

Entrepreneurship Education and Entrepreneurial Competency among Graduates of Nigerian Tertiary Institutions

By

**Sonny Emmanuel Braide, Abdulrazak Morenikeji Abdulrahaman, Nuraini Hashimu
Salaudeen**

Department of Business Management Federal University, Dutsin-Ma, Katsina State

Department of Business Administration, Umaru Musa Yar'adua University, Katsina

Email: sbraide@fudutsinma.edu.ng

ABSTRACT

This study examines entrepreneurship education (EE) and entrepreneurial competencies (EC) among graduates of Nigerian tertiary institutions. EE as the independent variable was considered in the dimensions of course curriculum (CC), lecturers' competence (LC), instructional materials (IM), and course duration (CD), with EC as dependent variable. Survey design was used to collect cross-sectional data from 497 National Youth Service Corps (NYSC) members in Katsina (registered in Batch B, Stream 2, and September 2021). A 5-point Likert scale questionnaire was used to collect the data, while multiple regression analysis was used to analyse it. CC, LC, and CD had significant positive effect on EC while IM shows no significant effect. It was recommended that managers and administrators of entrepreneurship programmes, and policy makers, should seek to; better the state of the CC, LC, IM, and CD in the tertiary institutions; review the curriculum of the entrepreneurship education programme in the tertiary institutions to have a good balance of theory or knowledge and practical applications or practice; add an additional two semesters to the present duration of two semesters, for desired development of EC; conduct regular training and retraining of lecturers/instructors for competence in EE teaching; encourage more studies to be done to investigate other factors like adequate funding, that may better explain the variations in EC.

Keywords: Entrepreneurship Education, Entrepreneurial Competencies, Graduates, Tertiary Institutions.

Introduction

The United Nations Conference on Trade and Development (UNCTAD) (2016), states that both government and civil society know and are aware of the importance of entrepreneurship, but, this potential has not been favourably explored. Nwambam, Nnennaya, and Nwankpu (2018), believe that entrepreneurship education is being taught like any other subject in our tertiary institutions (but, by its nature there is a need to teach it with the specialty that it deserves), thus, affecting the desired result. This leads to an overarching number of job

seekers plodding the streets daily, while the economy remains precarious and the society struggling with rising insecurity and diverse social vices being perpetrated mostly by youths with frightening ingenuity.

Entrepreneurship education and programmes are imbedded in the educational curriculum of tertiary institutions in Nigeria, (both public and private). The hope is that those who acquire the education would turnout as employers of labour rather than applicants for employment.

Furthermore, an area of concern that needs to be looked into is the alignment of entrepreneurship education and entrepreneurial competency. It is observed across the Organisation for Economic Co-operation and Development (OECD) countries that a perceived lack of capabilities remains one of the most frequently cited barriers for people to start a business (OECD, 2018). The OECD (2018) added that, youths (18 – 30 years old) are the most affected as they need education more, to acquire the required skills, knowledge, and attitude to start their own businesses.

Nonetheless, the curricula of the entrepreneurship education programmes are expected to provide the needed knowledge, skills, and attitude of the students for entrepreneurial success. It is also expected of the lecturers to be able to impart the knowledge, skills, and right entrepreneurial attitude to the students. The right instructional materials and equipment are required to be made available to the students in adequate quantities and numbers for the students to use practice what they are being taught. The duration for the programme should be sufficient enough to entrench the entrepreneurial competencies into the students before their graduation.

Competent entrepreneurs play a key role in achieving sustainable entrepreneurship objectives and the entrepreneurial

competencies are critical internal resources for Small and Medium Enterprises (SMEs) (Tehseen, Qureshi, Johara, & Ramayah, 2020). However, it has been observed across the Organization for Economic Co-operation and Development (OECD) countries that a perceived lack of capabilities remains one of the most frequently cited barriers for people to start a business (OECD, 2018). Entrepreneurship education involves developing youth critical awareness towards engaging their innovativeness, skills and strength to explore productive socio-economic opportunities. This develops in the individuals, competencies for entrepreneurship.

The current state of affairs in Nigeria, whereby the level of unemployment keeps rising suggests that the success of entrepreneurship education is not remarkable. Thus, an examination of the effect of entrepreneurship education on youth entrepreneurial competencies, as a measure for the success of entrepreneurship education in helping to reduce unemployment is needed, as the unemployment rate keeps rising with many youths remaining unemployed.

1.2 Significance of the Study.

Although several aspects of entrepreneurship and enterprise creation have been studied through various researches in Nigeria, not much seems to have been done to determine the effects of

educational efforts on the development of the competencies of the graduates. Tittel and Terzidis (2020), observe that research in entrepreneurship education is still a young discipline, and that, “entrepreneurial competencies” is a current area of research with regards to entrepreneurship.

This study further examines how entrepreneurship education has equipped the youths with the needed entrepreneurial competencies, hoping that this will bring about effective and efficient teaching and learning of Entrepreneurship Education in our tertiary institutions. With youth unemployment rate continually rising, every effort at creating employment needs to be enhanced. It gives insight into the effectiveness of the entrepreneurship education being taught in our institutions on developing the entrepreneurial competencies of our youths.

It is hoped that this generates the needed i. boost for creating more employment opportunities. Lecturers, teachers or tutors ii. may need to adjust to a better management and delivery of the course. The paper aims bring about the effective and efficient iii. method and approach to teaching and learning of Entrepreneurship Education in our tertiary institutions. It is hoped that iv. policy makers and educationists will improve on their skills and technics of teaching the entrepreneurship training programmes.

