



The Influence of Entrepreneurship Education on the Entrepreneurial Intentions of University Students in Katsina State, Nigeria

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Abstract. This study attempts to determine the influence of Entrepreneurship Education (EEd) on the entrepreneurial intentions of university students in Katsina State, Nigeria. The study is guided by the following specific objectives: to examine the nature of entrepreneurial education being acquired by the students to determine the extent of influence of the acquired education on the students' entrepreneurial self-efficacy and to determine the extent of influence of the acquired education on student's entrepreneurial mindset. Secondary and primary sources were used in generating data for the study. Using stratified and random sampling techniques, data was generated by means of a structured questionnaire administered to 400 students across the three universities in the State. Descriptive statistics as well as simple regression was used in analysing the data collected from the respondents. Findings revealed that students fairly agreed that they have acquired education in major areas of entrepreneurship encompassing creativity, innovation, and venture creation and that EEd has a significantly positive influence on their entrepreneurial self-efficacy and entrepreneurial mindset. The study recommends that university managements should devise means of an adequate follow-up of their graduates to ensure the translation of their entrepreneurial intentions into venture creation, while entrepreneurship education lecturers should pay special attention to the area of venture creation as the students do not seem to be very optimistic in their ability to translate business opportunities into business projects/ventures.

Keywords: influence, enterprise creation, entrepreneurial mindset

JEL Classifications: L26, M13, O10

1. Background of the Study

In the 60s and 70s, unemployment was not pronounced among university graduates (Odidi, 2013) as at that time, mainly due to desperate need for human resources, public and private organizations would visit universities and grant employment to graduating students in advance. In that period, it was even reported that organizations with vacant positions would jingle the bell around the host community requesting qualified candidates to apply for the said positions. Candidates who failed secondary school examinations were usually secured front-desk jobs in banks and were handsomely paid.

The rosy situation for university graduates began to change in the 80s. The Commission on the Review of Higher Education, popularly called “Longe Commission” (1992), reported that by 1984 the phenomenon of graduate unemployment had begun to emerge in Nigeria. The situation kept on worsening from that time to date. According to publications by the National Manpower Board (NMB) and Federal Bureau of Statistics (FBS), only about 10% of university graduates released annually to the labour market are employed.

There has not been a consensus on the causes of graduate unemployment in Nigeria. Some stakeholders attributed the unfortunate phenomenon to negligence on the part the Agricultural Sector that used to generate about 70% of the nation’s employment opportunities and accounted for about 8% of the Gross Domestic Product (Maina, 2014). Graduate unemployment was also attributed to the inability of successive government regimes to effectively manage the oil boom of the 70s and the oil windfall of the 90s to create infrastructural and industrial development that will generate employment for the teeming youth in general and university graduates in particular (Ojeifo, 2013). Some stakeholders even attributed the high rate of unemployment among university graduates to the lopsided production of high-level manpower from the universities.

Among all the causes advanced, there is none that is more appealing than the one that traced the problem of graduate unemployment to the disequilibrium between labour market requirement and lack of essential employable skills by the graduates themselves. Oviawe in Olorundare and Kayode (2014) reported the findings of a three-week large-scale, rapid national survey in 2004, jointly sponsored by the Nigerian University Commission (NUC) and the then Education Trust Fund, now TetFund, to determine the needs of the labour market which Nigerian university graduates are failing to meet. Of the 20 organizations covered and 100 individuals surveyed, 60% considered the graduates to be very poor in the required skills, such as literacy, oral communication, information communication technology (ICT), and entrepreneurial and critical thinking ability, as well as to have great deficiency in problem solving and decision making. Olorundare and Kayode (2014) also noted that the major defect in the

Nigerian educational system, including universities, is its theoretical inclination. The duo rightly observed that most Nigerian universities produce graduates who are at best only suited for white collar jobs and have little or no basic skills of any other vocational relevance, and all these greatly contribute to the high rate of unemployment among university graduates.

As part of the measures to provide graduates the essential employable skills and even to be job creators rather than job seekers, the Federal Government in 2006 directed all tertiary institutions (including universities) to include Entrepreneurship Education (EEd) as a compulsory course for all students with effect from the 2007/2008 academic session (Aliu, 2008). This directive led to the inclusion of EEd in the curriculum of all universities and to the establishment of the centres for entrepreneurship education/development (Olorundere & Kayode, 2014).

The introduction of EEd in the curriculum of universities was premised on two major assumptions which academic researchers have proved to be factual (Sanchez, 2013). First, entrepreneurs are not necessarily “born” but “made”. It is possible to learn how to be an entrepreneur through different specific educational policies and programmes (Erikson, 2003). Second, policymakers and economists firmly believe that the higher the level of entrepreneurship in a country, the greater its levels of creativity, innovation, economic growth, and development.

