concerning entrepreneurial abilities, potentials and other entrepreneurial attributes (Shinnar, Giacomini, & Janssen, 2012; Díaz-García & Jiménez-Moreno, 2010; Yordanova & Tarrazon, 2010).

### **VIII. Conclusion and Recommendation**

The extant literature shows that entrepreneurship contributes to economic development, eradication of unemployment, bring about innovation, and increase standard of living among others. Due to the contribution of entrepreneurship to the nation and the increasing problem of graduate unemployment, it is very important to understand the factors that contribute to increasing entrepreneurship. The low but increasing literature on the influence of entrepreneurship education and entrepreneurial ability revealed that findings at present are contradictory. Aside, the rate of studies from developing countries on entrepreneurship education and entrepreneurial ability with educational variables as follows, Entrepreneurship Curriculum, Entrepreneurship Teaching methods, Entrepreneurship Infrastructure, Entrepreneurship Mentorship and demographic factors in predicting students' entrepreneurship ability which is low in Higher Educational Institutions, Federal Ministry of Education and government in Nigeria should be of concerned since entrepreneurial education leads to entrepreneurial ability and can automatically lead to entrepreneurial development which is vital for drastic reduction in unemployment rate and the economic activities accrued from it can lead to accelerated growth of the Nigerian economy.

The findings of this study suggest that in order to promote graduates' entrepreneurship into venture creation or start-up, efforts will be required from policy makers to help shape institutions, educators to re-design and use appropriate entrepreneurship education curriculum content and Teaching Methods, most importantly the study shows that Infrastructure to promote entrepreneurship education in most universities are dilapidated appropriate Entrepreneurship infrastructures to promote entrepreneurial ability of undergraduates should be put in place and the support given by the tertiary institutions which can bring about encouragement on the part of the scholars to develop entrepreneurial ability should be given highest priority.

The study reveals that Entrepreneurship Curriculum has high influence on the entrepreneurial ability of students. The Nigerian tertiary institutions need to re-evaluate the curriculum if they are to promote entrepreneurship in an effective way. Also the study revealed that Entrepreneurship teaching methods has significant effect and entrepreneurial ability of students because of this, teaching of entrepreneurship courses should not be undertaken solely in classroom settings, but rather as a process which involves hands –on learning or practical classes where start-up businesses trainings, entrepreneurial activities, and reflective practices could be taught is acquired by the students. Incorporating real-world practice of business creation as part of coursework by the students from the first to the last year of their courses is a way of encouraging them for the graduates to have entrepreneurial ability, as the focus is on entrepreneurship recognition, resource planning, team development and value creation. Courses on Starting business can be inculcated into the entrepreneurship courses this will assist the students in developing a level of insight and confidence from practicing methods for navigating unknown territories, experience success and failure, decision-making, gain knowledge and importance of leadership, managing human resources, and effective communication skills.

Practical approaches like business plan, experimental games competitions should be introduced into the entrepreneurship curriculum to make it more interesting. The purpose of this method of teaching is to impact business creation ideas into the students, as an entrepreneur, uses his or her time and money in relation to the business, employees and the community. The well known traditional-based classroom teaching and approaches need to be overhauled. An entrepreneur friendly environment to instil entrepreneurial behaviour among the students needs to be created as a support by the universities. It is essential to promote an entrepreneurial environment through the introduction of entrepreneurial courses and entrepreneurial activities. Entrepreneurial clubs could be set up to coordinate and organise entrepreneurial activities this will exposed the students to practical experiences of entrepreneurship and to real-business world situations through active participation.

The universities should cultivate an enterprise culture across campuses to influence the students' decisions for business creations. It is important to present a positive image of entrepreneurship as a career option to draw the

students' attentions within the university environment. Even though individuals have the relevant knowledge and skills, they must have an interest, motivation and a positive image to venture into the business field. Though the current programs and activities in Nigerian universities are in line with the government policies there is a need to emphasise and cultivate a strategic direction towards entrepreneurship to achieve the national objectives.

Based on the findings this current study proposes some recommendations for action. The result of the study suggests that entrepreneurship curriculum significantly influence entrepreneurial ability of students of selected Federal tertiary institutions. Hence Specific entrepreneurial courses should be included in the curriculum to develop entrepreneurial knowledge and skills, such as Digital Entrepreneurship, Fintech, crypto-currencies entrepreneurial finance, creativity and innovation, problem solving and decision making, critical thinking and marketing. Innovative co-curricular programs, outside the classrooms should be introduces the courses should not be heavily academic but hand-on learning along with the emphasis on business competencies and like leadership skills and entrepreneurial skill and many more. Also the faculty members are to be encouraged to attend seminars and workshops on entrepreneurship in order to equip them with all necessary training needed to teach entrepreneurship education. Government should make available Entrepreneurship infrastructure to promote entrepreneurial ability among university undergraduates most especially entrepreneurial centres, uninterrupted power supply, internet facilities and many more. It is pertinent to present a positive image of entrepreneurship as a career option through mentorship to draw the students attentions within the university environment. Even though individuals have the relevant knowledge and skills, they must have an interest, motivation and a positive image to venture into the business field. Findings also suggest that when demographic variables are combined they do not moderate the relationship between entrepreneurship education and entrepreneurial ability. But when they are applied individually the effect of entrepreneurship education and entrepreneurial ability relationships is obvious. Hence it is recommended that demographic factors should be applied individually and not be treated as combined factors for it to affect ability.