In addition, the study brings about a better understanding of the personal needs of youth entrepreneurs as it reveals the extent of competencies acquired through entrepreneurship education. The youths who are the ultimate beneficiaries of the entrepreneurship education programme, will also gain from the study as efforts to hone up their entrepreneurial competencies, will be stimulated. Moreover, the study will add to the existing body of knowledge on entrepreneurship education and entrepreneurship and its effect on the fight against youth unemployment in Nigeria.

1.3 Aim/ Objectives

The broad objective of the study is to examine the effect of entrepreneurial education on youths entrepreneurial competencies development among Nigerian university graduates. Specific objectives, however, are to:

- i. Examine the effect of course curricula on entrepreneurial competencies development.
- ii. Assess the effect of lecturers' competence on course on entrepreneurial competencies development.
- iii. Determine the effect of instructional materials on entrepreneurial competencies development.
- iv. Examine the effect of course duration on entrepreneurial competencies development.

1.4 Hypotheses of the Research

The following hypotheses are formulated:

H₀₁: Course curricula of the entrepreneurship education programme have no significant effect on entrepreneurial competencies development.

H₀₂: Lecturers' competence on the course has no significant effect on entrepreneurial competencies development.

H₀₃: Instructional materials have no significant effect on entrepreneurial competencies development.

H₀₄: Course duration has no significant effect on entrepreneurial competencies development.

2.0 Review of Related Literatures

The conceptual definition and framework, as well as review of empirical studies, and theoretical framework are presented in this section.

2.1 Conceptual Definition

2.1.1 Entrepreneurship

The United Kingdom (UK) Quality Assurance Agency (QAA) (2012), defines entrepreneurship as focusing on the specific context of setting up a venture and becoming self-employed. To Baba (2013), it is an act of bringing about a company, securing deals, and risk taking, to make profit using education skills acquired.

In the educational domain the two terms, enterprise and entrepreneurship education, indicate that there are two quite differing views on what is meant by entrepreneurship, one termed "wide" and one termed

"narrow". According to QAA (2012), the narrow definition of entrepreneurship is about opportunity identification, business development, self-employment, venture creation and growth and this definition applies to being an entrepreneur. The wide definition is about personal development, creativity, self-reliance, initiative taking, action orientation, i.e. becoming entrepreneurial (Lackeus, 2015).

Entrepreneurship as used in this study encompasses all these, but a summarised definition is that entrepreneurship is the activity of idea formulation and initiating the development of the idea into action that creates business opportunity.

2.1.2 Entrepreneurship Education

Entrepreneurial education is vital to success as a business owner. Metcalfe (2013), states that in modern society, education's role in shaping entrepreneurs is underestimated. According to him, the stereotype of the college drop-out who becomes the 'ultimate' entrepreneur is misleading, since well over 90% of successful technology company founders are college graduates and about half of these hold post-graduate degrees.

Entrepreneurship Education is concerned with functional management skills and abilities and seeks to train individuals in starting, managing and developing a business (Komarkova, Gagliardi, Conrads, & Collado, 2015). Tittel and Terzidis (2020) state that its goal is to prepare students to

develop profound entrepreneurial competency so that they may get involve in to the practice of entrepreneurship. It should focus on providing students with enterprising skills, which are useful to all students (Gibb, 2002). It is a means to foster youth entrepreneurship and self-employment, and to equip young people with the attitudes (such as a sense of personal responsibility) and skills (flexibility and creativity) that are necessary to cope with uncertainties and transform their fears into fortitudes in today's societies. The aim is to develop entrepreneurial skills, attitudes, competencies, and dispositions which are prerequisites to predisposing the individual to become a driving force in managing business.

The proxies for entrepreneurship education in this work were course curriculum, lecturers' competence, instructional materials, and course duration. Course curriculum involves the contents of the courses and what the students were taught. If the curriculum is not well structured, the learning outcomes may not be satisfactory. Lecturer's competence refers to the qualifications of the lecturers, and their ability to impart the right knowledge to the students. Instructional materials are the facilities and materials used to teach the students, whereby the competencies can be imparted to the students. Course duration is

the length of time the students stay in entrepreneurship course, which is defined by the number of semesters they undergo the course, and the more time in the system the more impacts on the students.

2.1.3 Entrepreneurial Competencies

Entrepreneurial competencies are the underlying characteristics possessed by an individual which assist them to execute the tasks in a manner that is most befitting (Lazar & Paul, 2015). Yusuff, Bakar, and Ahmad (2016) posit that there is a gap in the knowledge base relating to the entrepreneurial competencies of entrepreneurs. Human capital is generated by competencies which hows the skills, education, experience, and attitudes of employees and business owners (Johara, Yahya, & Tehseen, 2017). Competencies of entrepreneurs make a business more successful and even lead its sustainability and competitive advantage as well (Tehseen & Ramayah, 2015).

United Nations Conference on Trade and Development (UNCTAD) (2012) considers competencies in light of attitudes (soft skills) and enabling skills (hard skills). The soft skills are stated as persistence, networking, and self-confidence while enabling skills (hard skills) included basic start-up knowledge, business planning, financial literacy and managerial skills. Meutia (2012) divides competencies into natural and unnatural competencies. Natural

competencies were stated as consisting of characteristic, attitude, self-image, and social role. The unnatural or learned competencies are the skills needed when a task is done, which is acquired through practical and theoretical learning. These include knowledge and experience.