Based on the above premises, many researchers consider EEd as a typical example of planned intentional behaviour (Bird, 1988; Katz & Garner, 1988; Krueger & Brazeal, 1994). Having an entrepreneurial intention means that one is committed to starting a new business (Krueger, 1993). Despite the recognition that education generally and prior entrepreneurial experiences may influence people’s attitudes towards starting their own business, the influence of EEd – as distinct from general education – on students’ intentions to start their own business after graduation has largely remained unexplored even in developed economies (Graeventiz, Harhoff, and Weber, 2010). From the time EEd was introduced in the curriculum of universities in 2006 to date, there has been few research on its influence on students’ intentions to practice entrepreneurship during or after their university education (Bette, 2012). Research of this nature may bring out deficiencies and make useful recommendations on areas of improvement in the curriculum, method of teaching, and learning outcomes of EEd in universities.

In this study, an attempt will be made to determine the level of influence of EEd on the students’ entrepreneurial intentions.

1.1. Statement of the Problem

Globally, the role of EEd is to create a mindset of entrepreneurial spirit in students by means of providing them with knowledge, behaviour pattern, and skills that enable them to be entrepreneurial throughout their lives (ASTEE, 2014). In view

of this development, EEd requires a continuous programme evaluation that is different from the traditional classroom examination method. Programme evaluation, unlike the traditional classroom examination, determines the effects of EEd on students' entrepreneurial intention and also reveals areas of strengths and weaknesses in the implementation of its curriculum with a view to coming up with meaningful suggestions on further improvement (Borchers, 2011).

Although there has been a growing interest in EEd, over the years in many countries, there have not been corresponding efforts regarding the evaluation of its influence on students' entrepreneurial intention (Graevenitz, Harhoff, and Weber, 2010). Despite its limitations, institutions rely heavily on the traditional examination and classroom evaluation measure to assess the impact of EEd on students. This unfortunate development is even more pronounced in developing countries such as Nigeria (Bette, 2012).

It is against this background that the study intends to assess the level of influence of EEd on students' intentions. The dependent variable of the study is entrepreneurial intention (entrepreneurial self-efficacy and entrepreneurial mindset), and its independent variable is entrepreneurship education.

1.2. Objectives of the Study

The general objective of the study is to assess the influence of EEd on the entrepreneurial intention of students in universities within Katsina State. The specific objectives of the study are as follows:

- i. to examine the nature of entrepreneurial education being acquired by the students,
- ii. to determine the extent of influence of the acquired education on students' entrepreneurial self-efficacy, and
- iii. to determine the extent of influence of the acquired education on students' entrepreneurial mindset.

1.3. Research Hypotheses

Based on the above research objectives, the study has the following hypotheses:

H₀1: Entrepreneurship education does not have significant effect on students' entrepreneurial self-efficacy.

H₀2: Entrepreneurship education does not have significant effect on students' entrepreneurial mindset.

1.4. Significance of the Study

The study will determine the extent of influence of EEd on the entrepreneurial intention of students in universities within Katsina State. The study will be beneficial to the following categories of stakeholders in the following ways:

Students of EEd. The main goal of EEd is to teach entrepreneurial knowledge that will positively influence students' entrepreneurial intention and determination for self-employment. The findings of the study will reveal the extent of achievement of this noble objective among students in universities within Katsina State. The recommendations of the study can serve as the basis for further improvement in the achievement of the EEd objective among students, particularly in the universities under study but others as well.

Lecturers of EEd. Lecturers at universities play a vital role in the teaching and learning of EEd as agents of dissemination and knowledge producers. The findings of the study will indicate the extent to which lecturers play this significant role in the teaching and learning of EEd. The recommendations of the study can serve as the basis for further improvement in the teaching of EEd at universities and other tertiary institutions.

University Authorities. The responsibility of universities is to provide a conducive atmosphere to ensure an adequate teaching and learning of EEd. The findings and recommendations of the study can be used as the basis for further improvement regarding this statutory role.

Nigerian Universities Commission (N.U.C.). As a regulatory body, the N.U.C. should be interested in all measures that will improve the teaching and learning of EEd. This study is a step in that direction, and as such its findings and recommendations may be useful to the N.U.C. in performing its statutory regulatory role.

Government. The main objective of the government in introducing entrepreneurship courses at universities is to disseminate the culture of entrepreneurship among students with a view to making them job creators instead of job seekers. The findings of the study will give the government (especially the Federal and Katsina State Government) an insight into the extent of achievement of this objective among students in the study area, while its recommendations can serve as the basis for the formulation of policies that will improve the teaching and learning of EEd.