### **Contribution to Knowledge**

The findings of this study made important contributions to knowledge in the following ways.

This study made a contribution to knowledge by submitting significant background to the various concepts of entrepreneurship education and entrepreneurial ability. The study accessed entrepreneurship and the various notions of entrepreneur. The study also looked into the key entrepreneurship variables such as entrepreneurship curriculum Entrepreneurship Teaching Methods, Entrepreneurship, Entrepreneurship Infrastructure, mentorship and how they affect entrepreneurial ability. The present study gives researchers opportunities and authorities of tertiary institutions to understand these variables in order to increase the entrepreneurial ability of undergraduates. This study made a contribution to knowledge with the development of the researcher's conceptual model. And defines entrepreneurship education as, every activity that is geared towards equipping an individual with the knowledge and skill that is needed to pursue entrepreneurial activities i.e starting a business, run it successfully and nurture it to grow. While defining entrepreneurial ability of students as the state of mind occupied with the premonition of starting a business. The underpinning theory for the study is the entrepreneurial event theory. The study contributes to knowledge theoretically by further confirming the applicability on federal tertiary institutions in South-Western Nigeria of the entrepreneurial event theory.

The current variables under study (Entrepreneurship education, Entrepreneurship Teaching methods, Entrepreneurship infrastructure, mentorship moderators like Age, gender and family background expand knowledge in the subject of entrepreneurship education and entrepreneurial ability of tertiary institution undergraduates undergraduates. By conducting this research in South-Western, Nigeria, the study confirms the applicability on federal tertiary institutions in South-Western Nigeria of the basic entrepreneurial ability model and effect of entrepreneurship education variables on entrepreneurial ability in a developing country context.

Furthermore, extant literature indicates that the link between teaching methods and entrepreneurial ability is not clear but this present study indicates the nexus between teaching methods and entrepreneurial ability. The study found out that practical approaches to teaching entrepreneurship education are positively related with entrepreneurial ability. The present study submits that practical approaches to the Entrepreneurship teaching of entrepreneurship education is preferable this is because it gives room for entrepreneurship education to go beyond learning from the module and embracing hand-on learning i.e learning by doing. Which is important because entrepreneurship education delivery is criticized widely on the basis of the classroom delivery that centres on lectures as a prominent teaching method? Entrepreneurship education teaching methods should include experiential learning for it to be practical.

Also the relationship between entrepreneurship education and entrepreneurial ability has mixed conclusion. Some studies found that entrepreneurship education is positively related to entrepreneurial ability while others report a negative relationship between the two. But this study contributes to knowledge empirically by establishing that

entrepreneurship education evaluated with finer educational variables like Teaching methods, University infrastructure and Perceived University Support reveals that entrepreneurship education is positively related to entrepreneurial ability.

### **Implication of findings**

The findings of this research have implication for policy makers and educational institutions on how best to implement strategies to advance entrepreneurship education and inculcate factors that can considerably affect the decision for start-ups. In order to increase graduate involvement in new venture creation there is need to for a multi-facet approach, specifically, coordinated policies and strategies are required to promote entrepreneurship education, training as well as favourable regulatory framework favourable regulatory mechanism should include easy access to finance, sustained business advisory and training services, simplified regulations as well as affordable relevant infrastructure and technology. Government could also develop and implement coordinated nationwide policies and strategies to promote start-up and SME growth. Such policies and strategies should address concerted collaborative mechanism among educational institutions. Government and non-government entrepreneurship support agencies and local authorities to promote entrepreneurship. A well functional infrastructural support should be put in place in universities to bring about entrepreneurial ability of students.

The implication of this study is also to provide a platform for authorities of tertiary education institutions to have access to information on significant factors that are linked to undergraduates' entrepreneurial ability. To contribute to new venture creation, entrepreneurship education offerings should focus on content and methods of delivery which allow participants to engage in activities that enable one to understand the entrepreneurial process and its behavioural requirements..

This study provides the Nigerian society of Entrepreneurs and the society in general to further access and explore on the influence of Entrepreneurship curriculum, teaching methods, university infrastructure, perceived university support and demographic factors on the ability to be entrepreneurs in different fields of study in the content of local or national differences. This study provides the scholar with detailed information about the entrepreneurial ability among undergraduates in Universities by investigating entrepreneurial ability, researchers can identify the entrepreneurial activity easily and be well informed about the rudiment of entrepreneurial process.

### **Suggestions for Further Studies**

First, the present study employed the survey method that used a set of questionnaires as research instrument. Future studies could consider the use of other research instrument, such as interviews and focus groups, to collect the required data for measuring entrepreneurship education and entrepreneurial ability. Second, future research may be conducted in other tertiary institutions by modifying some of the dimensions found in the present study. Such studies could enrich knowledge on variables in the evaluation of entrepreneurial ability within the entrepreneurship education settings. Third, Future studies could further carry out the research from two or more countries at the same or different levels of economic development could be compared. Furthermore, Future research should examine the similarities between postgraduates and undergraduates in order to test whether students with more educational experiences have a stronger desire to set up a business. Lastly, studies could further compare samples of participants in short and long entrepreneurship programmes and evaluating their ability within the entrepreneurship education settings.

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