Servicio Público de Empleo Estatal, (2016) recognise entrepreneurship skills as key competences to promote employability,

2.2 Conceptual Framework

The figure below depicts the conceptual framework upon which this study is set.

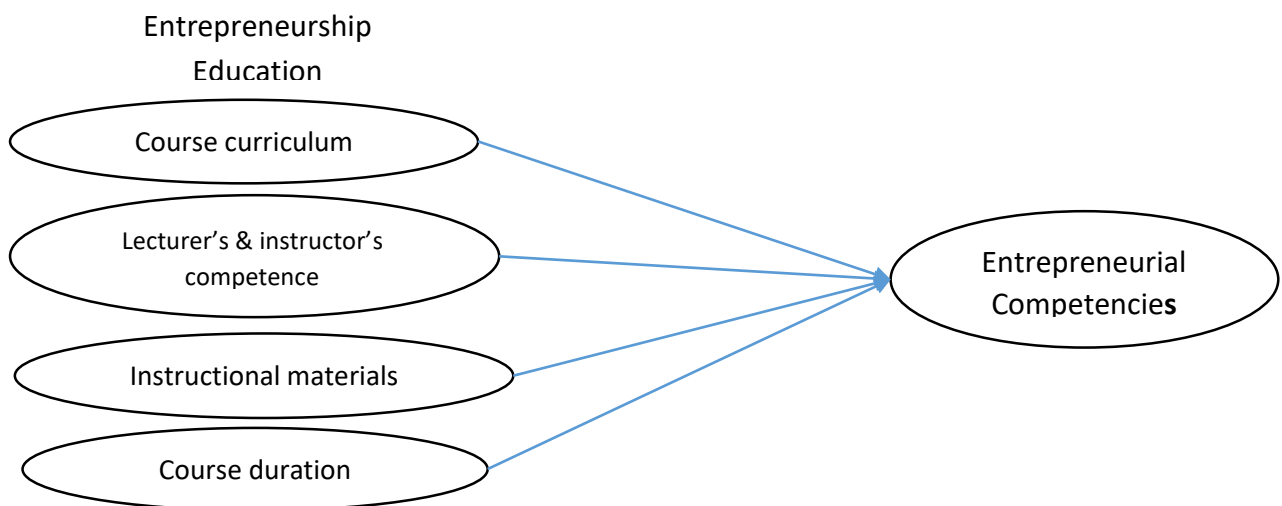


Figure 2.1 Conceptual framework

Entrepreneurship education (EE) is the independent variable which is expected to have an effect on the entrepreneurial competencies (EC), (which is the dependent variable) of the graduates. The dimensions of EE being curriculum used, lecture delivery, instructional materials, and course duration. The dimensions considered under EC are knowledge, skills, and attitudes. The variables course curricula, lecturers' competence, instructional materials, and the

involving personal initiative, self-learning and enterprise development. Entrepreneurial competencies are referred to as knowledge, skills and attitudes that effect and affect willingness and ability to perform entrepreneurially. This aligns with much of the literature on competencies in general as well as on entrepreneurial competencies.

course duration are considered to affect the development of entrepreneurial competencies of skills, knowledge, and attitude of the graduates.

2.3 Review of Empirical Studies

Studies on entrepreneurial development vary in their findings. This is especially so within the Nigerian space. A few related researches are herein reviewed.

Nwambam, Nnennaya, and Nwankpu (2018), through survey research on students

in Ebonyi State University, (EBSU) Abakaliki and Federal University, Ndufu Alike Ikwo (FUNAI) assessed the entrepreneurship education programme in Nigerian Universities as a means for guaranteeing sustainable development in Nigeria. Data are analysed using mean scores. Their findings reveal an inadequacy of trained lecturers/instructors, instructional facilities/materials for teaching entrepreneurship education and the entrepreneurship curricular contents are relevant for sustainable development in Nigeria but do not fully empower the students to be equipped with adequate knowledge, resources and skills to establish businesses of their own. It is recommended that regular training and retraining of lecturers/instructors be conducted by the institutions' authorities for competence in entrepreneurship education teaching, provision of requisite facilities and materials by the universities, government and individuals for instructional efficiency and effectiveness.

Asogwa and Dim (2016), investigate research on Entrepreneurship Development and unemployment reduction in Anambra State, Nigeria. The study focuses on youths in the five selected Local Government Councils of Anambra state. Data are collected using questionnaire from an infinite population of the selected Local Government Councils. Samples of 30 youths

are drawn from the population of each Local Government through a convenience sampling technique. One hundred and fifty (150) youths are taken as sample. Pearson correlation (r) is used for the test. The study discovers that there is significant relationship between entrepreneurship training and unemployment reduction in the selected Local Government Areas of Anambra State. It also reveals that there is a significant relationship between entrepreneurship traits and unemployment reduction.

Pepple & Enuoh, 2020; Tittel & Terzidis, 2020; Zarefard & Beri, 2018; Gwadabe & Amirah, 2017; Kabir, Ibrahim, & Shah, 2017; Onuma, 2016) examines competencies required for entrepreneurial performance, as influenced by personal traits and leadership skills, determined relationship between entrepreneurial competency and firm performance and investigated the effect of entrepreneurs' managerial competencies on the development of innovative start-up intentions among university students, and also examined the mediating roles of entrepreneurial self-efficacy and attitude toward start-ups. Findings show that engaging in entrepreneurial core competencies, personal traits and learners' skills are positively related to business success. Results showed the significance of entrepreneurs' managerial competencies for the development of innovative start-up

intentions through the mediating factors. This relates to this study in that entrepreneurial competencies are needed for entrepreneurship to flourish.