1.5. Scope and Delimitation of the Study

The expected outcome of EEd is not limited to entrepreneurial knowledge, entrepreneurial mindset, and self-efficacy, but, in view of their close relationship with intention, the study will restrict itself to them. This is a limitation to this study.

Apart from EEd, there are other factors, such as family background, friends, socio-cultural values, etc., that can also have influence on students' entrepreneurial intention. The study will restrict itself to the influence of EEd on students' entrepreneurial intention, adopting entrepreneurial knowledge, entrepreneurial self-efficacy, and mindset as proxies. The study will not cover the effects of other factors on students' entrepreneurial intention, which constitutes another limitation to the study.

To address the objectives of this study, Section 2 of this paper considers the conceptual, empirical, and theoretical issues related to entrepreneurial education and intention. The method adopted by the study is explained in Section 3, while the presentation and analysis of data is done in Section 4. Section 5 presents the conclusions of the findings as well as recommendations.

2. Review of Literature

2.1. Conceptual Issues

2.1.1. Entrepreneurship Education (EEd)

There have been many definitions of EEd by different scholars and institutions. Ebele (2008) defines EEd as the teaching of knowledge and a skill that enables students to plan, start, and run their own business. In the view of Enu (2012), EEd is made up of all kinds of experiences that give students the ability and vision of how to access and transform opportunities of different kinds. The European Commission (2014) defines EEd as contents, methods, and activities supporting the creation and development of knowledge, competences, and experiences that make it desirable and feasible for students to initiate and participate in entrepreneurial value-creating processes. Based on this definition, EEd entails transfer of knowledge, competences, and experiences to students with a view to directing their mindset towards self-employment by means of establishing their own enterprises. This study draws a lot of inspiration from the EU's definition of EEd, as it covers the objectives of the study and its independent variables regarding entrepreneurial knowledge, entrepreneurial self-efficacy, and entrepreneurial mindset.

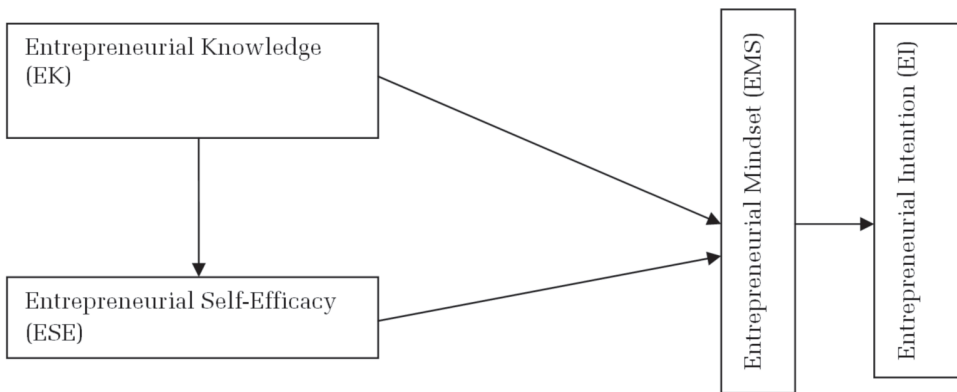
2.1.2. Entrepreneurial Intention (EI)

Entrepreneurial Intention (EI) may be viewed as the intent of an individual to pursue an entrepreneurial career, which may be encouraged by the environment or by certain personal factors (Lee, 2011). Intentionality can be defined as a state of mind directing a person's attention, experience, and action towards a

specific path to achieve something (Bird, 1988 as qtd by AbdulKadir, Salim, and Kamarudin, 2008); in this light, it could be attributed to be a predictor of planned entrepreneurial behaviour (Kruger & Carsud, 1993).

EI is the mindset that directs, guides, coordinates, and controls the basic concept (action) of new business development, implementation, and evaluation (Bird, 1988). EI is the self-acknowledged conviction of the individual mind to start up a new business with a sincere and dedicated plan to do so at a certain point in time (Thompson, 2009). EI, in the words of Ogundipe, Kosile, and Olatunde (2012), is the willingness to undertake entrepreneurial activities so as to become self-employed.