In all of these, there is none that shows a direct link between entrepreneurship education and entrepreneurial competencies development, hence the need to carry out this study.

2.4 Theoretical Framework

This study is embedded in the Personal Initiative (PI) theory developed by Michael Frese and his co-workers in the 1990s. PI is characterized by a self-starting, proactive, and persistent approach to work; PI helps to accomplish entrepreneurial tasks successfully (Glaub, Frese, Fischer, & Hoppe, 2014). According to Frese and Fay (2001), PI is a self-starting and proactive work behaviour that overcomes barriers to achieve a goal. They further submit that it sharpens and partly modifies the concepts of intrinsic motivation, work performance, organizational citizenship, reciprocal determinism, innovation, entrepreneurship, and self-regulation.

PI training is specifically designed to equip entrepreneurs with a proactive mind-set, and enables them to grow their businesses and to create jobs (Frese & Fay 2001). This is the drive of this study. One major reason for the introduction of entrepreneurship education and training according to Babalola (2010), is to encourage and direct the minds of the

students and trainees to start businesses of their own. So, if this aim is not being achieved then the programme has failed or is failing. Therefore, if the competencies are not being developed in the graduates, the programme is not meeting up to the expectation and it may have to be rejigged.

Frese and Fay (2001) reiterate that PI means being self-starting, future thinking (proactive), and overcoming barriers (persistent). Self-starting implies that entrepreneurs act without being told or without mimicking others (Frese & Fay, *ibid*). Also, they seek to be different in the way they pursue business opportunities. Frese and Fay (2 *ibid*), add that, one prerequisite of being self-starting is, therefore, creative thinking, and future thinking means that entrepreneurs anticipate potential setbacks and opportunities and prepare for them now. Successful entrepreneurs are able to identify future needs of customers, new customers, changes of laws and technology, social trends, as well as possible threats to their businesses.

This work is hinged on the premise that graduates of Nigerian tertiary institutions who are presumed to have undergone entrepreneurship course in their institutions need to have entrepreneurial skills in order to start businesses of their own and do well. They lack PI. Therefore, developing their entrepreneurial skills, knowledge and attitude will in turn develop their PI which

Frese and Fay (2001) have stated that enables people to handle job difficulties more actively. It helps to accomplish entrepreneurial tasks successfully (Glaub, et al., 2014).

3.0 Methodology

A cross-sectional survey research design involving graduates of Nigerian tertiary institutions is adopted. The survey approach is considered most appropriate for the large population involved and the need to cover a representative sample of the graduates.

Since this study does capture all the states in Nigeria, corps members who are usually drawn from across the federation to Katsina state are used. The data obtained using questionnaire, is from the total number of one thousand one hundred and ninety (1,190) graduates that registered during the 2021 (Batch B, Stream 2) camping of the NYSC that took place in September 2021 in Katsina. Using the revised Krejcie and Morgan (1970) table for the determination of sample size for a given population, sample size of two hundred and ninety one (291) used is obtained. Convenience sampling technique is then applied in distributing the questionnaire to get the desired data for the work. The availability of the corps members in the camp constituted the primary basis for inclusion in the survey. However, Based on the varying views of scholars, Bartlett, Kotrlik, and Higgins (2001), Cohen, (1988), Faul, ErdFelder,

Lang, and Buchner, (2007), Borenstein, Rothstein, & Cohen, 2001; Kelley & Maxwell, 2003; Maxwell, Kelley, & Rausch, 2008; Snijders, (2005); Pallant (2005) in their suggested means of getting additional increments to the sample size, 80% of 291 is added. The researcher therefore, distributed five hundred and twenty five (525) copies of the questionnaire. The questionnaire is adapted from Mets et al (2017), using five point Likert scale for the item measures of the variables. Multiple linear regression run on Statistical Package for Social Sciences (SPSS) is used to determine the significance of relationship between the independent and dependent variable.

The regression equation is derived from the hypothesized effect of the independent variable on the dependent variable. The dependent variable is entrepreneurial competencies (EC) comprising skill, knowledge, and attitude, while the independent variable is entrepreneurship education (EE) comprising of course curricula (CC), lecturers' competence (LC), instructional materials (IM), and course duration (CD). Technically, this is defined as: $EC = f^n(CC, LC, IM, CD)$

Where:

EC ~ Entrepreneurship Education.

f^n ~ function of

CC ~ Course Curricula.

LC ~ Lecturers' Competence.

IM ~ Instructional Materials.

CD ~ Course Duration.

This function is transformed into regression equation as specified below:

$$EC_j = \alpha_j + \beta_1 CC_j + \beta_2 LC_j + \beta_3 IM_j + \beta_4 CD_j + \epsilon_j$$

Where:

EC, CC, LC, IM, and CD are as defined earlier.

α_j = the regression constant or intercept.

β_{1-4} = regression coefficients for the independent variables.

ϵ_j = the residual or error terms (epsilon).

The model states that entrepreneurial competencies are a function of the four factors of Entrepreneurial Education in the tertiary institutions.