It is important to understand the factors leading to EI, as intentions are reliable indicators of entrepreneurial action. A clear entrepreneurial intention leads to more possibilities of displaying entrepreneurial behaviour (Ajzen, 1991). Based on this argument, studying the EI provides a clue to understanding the antecedents that predict entrepreneurial action. The underlying EI model guiding the study is depicted as follows:



Source: authors (2017)

Figure 1. *EI – conceptual model*

2.1.3. *Entrepreneurship Education and Entrepreneurial Intention*

From the mid-80s to date, there has been a growing youth and graduate unemployment in Nigeria. According to the National Bureau of Statistics, as at 2012, 54% of the Nigerian youth were unemployed (Innocent, 2014). As part of measures to address the danger of youth unemployment, especially graduates, in 1987, the Federal Government of Nigeria introduced EEd in the curricula of tertiary institutions, comprising universities, polytechnics, and colleges of education. The objectives of teaching EEd in the tertiary institutions include:

- the presentation of functional education for the youth so as to engender in them the need for self-employment and self-reliance;

- providing graduates with ample and appropriate skills for creative and innovative thinking that would enable them to identify unique business opportunities;
- serving as a channel towards economic growth and development;
- creating employment and reducing the high rate of poverty;
- reducing rural–urban migration;
- providing young graduates with the right skills and support, financial and otherwise, that will make it easier for them to set up careers in the establishment of small and medium-sized businesses;
- instilling in young graduates and adults an entrepreneurial spirit that would create in them perseverance in any business venture they embark upon;
- creating an environment for a smooth transition from a local and traditional economy to a modern industrial economy.

To achieve the above stated objectives correctly, teachers need to teach the EEd (e.g. creativity, business idea generation, role of entrepreneur in business/society, etc.) that will trigger desired entrepreneurial behaviours such as entrepreneurial self-efficacy (e.g. financial literacy, managing ambiguity, marshalling resources, planning, etc.) and entrepreneurial mindset (e.g. self-confidence in tackling problems, self-evaluation, entrepreneurial attitude, etc.). The study will attempt to examine the nature of entrepreneurial knowledge being taught at universities within Katsina State and also determine the influence of the said knowledge on student’s entrepreneurial self-efficacy, entrepreneurial mindset, and consequently their EI. The attempt was based on the fact that EI is regarded as a reliable indicator of entrepreneurial action leading to self-employment resulting from learning EEd (Ogundipe et al., 2012).

2.2. Review of Empirical Studies

Studies on the effect of entrepreneurial education on entrepreneurial intention (EI) follow various perspectives. A lot of these studies indicated a positive or mixed result (Lorz, Müller, and Volery, 2011), while a few others found a negative impact of entrepreneurship education (Oosterbeek, Praag, and Ijsselstein, 2010; Graevenitz, Harhoff, and Weber, 2010). Other studies found insignificant or mixed results between entrepreneurial education and entrepreneurial intention (Olomi & Sinyamule, 2009; Souitaris, Zerbinati, and Al-Laham, 2007). To actually test the depth of the relationship between the factors, Linan and Chen (2009) developed and tested a new questionnaire aiming at measuring entrepreneurial intention through the theory of planned behaviour. Studies conducted in different countries across the globe at different times have revealed positive and negative impacts of EEd courses or programmes at universities on entrepreneurial intention. Peterman and Kennedy (2003) discovered that EEd positively affected the entrepreneurial

intentions of high school students in Australia. The study involved 220 students from 17 high schools chosen from across Australia. Souitaris et al. (2007) found that sensitization through a long (January–May) entrepreneurship programme led to stronger EI. The study covered 250 students from science and engineering faculties randomly selected from two major European universities. Graevenitz, Harhoff, and Weber (2010) in their study on the effects of EEd involving students of the Department of Business Administration, Munich School of Management (one of Germany's largest universities), discovered that students' EI had become more pronounced as a result of the EEd course they had been taking. Sanchez (2013), using correlation and regression analyses, conducted a study on *the impact of Entrepreneurship Education Programme on Entrepreneurial Competences and Intention* in Spain and discovered that there is a positive relationship between EEd and EI. Furthermore, Karlsson and Moberg (2013) in their study on students who offered EEd courses in a marketing master's programme at Southern Denmark University found that the said courses were effective in enhancing the students' EI and start-up behaviour, which, however, was not observed in the control group. Remeikene, Startiene, and Dumciuviene (2013) conducted a study on *Explaining Entrepreneurial Intention of University Students: The Role of Entrepreneurial Education*, involving students of economics and mechanical engineering from across universities in Lithuania. The result of the study reveals that EEd has a positive impact on the EI of students of economics and mechanical engineering. The study has also established that students of economics have a more favourable attitude towards the benefits of EEd with respect to business start-up in comparison with students of mechanical engineering.

In Nigeria, some related studies on students EI have also been conducted. Muhammad, Aliyu, and Ahmed (2015) conducted a study on *EI among Nigerian University Students*, involving 205 students from Abubakar Tafawa Balewa University, Bauchi. The findings of the study indicated that entrepreneurial attitude, subjective norm, and power of behavioural control are all significant indicators of EI. Using multi-regression analysis technique, Lucky and Ibrahim (2014) conducted a study on the *Environmental Factors and EI among Nigerian Students in University Utara, Malaysia (UUM)* and found that both entrepreneurial orientation (EO) and entrepreneurial skill are essential factors required in the realization of EI by the Nigerian students in UUM. In a study on EI by Ogundipe et al. (2012) among students from Lagos State University, 206 graduating students from the departments of Guidance and Counselling and Business Education were observed, and it was discovered that EEd had a significant impact on students' EI. Students from the Department of Guidance and Counselling showed stronger EI than their Business Education counterparts.

Oosterbeek, Praag, and Ijssestein (2010) studied the impact of EEd, using a difference-in-differences framework in the Netherlands, covering 252 students, and

the results indicated that the effect on students' self-assessed entrepreneurial skills was insignificant. The study also found that the effect of the EEd course on EI was a significantly negative one. A study conducted by Olumi and Sinyamule (2009) in Tanzania, involving 237 professionals who took EEd courses during vocational training, discovered that participation in an entrepreneurship course has no significant effect on start-up inclinations. Galloway, Anderson, and Wilson (2005) examined the influence of EEd on 307 university students in Scotland and found that only half of them perceived that the course had a positive impact on their EI.

Our view of empirical studies on EI glaringly shows that all the studies were conducted in other countries, and the ones conducted in Nigeria covered students from institutions in the south-western and north-eastern zones only. None of the studies covered students in universities located in Katsina State in particular and the north-western zone in general. This study intends to address this gap by covering students in universities located in Katsina State, north-western Nigeria.

2.3. Theoretical Framework

There are three major theoretical approaches to studying the practice of entrepreneurship. The first approach comprises the trait theories that explain entrepreneurship from the perspective of personal traits of entrepreneurs which distinguish them from other people, such as need for achievement, need for power, need for affiliation, etc. The second approach involves behavioural theories that explain entrepreneurship through the ability of an individual to identify, utilize, and take steps to harness the profitable opportunities not seen by others. The third approach comprises the cognitive theories that explain entrepreneurship from the perspective of influence of environmental factors such as subjective norms, behavioural control, EEd, etc. Cognitive theories attempt to understand how entrepreneurs process information and how they think (Baron, 2004). Most scholars are of the view that cognitive theories/models provide a stronger predictive power than the trait and behavioural ones (Gartner, 1988). Based on this argument, the theoretical underpinning of this study will be *The Theory of Planned Behaviour*, one of the major cognitive theories of entrepreneurship.

According to the theory of planned behaviour, EI is a function of the following factors: Subjective Norms (SN), Attitude (A), and Perceived Behavioural Control (PBC) which involves EEd (Ajzen, 1991). The subjective norms represent the influence of family background, peers, and friends. For instance, if the parents and friends of an individual consider entrepreneurship as too risky, it is unlikely the individual concerned will have EI. Attitudes comprise expectations about the consequences of performing a given action. For example, if an individual expects positive consequences from an entrepreneurial action, such as commencement of business, it is likely he or she will develop an EI. Perceived Behavioural Control

(PBC) entails the individual's perception of the ease or difficulty of becoming an entrepreneur. PBC includes not only the feeling of being able or not being able to become entrepreneur but also the controllability of the behaviour; the greater the perceived control, the stronger the person's EI (Ogundipe et al., 2012). For example, if an individual has perceived that his difficulty in becoming an entrepreneur is due to lack of awareness and education, his or her enrolment in any of the EEd courses may bring about EI. EEd was introduced in the curricula of tertiary institutions based on the assumption that it would have a positive impact on students' EI and eventual establishment of business start-ups. In literature, there is sufficient theoretical basis to justify a belief that educational interventions may increase entrepreneurial behaviour and efficacy (Rideout & Gray, 2013). It is in the light of this belief that this study will attempt to assess the influence of EEd on the EI of university students in Katsina State, which may be positive or negative.

3. Research Methodology

3.1. Research Design

The descriptive survey design was adopted for this study. The method is considered appropriate since there will not be any attempt to control or manipulate the sample subjects from the population.

3.2. The Population of the Study

The population of the study consists of all students offering various entrepreneurship courses for a semester at the three universities in Katsina State, namely, Federal University Dutsin-Ma (FUDMA), Umaru Musa Yaradua University (UMYU), and Al-Kalam University, Katsina (AUK). Based on the information provided by the Entrepreneurship Development Centres of the said universities, the total number is 5,898 (FUDMA – 575, UMYU – 1,933, and AUK – 3,390).