4.0 Results and Analyses

4.1 Regression Results

Table 4.1 Regression Model Summary

Model	Change Statistics							Durbin	
	R	R ²	Adjusted R ²	SE	R ²	F	df1	df2	Sig. Watson
1	.568	.322	.317	.63532	.322	58.475	4	492	.000 1.916

a. Predictors: (Constant), Course Duration, Course Curriculum, Instructional Materials, Lecturers' Competence. b. Dependent Variable: Entrepreneurial Competency

Source: SPSS 23 Output 2022.

According to the Chin (1998) rule, the statistical significance of R^2 can be determined as R^2 equal to 0.19, 0.33, or 0.67 being 'weak', 'moderate', or 'substantial' respectively. In table 4.1, R^2 , adjusted R^2 , and R^2 -change are shown as 0.322, 0.317 and 0.322 respectively. This means that the model is capable of predicting about 32% of the variations in the dependent variable. That is, the combination of CC, LC, IM, and

CD could result in 32% of Entrepreneurial Competencies in Nigerian graduates.

Furthermore, Keller (2008) posited that the overall quality of the model is determined by the F-change. If at least one of the independent variables is found to significantly affect the dependent variable at 0.05 level of significance, the regression model is considered significant. The F-value in Table 4.2 is 58.475, which is greater than the critical value of 2.21. This is significant.

Table 4.2 Regression Co-efficients^a

Model	Unstand ardized Coefficie nts	Standar dized Coeffic ients	t.	Sig.
	B	Beta		
1 (Cons tant)	2.074	.129	16.092	.000
Course Curricul um	.339	.391	6.396	.000

Lecturer , Compet ence Instructi onal Material s Course Duratio n	.124	.060	.134	2.056	.040
	-.011	.046	-.015	-.246	.806
	.087	.041	.115	2.158	.031

a. Dependent Variable: Entrepreneurial Competency.

Source: SPSS 23 Output 2022.

With the in Table 4.2 above, the regression equation is determined. The beta statistics are substituted into the earlier stated formulation of:

$$EC = \alpha + \beta_1 CC + \beta_2 LC + \beta_3 IM + \beta_4 CD + \epsilon$$

With: EC, CC, LC, IM, and CD as earlier defined, and: $\alpha=2.074$, $\beta_1=0.339$, $\beta_2=0.124$, $\beta_3=-0.011$, $\beta_4=0.087$.

The model is therefore, restated as the standard regression equation:

$$EC = 2.074 + 0.339CC + 0.124LC - 0.011IM + 0.087CD.$$

4.2 Hypotheses Testing

The regression model shows the relative significance of the individual predictor variables on the dependent variable. The level of significance used in the study was 0.05. The tabulated t-value at this level is 1.96. Any computed t-value higher than the tabulated value is considered significant. That is the independent variable has significant effect on the dependent variable. Contrariwise, any computed t-value less than 1.96 at the 0.05 level of significance indicates that the independent variable does not have a significant effect on the dependent variable.

The decision rule was therefore to: accept the null hypothesis if the computed t-value is less than the critical t-value at 95% confidence interval, or 0.05 level of significance, and reject the alternate hypothesis; reject the null hypothesis if the computed t-value is greater than the critical

t-value at 95% confidence interval, or 0.05 level of significance, and accept the alternate hypothesis.

4.3 Results

This study discovers out that course curriculum has a significant effect on entrepreneurial competency development of Nigerian tertiary institutions' graduates. Nwambam, Nnennaya, and Nwankpu (2018), corroborates this when they pointed out that the entrepreneurship curricular contents are relevant for sustainable development in Nigeria. This study is 95% confident that course curriculum positively affects entrepreneurial competencies of Nigerian tertiary institutions' graduates. Course curriculum is important for the development of youths' entrepreneurial competency. But the study finds out that the present curriculum is inadequate in terms of the duration and content spread of the programme.

A look into the synopses of the programme syllabuses shows that the practicality of marketing, setting-up, budgeting, and drawing up feasibility studies and business plans are not given emphasis in the programme. The students are not taught adequately in these aspects. They are taught the theoretical aspects for a semester, then the practical aspect for another semester. The practical aspect, however, usually involves acquisition of skills in certain arts and production of products.

The curriculum takes a single academic year and covers both the theory and practical for 'hands on', but less teaching on entrepreneurial attitude development. None of the respondents indicated acquisition of entrepreneurial attitude. There is an imbalance in the theoretical and practical aspects as implied by the respondents that more practical teaching is required. The imbalance may be why Nwambam, Nnennaya, and Nwankpu (2018) point out that the entrepreneurship curricular contents are relevant for sustainable development in Nigeria, but, do not fully empower the students to be equipped with adequate knowledge, resources and skills to establish businesses of their own. Olorundare and Kayode (2014) have also pointed out that there are challenges in the area of curriculum development and implementation.

Course duration has a significant, positive relationship with entrepreneurial competency development in graduates of Nigerian tertiary institutions. Oyebola, Ireferin, and Olaposi (2015), find adequacy of course duration having significant and positive relationship with number of business opportunities identified by the graduates. The students do not spend enough time in the programme. Those with two years and over two years duration seem to have more successful outcomes of acquiring skills 93.75%, compared to those

of less than one year and one year duration 67.21%. This can be an indication of a positive relationship between duration and acquisition of skills.

Lecturers' competence on the course was found to have significant positive effect on youth entrepreneurial competencies development among Nigerian tertiary institutions' graduates. This implies that the lecturers' ability to know how to direct the mindsets of the students while on the course will really matter in order to impart the right entrepreneurial skills to them at the right time. The respondents suggest that more entrepreneurially trained teachers need to be engaged in the course. Ustyuzhina, Mikhaylova and Abdimomynova (2019), find that majority of the respondents did not have confidence in the competence of their teachers. Wu and Chen (2019), support this position from when they suggest that entrepreneurial education courses need experts with entrepreneurial experience to contribute to course designs and assist with course teachings. Ubogu (2020), Nwambam, Nnennaya, and Nwankpu (2018), Olorundare and Kayode (2014), and other writers have further sighted the inadequacy and dearth of trained and experienced lecturers for entrepreneurship education.

Instructional materials did not show a significant effect on entrepreneurial competency development of Nigerian tertiary institutions' graduates. Perhaps the

implication here maybe that the learners have taken it for granted that such materials are not available and there is no expectation of them to be provided. The respondents in the study did not suggest any improvement in this area. Many did not indicate any skill acquired either. This may be an indication of a nonchalant attitude by many of the students towards the entrepreneurship programme. However, Ementa (2013), Nwambam, Nnennaya, and Nwankpu (2018), reveal, that there is an inadequacy of instructional materials and facilities for teaching entrepreneurship education in Nigeria. The suggestion of the students to have more practical teaching may also be adduced to the non-availability of materials and equipment at the entrepreneurship development centres of the institutions.

5.0 Conclusion and Recommendation

5.1 Conclusion

From the findings, the research model is capable of predicting that 32% of the variations in the dependent variable, EC can be attributed to the combination of CC, LC, IM, and CD. The paper concludes that 68% of such variations in EC are not explained by the four variables considered in our research model. This implies that more factors such as funding, and mentoring which can also affect the entrepreneurial competency development in graduates of entrepreneurship education in Nigerian tertiary institutions, may need to be explored

in addition to the ones considered in this study.

Course curriculum is an important variable in developing entrepreneurial competencies. A curriculum that will inspire the students to have entrepreneurial intentions by the time they graduate is needed. Lecturers' competence on the course is another important variable for the development of entrepreneurial competencies. The course may not be taught by lecturers who teach normal courses just as any other course is taught. The right mix of courses with the right mix of lecturers is needed.

Instructional materials are found not to show a significant effect on entrepreneurial competency development of Nigerian tertiary institutions' graduates. Nevertheless, this may not rule out the need for required and essential materials and facilities from being provided by the authorities guiding the entrepreneurship programmes in our tertiary institutions. Majority of the suggestions on areas of improvement are for more practical teaching. This will need more facilities. Course duration is also a significant variable in the mix of factors affecting entrepreneurial competency development. The current duration is not enough to encourage the required levels of competencies development.

Overall, the study concludes that the competencies of the graduates are

inadequate. The entrepreneurship education in Nigerian tertiary institutions has not led to adequate levels of entrepreneurial competencies in the graduates. More needs to be done to make the programme to be effective.

5.2 Recommendations

The recommendations drawn from the conclusions are in hope that they will assist administrators, managers, and policy makers to make improved decisions and policies on entrepreneurship and entrepreneurship education.

- i. Managers and administrators of entrepreneurship programmes, and policy makers should make efforts to review the curriculum of the entrepreneurship education programme in our tertiary institutions to have a good balance of theory iii. or knowledge and practical applications or practice and attitudinal orientation and development. The curriculum should be geared towards meeting current needs of the economy in terms of services and products and jobs needed. In addition, entrepreneurship education could be aligned with the students' core disciplines to give an entrepreneurial vibe to those disciplines.
- ii. The course duration which is presently for a period of two semesters should be given adequate attention for desired entrepreneurial competencies to be developed. More time in the programme is needed for them to acquire more knowledge,

skills and the right entrepreneurial attitude. Further to this, the curricula may need to be tweaked to run for a longer duration and have a better balance of theory and practice that will induce the right entrepreneurial attitude. Additional two semesters may be added to teach aspects that will develop and strengthen entrepreneurial attitude in the students. Also, the students need to be persuaded to spend more time at the entrepreneurship development centers to engage in more practical on their own outside the official lecture periods. Thus, it may also be required for the lecturers to be provided the right environment to offer their services, with respect to duration in terms of uninterrupted learning periods devoid of strikes in the institutions.

There is need for lecturers who are well trained and experienced in the field of entrepreneurship to impart the required knowledge. Regular training and retraining of lecturers/instructors, therefore, needs to be conducted by the institutions' authorities for competence in entrepreneurship education teaching. The lecturers/instructors should be exposed to and equipped with modern and current methods in teaching entrepreneurship. The course may not be taught by lecturers who teach normal courses just as any other course is taught. The right mix of courses with the right mix of lecturers is needed.

- iv. Required and essential materials and facilities should be well provided for by the authorities guiding the entrepreneurship programmes in our tertiary institutions. Provision of requisite facilities and materials by the universities, government and individuals for instructional efficiency and effectiveness is required.
- v. It is recommended that more researches need to be conducted to help determine other factors that can improve, boost, and

better explain the development of youth entrepreneurial competencies in Nigeria. However, as the model showed a significant relationship between most of the independent variables and the dependent variable, managers and administrators of entrepreneurship programmes, and policy makers should seek to better the state of the independent variables in the tertiary institutions.