3.3. Sample Size and Sampling Techniques

In estimating the sample size for the study, the formula for determining sample size given by Krejche & Morgan (1970) was used. The formula is as follows:

$$s = X^2 NP (1 - P) \div d^2 (N - 1) + X^2 P (1 - P),$$

where s = required sample size.

X^2 = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841).

N = the population size.

P = the population proportion (assumed to be .50 since this would provide the maximum sample size).

D = the degree of accuracy expressed as a proportion (.05).

$$S^+ = \frac{3,841(5.898)(0.50)(0.50)}{0.05^2(5,898) + 3,841(0.50)(0.50)}$$

$$S = \frac{5,663.6}{15.7} \quad S = 377 \text{ Students}$$

Quota sampling technique was used to determine sample sizes in the three universities covered. The random sampling technique was used in administering the questionnaires among the sample subjects within the universities under study.

3.4. Data Collection Instruments

Data was collected from both primary and secondary sources. The primary data was generated by means of an adapted questionnaire titled *Assessment Tool for Entrepreneurship Education (ASSTEE)*. The instrument was used in evaluating the influence of EEd taught in tertiary institutions in European Union (EU) countries. The instrument was adapted due to similarities of objectives of study and study variables. Using a random sampling technique, the questionnaire was administered to the 377 students from the three universities as follows: FUDMA – 37, UMYU – 124, and AUK – 216. The quota for the sample size in each university was arrived at using this formula:

$$\frac{\text{Sample Size}}{\text{Total Population}} \times \text{No. of EEd students of a University} = 37$$

E.g. for FUDMA $\frac{377}{5,898} \times 575 = 37$

3.5. Method of Data Analysis

Descriptive as well as inferential statistics were used in the analysis of the data collected. Descriptive statistics in the form of frequencies and percentages was used to analyse the demographic data of the respondents, while means (averages) were used for the descriptive analysis of entrepreneurial education. Inferential statistics in the form of simple regression was used to investigate the effect of entrepreneurial knowledge on entrepreneurial self-efficacy and mindset.

4. Data Presentation and Analysis

4.1. Reliability Test

In order to test the reliability of research instruments, Cronbach's alpha was used. The seven items used in measuring entrepreneurial education, entrepreneurial self-efficacy, and entrepreneurial mindset were tested for reliability, and the results are presented in *Table 4.1*.

Table 4.1. Reliability test using Cronbach's alpha

	Variables	Cronbach's alpha	No. of items
1.	Entrepreneurial knowledge	.728	7
2.	Entrepreneurial self-efficacy	.777	7
3.	Entrepreneurial mindset	.813	7

Source: authors' computation (2017) using SPSS

From the results in *Table 4.1* above, it can be clearly seen that Cronbach's alpha for the three variables are well above .70, which implies that the research instruments are highly reliable.

4.2. Descriptive Statistics

Descriptive statistics in the form of frequencies, percentages, means, and minimum and maximum values were used in the analyses of demographic variables and entrepreneurial education.

4.2.1. Demographic Variables

There are three universities in Katsina State, namely: the Federal University, Dutsin-ma; Umar Musa Yar Adua University, Katsina; Al-Qalam University, Katsina. *Table 4.2* presents the descriptive results of the institutions where the respondents receive entrepreneurial education.

Table 4.2. Institution of respondents

	Frequency	Percentage
FUDMA	37	13
UMYU	96	34
AUK	152	53
Total	285	100

Source: authors' computation (2017) using SPSS

In the Table, 37 respondents, amounting to 13 per cent, are students of FUDMA, 96 respondents, or 34 per cent, are students of UMYU, while 152 students, making up 53 per cent of the respondents, are students of AUK.

In *Table 4.3* below, the descriptive results of respondents' age distribution are shown. The results in the Table indicate that the majority of the respondents are above 30 years, while only 14, or 5 per cent, of them are between 18 and 20 years. The result is thus quite worrisome, showing that the majority of the respondents, who are undergraduates, are above 30 years. The implication is that the respondents in this category are above the National Youth Service Corps (NYSC) age and cannot be gainfully employed by most organizations, which expect a graduate trainee to be around 26 years old. However, it can be argued that some of the respondents may already belong to the working class. Another argument is that most of the respondents are from AUK, which is a private university, where the most working-class members are enrolled compared to public universities.

Table 4.3. *The age-group of respondents*

	Frequency	Percentage
18–20	14	5
21–23	61	21
24–26	67	24
27–29	54	19
Above 30	89	31
Total	285	100

Source: authors' computation (2017) using SPSS

For the gender distribution of the respondents, results in *Table 4.4* below show that the majority of the respondents are male students, who account for 79 per cent, while the remaining 21 per cent of the respondents are female. This result confirms the male domination in the selected universities, which may be due to cultural and religious factors, among others.