REFERENCES

- Agbonlahor, A. A. (2016). Challenges of Entrepreneurial Education in Nigerian Universities: Towards A Repositioning for Impact. *Journal of Educational and Social Research*, 6(1) January 2016.
- Anyadike, N., Emeh, I. E. J. & Ukah, F. O. (2012) Entrepreneurship Development and Employment Generation in Nigeria: Problems and Prospects. *Universal Journal of Education and General Studies* 1(4) pp. 088-102, April, 2012
- Asogwa, O.S. & Dim, E. (2016). Entrepreneurship Development and Unemployment Reduction in Nigeria. *International Journal of Business and Management Review*, 4(8), pp.27-43, October 2016.
- Baba, G.K. (2013). The Challenges of Entrepreneurship Development in Nigeria and Way Forward. *Journal of Business and Organizational Development*, 5(1), 54 – 64.
- Bartlett, J. E., Kotrlik, J. W., & Higgins, C. C. (2001). Organizational Research : Determining Appropriate Sample Size in Survey Research, 19(1), 43–50.
- Borenstein, M., Rothstein, H., & Cohen, J. (2001). Power and Precision: Air Force Magazine. New Jersey: Biostat Inc. doi: 10.1300/J407v15n04_06.
- Chin, W. W. (1998). The partial Least Squares Approach to Structural Equation Modelling. In G. A. Marcoulides (Ed.) (2013). Modern methods for business research (pp. 295–336). New York: Taylor and Francis Group, Publisher.
- Cohen, J. (1988). Statistical Power Analysis for the Behavioral Sciences (2nd ed.). New Jersey: Lawrence Erlbaum Associates, Publishers. doi:10.1234/12345678.
- Ementa, C.N. (2013). Curriculum Implements of Entrepreneurial Subjects at the Senior Secondary School: A case for Entrepreneurship Education at the Senior Secondary School in Nigeria Unizik Orient Journal of Education, 7(1), 165-17
- EU (2006). Recommendation of the European Parliament and the Council of 18 December 2006 on Key Competencies for Lifelong Learning. (2006/962/EC) 12, European Parliament.
- EU (2017). Council Recommendation of 22 May 2017 on the European Qualifications Framework for Lifelong Learning and repealing the recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European qualifications framework for lifelong learning. Technical report, European Commission.
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A Flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavioral Research Methods*, 39(2), 175–191. doi:10.3758/BF03193146
- Fayolle A. (2013). Personal views on the future of entrepreneurship education, *Entrepreneurship & Regional Development*, 2013, 25(7–8), 692–701, <http://dx.doi.org/10.1080/08985626.2013.821318>
- Frese, M. & Fay, D. (2001). Personal initiative: An active performance concept for work in the 21st Century, *Research in Organizational Behavior*, 23, pp. 133 - 187.
- Gibb, A. (2002). In pursuit of a new 'enterprise' and 'entrepreneurship' paradigm for learning: creative destruction, new values, new ways of doing things and new combinations of knowledge. *International Journal of Management Reviews*, 4, 233-269. <http://dx.doi.org/10.1111/1468-2370.00086>

- Glaub, M. E., Frese, M., Fischer, S., & Hoppe, M. (2014). Increasing personal initiative in small business managers or owners leads to Entrepreneurial Success: A Theory-based controlled randomized field intervention for evidence-based management. *Academy of Management Learning & Education*, 2014, 13(3), 354–379. <http://dx.doi.org/10.5465/amle.2013.0234>
- Gwadabe, U. M. & Amirah, N. A. (2017). Entrepreneurial Competencies: SMEs performance factor in the challenging nigerian economy. *Academic Journal of Economic Studies* 3(4), December 2017, pp. 55–61 ISSN 2393-4913, ISSN On-line 2457-5836
- Johara, F., Yahya, S., & Tehseen, S. (2017). Determinants of future entrepreneurship and entrepreneurial intention. *Global Business and Management Research: An International Journal*, 9(4), 80–96.
- Kabir, M., Ibrahim, H. I., & Shah, K. A. M. (2017). Entrepreneurial competency as determinant for success of female entrepreneurs in Nigeria. *Indonesian Journal of Business and Entrepreneurship*, 3(2), May 2017
- Keller, G. (2008). Statistics for management and economics abbreviated (7th ed.). United States of America: Thompson South-Western.
- Kelley, K., & Maxwell, S. E. (2003). Sample size for multiple regression: obtaining regression coefficients that are accurate, not simply significant. *Psychological Methods*, 8(3), 305–321. doi:10.1037/1082-989X.8.3.305
- Komarkova, I., Gagliardi, D., Conrads, J., & Collado, A. (2015). Entrepreneurship competence: An overview of existing concepts, policies and initiatives. Final Report, Joint Research Centre Institute for Prospective Technological Studies, Report EUR 27472 EN, European Commission, ISBN 978-92-79-51926-0 (PDF)
- Krejcie R. & Morgan D.W. (1970). Determination of sample size for research activities. *Educational and Psychological Measurement*. 30(3), pp. 607 – 610.
- Lackeus, M. (2015). Entrepreneurship in Education; What, Why, When, How, Entrepreneurship 360 Background Paper, Center for Entrepreneurship, OECD.
- Lazar, N., & Paul, G. (2015). Entrepreneurial competencies in a business enterprise – An overview. *International Journal of Scientific Research* 4(1): 226–227.
- Maxwell, S. E., Kelley, K., & Rausch, J. R. (2008). Sample size planning for statistical power and accuracy in parameter estimation. *Annual Review of Psychology*, 59, 537–563. doi:10.1146/annurev.psych.59.103006.093735
- Metcalfe, R. (2013). Can entrepreneurship be taught? *Texas Education Review*, 1(1), 119- 131.
- Mets, T., Kozlinska I. & Raudsaar M. (2017). Patterns in entrepreneurial competences as perceived learning outcomes of entrepreneurship education: The case of Estonian HEIs. *Industry and Education Higher*, 2017, 31(1), 23–33
- Meutia, I. T. (2012). The Development of Entrepreneurial Social Competence and Business Network To Improve Competitive Advantage and Business Performance of Small Medium Sized Enterprises: A Case Study of Batik Industry in Indonesia. *Procedia-Social and Behavioral Sciences* 65: 46–51.
- Mitchelmore, S. & Rowley, J. (2010). "Entrepreneurial competencies: a literature review and development agenda", *International Journal of Entrepreneurial Behavior & Research*, 16(2), pp. 92–111. <https://doi.org/10.1108/13552551011026995>