Table 4.4. *Gender Distribution*

	Frequency	Percentage
Male	226	79
Female	59	21
Total	285	100

Source: authors' computation (2017) using SPSS

Respondents' level at the university is summarized in *Table 4.5* below. Descriptive results revealed that 12 (4%) of the respondents are in their second year (level 200), 49 (17%) are level 300, and 224 (79%) are level 400 students.

The implications for this are that the majority of the students who have had extensive EEd training are at level 400 and would most likely have taken all the courses in entrepreneurship and have had a reasonable number of interactions with lecturers taking entrepreneurship courses.

Table 4.5. *Level of respondents*

Level	Frequency	Percentage
200	12	4
300	49	17
400	224	79
Total	285	100

Source: authors' computation (2017) using SPSS

4.2.2. Entrepreneurial Knowledge

To examine the nature of entrepreneurial education acquired by the students, 7 factors of EEd were used. The mean distribution of the responses was fairly high with a minimum of 3.94 and a maximum of 4.40, as shown in *Table 4.6*. The high standard deviation scores indicate that the dispersion from the means appears to be normal.

Table 4.6. *Descriptive statistics of entrepreneurial education*

	N	Min.	Max.	Mean	Std. Deviation
i. In entrepreneurship education (EEd), I have been taught how to think creatively.	285	2	5	4.40	.875
ii. I have been taught how to generate business ideas.	285	1	5	4.24	1.065
iii. I have been taught how to translate business ideas into business opportunities.	285	1	5	4.12	.976
iv. I have been taught how to translate business opportunities into business ventures/projects.	285	1	5	3.94	1.012
v. I have been taught the role of entrepreneur in a business set-up.	285	1	5	4.15	.986
vi. I have been taught the role of entrepreneur in the society.	285	1	5	4.19	.913
vii. I have been taught different reasons why people start a business.	285	1	5	4.10	.867

Source: authors' computation (2017) using SPSS

From *Table 4.6* above, it can be seen that all the 7 items used in measuring entrepreneurial education, except Item 4, had a mean value greater than 4. This implies that on the average the respondents fairly agreed that they had been taught: how to think creatively, generate business ideas, translate business ideas into opportunities, translate business opportunities into business projects/ventures, the role of entrepreneur in a business set-up, the role of entrepreneur in the society, different reasons for starting a business – and they are satisfied with the teaching methodology adopted by the lecturers. The implication is that lecturers handling entrepreneurship in the three universities have a positive impact on students' knowledge. However, the mean value of Item 4, which is less than 4, should not be ignored. It shows that remedial actions are required concerning how business opportunities could be translated into business projects/ventures. On the whole, the students reasonably agreed that they had received education in the major areas of entrepreneurship included in the questionnaire.

4.3. Regression Analysis

In order to achieve the remaining two objectives, a simple regression analysis is utilized, and two models are used in this regard. In Model 1, entrepreneurial self-efficacy (ENSE) is regressed on entrepreneurial education (ENE), while in Model 2 entrepreneurial mindset (ENM) is also regressed on entrepreneurial education. The regression result of Model 1 is presented in *Table 4.7* below. The regression results reveal that entrepreneurial knowledge has a significantly positive influence on students' entrepreneurial self-efficacy, as confirmed by the t-value of 23.680, which is significant at 1 per cent level of significance. The regression coefficient of .735 is an indication that a 1 per cent increase in the level of entrepreneurial education acquired by students will positively influence their level or degree of entrepreneurial self-efficacy by .735 per cent. The implication here is that a student's level of self-efficacy is highly influenced by the level of entrepreneurial education acquired. The result is an attestation that entrepreneurial education is a strong determinant of entrepreneurial self-efficacy.

Table 4.7. *Regression results of Model 1*

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	6.142	.804		7.635	.000
ENK	.735	.031	.674	23.680	.000

Dependent variable: ENSE

Source: authors' computation (2017) using SPSS

Similarly, to determine the extent of influence of the acquired entrepreneurial knowledge on students' entrepreneurial mindset, the regression results presented in *Table 4.8* are used. Regression results indicate that entrepreneurial education has a positive and significant influence on students' entrepreneurial mindset. Again, the level of significance is 1 per cent, which suggests that we have a 99 per cent confidence in our results. The regression coefficient of .629 connotes that a 1 per cent increase in the level of entrepreneurial education is positively associated with about .629 per cent increase in the level of students' entrepreneurial mindset. This implies that a student's level of entrepreneurial mindset is propelled by the level of the received entrepreneurial education to a larger extent. These findings are in agreement with that of Peterman and Kennedy (2003), Souitaris, Zerbini, and Al-Jahran (2007), Graevenitz, Harhoff, and Weber (2013), Karlson and Moberg (2013), Remeikene, Startiene, and Dumciuviene (2013), and Muhammad, Aliyu, and Ahmed (2015). The findings were inconsistent with those of Oosterbeek, Praag, and Ijssestein (2010), Olumi and Sinyamule (2009), and Galloway, Anderson, and Wilson (2005), who revealed an insignificant influence of entrepreneurship education on students' EI.

Table 4.8. *Regression results of Model 2*

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
2 (Constant)	9.401	1.032		9.106	.000
ENK	.629	.040	.520	15.782	.000

Dependent variable: ENM

Source: authors' computation (2017) using SPSS

4.4. Hypothesis Testing

To test the hypotheses, the regression results in *Table 4.7* and *Table 4.8* were utilized. The t-test was used in testing the significance of entrepreneurship education on entrepreneurial intentions (entrepreneurial self-efficacy and mindset). The decision rule is to reject the null hypothesis if the probability value (P-value) is greater than 1 per cent level of significance (0.01).

4.4.1. Test of Hypothesis One

The regression result in *Table 4.7* is employed in testing hypothesis one (H_{0_1}). The hypothesis is recaptured below:

H_{0_1} : entrepreneurship education does not have a significant effect on students' entrepreneurial self-efficacy.

The t-value of entrepreneurial self-efficacy (ENSE) in *Table 4.7* is positive and significant at 1 per cent level since .000 is less than .01. Therefore, this study rejects the null hypothesis one and confirms that entrepreneurship education has a positive and significant effect on the entrepreneurial self-efficacy of students in the three universities under review.

4.4.2. Test of Hypothesis Two

Table 4.8 is used in testing hypothesis two (H_{0_2}). To do this, the hypothesis is recaptured as stated below:

H_{0_2} : There is no significant effect of entrepreneurship knowledge on students' entrepreneurial mindset.

Similarly, the t-value of entrepreneurial mindset (ENM) in *Table 4.8* shows a positive sign, which is significant at 1 per cent level of significance. The p-value of .000, which is less than .01, confirmed the assertion. Since .000 is less than 1 per cent level of significance, this study rejects the H_{0_2} , and affirms that entrepreneurship knowledge has a significantly positive effect on the entrepreneurial mindset of students in FUDMA, UMYU, and AUK.

5. Summary, Conclusions, and Recommendations

This study determines the level of influence of entrepreneurship education on the students' entrepreneurial intentions. Entrepreneurial intentions were represented using entrepreneurial self-efficacy and entrepreneurial mindset. The three studied variables comprising entrepreneurship education, entrepreneurial self-efficacy, and entrepreneurial mindset were measured using 7 items each. Descriptive as well as simple regression techniques were adopted as methods of data analysis. The study covers level 200, 300, and 400 students of Federal University Dutsin-Ma (FUDMA), Umaru Musa Yar'adua University (UMYU), and Alqalam University Katsina (AUK), respectively, who have taken course(s) in entrepreneurship. The major findings of the study are that students fairly agreed that they have received education in the major areas of entrepreneurship such as creativity, innovation, and venture creation and that entrepreneurial education has a significantly positive influence on students' entrepreneurial self-efficacy and entrepreneurial mindset.

On the basis of the major findings of the study, it was concluded that entrepreneurship education has contributed immensely to students' entrepreneurial intention. The study also concludes that the influence of entrepreneurship education is more pronounced on students' entrepreneurial self-efficacy than their entrepreneurial mindset. It is also concluded that for students to be able to translate business opportunities into business projects/

ventures, remedial actions and additional efforts are required. Following the major findings and conclusions, the study recommends the following:

- i. The university management should devise means of an adequate follow-up of their graduates to ensure the translation of their entrepreneurial intentions into venture creation and management.
- ii. In the course of teaching entrepreneurship education, lecturers should pay special attention to the area of venture creation as the students do not seem to be optimistic about their ability to translate business opportunities into business projects/ventures.
- iii. To minimize the high mortality rate of ventures established by university graduates at infancy level, the entrepreneurship centres of universities should monitor and assist their graduates financially and morally to nurture the said ventures from infancy to maturity levels.
- iv. Lecturers, the management of the university, state and federal ministry of education, and other relevant stakeholders should accord special attention to entrepreneurship education as doing so will enhance students' entrepreneurial self-efficacy and entrepreneurial mindset.
- v. Adequate funding, motivation of entrepreneurial lecturers, provision of well-equipped entrepreneurship development centres should be provided, among others, to enhance teaching of entrepreneurship education in the three universities covered by the study.

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