- Nwambam, A.S., Nnennaya, O.O., & Nwankpu, I.S. (2018). Evaluating the entrepreneurship education programme in Nigerian Universities for sustainable development. *Allied Business Academies*, 21(1).
- OECD (2018). Developing Entrepreneurial Competencies, Parallel Session 3. SMEs Ministerial Conference, February 22 – 23, Mexico City.
- Olorundare, A. S. & Kayode, D. J. (2014). Entrepreneurship education in Nigerian Universities: A tool for National transformation. *Asia Pacific Journal of Educators and Education*, Vol. 29, 155–175, 2014.
- Onuma, N. (2016). Entrepreneurship education In Nigerian Tertiary Institutions: A remedy to graduates unemployment, *British Journal of Education*, 14(5), pp.16-28, May 2016.
- Oyebola, M. A. I., Ireferin, S. A., & Olaposi, T.O. (2015). Evaluation of entrepreneurship education in selected universities. *Journal of Entrepreneurship and Innovation Management*, 4 (2), 49 - 75
- Pallant, J. (2005). SPSS Survival Manual: A Step by Step Guide to Data Analysis Using SPSS Windows (Version 12). Australia: Allen & Unwin.
- Pepple G. J. & Enuoh, R. O. (2020). Entrepreneurial competencies: A required skill for business performance. *European Journal of Business and Innovation Research*, 8(3). pp. 50-61, May 2020.
- Quality Assurance Agency (2012). Enterprise and entrepreneurship education: Guidance for UK higher education providers. Gloucester, UK: The Quality Assurance Agency for Higher Education.
- Servicio Público de Empleo Estatal (2016). “Key competences in vocational education and training – Spain”. Cedefop ReferNet thematic perspectives series, available at: http://libserver.cedefop.europa.eu/vetelib/2016/ReferNet_ES_KC.pdf
- Snijders, T. A. B. (2005). Power and sample size in multilevel modeling. *Encyclopedia of Statistics in Behavioral Science*, 3, 1570–1573. doi:10.1002/0470013192.bsa492
- South East European Center for Entrepreneurial Learning - SEECLE (2014). Entrepreneurial learning – A key competence approach ISCED Level 3.
- Tehseen, S., Qureshi Z. H., Johara F. & Ramayah T. (2020). Assessing dimensions Of entrepreneurial competencies: A type II (reflective-formative) measurement approach using PLS-SEM. *Journal Of Sustainability Science And Management* 15(2), February 2020: 108-145.
- Tehseen, S. & Ramayah T. (2015). Entrepreneurial competencies and SMEs business success: The contingent role of external integration. *Mediterranean Journal of Social Sciences*, 6(1), January 2015.
- Tittel, A. & Terzidis O. (2020). Entrepreneurialcompetences revised: developing a consolidated and categorized list of entrepreneurial competences, entrepreneurship education. (2020) 3:1–35.
- Ubogu R. (2020). Entrepreneurship education: Challenges and strategies towards promoting entrepreneurship in Higher Education in Nigeria, *Academic Journal of Interdisciplinary Studies* www.richtmann.org, 9(5), September 2020
- UNCTAD (2012). Entrepreneurship policy framework and implementation guidance. United Nations, Newyork and Geneva, 2012.
- UNCTAD (2016). Civil society: entrepreneurship is key to creating economic opportunity for disadvantaged groups, 14 March 2016
- Ustyuzhina, O., Mikhaylova, A., & Abdimomynova, A. (2019). Entrepreneurial Competencies in

- Higher Education. *Journal of Entrepreneurship Education* 22(1).
- Valerio, A., Parton B., & Robb A. (2014). Entrepreneurship education and training programs around the World: Dimensions for success. International Bank for Reconstruction and Development / The World Bank, 1818 H Street NW, Washington DC 20433 <http://dx.doi.org/10.1596/978-1-4648-0202-7>
- Wu H-T & Chen M-Y (2019) Course design for college entrepreneurship education – From personal trait analysis to operation in practice. *Front. Psychol.* 10:1016. doi: 10.3389/fpsyg.2019.01016
- Yusuff, Y.Z.M., Bakar, A.A. & Ahmad, S. (2016). Determinant factors of women Entrepreneurs' Business Performance: A conceptual Framework. *Journal of Global Business and Social Entrepreneurship (GBSE)*, 1(1), 55-67.
- Zarefard, M. & Beri S.E.C. (2018). Entrepreneurs' Managerial Competencies and Innovative Start-Up Intentions in University Students: Focus on Mediating Factors. *International Journal of Entrepreneurs*