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THE IMPACT OF ENTREPRENEURSHIP EDUCATION ON THE DEVELOPMENT OF ENTREPRENEURIAL CAREER INTENTIONS AND ACTIONS

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Abstract

Purpose: This study examined the impact of entrepreneurship education on the development of entrepreneurial career intentions and actions using selected tertiary institutions in Delta state as a case study. The main objective of the study was to investigate the impact of entrepreneurship education on the entrepreneurial intentions of university students to start a new venture using Linen's model. This study also analyzed the significance of different component of entrepreneurship education program in imparting entrepreneurship education at tertiary level.

Methodology: The population of this study consisted of 10,279 students who were, at the time of the survey, in their final year of study (2015/2016 academic session) at Delta State Polytechnic Ogwashi-uku and Delta State University. A study sample of 400 students was taken using random sampling technique. The methodological approach involved analysis of a close ended questionnaire distributed to undergraduate students in their last year in selected tertiary institutions. The data collected were analyzed using

descriptive statistics such as Frequency counts, percentages and population t-test were the statistical techniques deployed to test the study hypotheses and also answer the research questions.

Results: The findings suggest positive relationship between entrepreneurship education and intentions and perceived desirability while no relation existed with perceived feasibility or selfefficacy. Given the significance and importance of entrepreneurship, it is desirable to reform the educational system to encourage creativity and innovativeness of students.

Unique contribution to theory, practice and policy: The study recommended that entrepreneurship education should be practical oriented so as to sustain students' interest. In addition the duration and intensity of the entrepreneurship education should be increased beyond a semester's course to realize a maximum impact on university students.

Keywords: *Entrepreneurship Education, Entrepreneurial, Career Intentions and Actions*

1.0 INTRODUCTION

1.1 Background of the Study

Despite no universally accepted definition of the term, entrepreneurship has been seen as a process, action or an activity to convert an idea into a value added product or service. Shane and Venkataraman (2014) defined the term as the discovery, evaluation and exploitation of an opportunity, while Meredith, Nelson and Neck (2016) defined entrepreneurs as people who have the ability to see and evaluate business opportunities; to gather the necessary resources to take advantage of them; and to initiate appropriate action to ensure success. This behaviour would be best predicted by the entrepreneurial intentions (Liñán, Rodríguez-Cohard & Rueda-Cantuche, 2010). Several empirical studies have found out that a person's intention to become an entrepreneur offers the best predictor of his/her actual engagement in entrepreneurship in the future (Hamidi, Wennberg & Berglund, 2015).

Entrepreneurship education according to Isaac, Visser, Friedrick and Brijlal (2013) is the purposeful intervention by an educator in the life of the learner to survive in the world of business. It has as its focus an action orientation primarily embodied in teaching students how to develop a business plan (Ronstadt, 1985). Entrepreneurship education develops and stimulates entrepreneurial process, providing all tools necessary for starting up new ventures (Postigo and Tomborini 2012). It is commonly believed that entrepreneurship education is an imperative that would make a positive contribution to improving the entrepreneurship orientation of people, leading to the acquisition of skills, creativity, confidence, drive and courage, in order to create employment for self and others.

Entrepreneurial intentions can be defined as a state of mind directing and guiding the actions of individuals towards the development and implementation of new business concepts (Bird, 1988). The intentions to carry out certain behaviour are shaped and affected by different factors, such as, needs, values, wants, habits and beliefs (Lee & Wong, 2004); a set of cognitive variables (Ajzen, 1991) and situational factors (Liñán & Chen, 2006). Past research indicates that one of the key instruments to increase entrepreneurial attitudes of both potential and nascent entrepreneurs is entrepreneurship education (Liñán et al., 2010) which is strongly related to intention (Noel, 1998) and inculcation of a range of skills and attributes aimed at leveraging the entrepreneurial behaviour among recipients (OECD, 2009). It has an important effect on students' propensity to start-up a firm (see Do Paco, Ferreira, Raposo, Rodrigues & Dinis, 2011) and increases their interest in entrepreneurship as a career choice (Wilson, Kickul & Marlino, 2013).

Recent research has paid increasing attention to entrepreneurship promotion among university graduates (Liñán & Chen, 2006). The majority of this research has focused on developed countries (Nabi & Liñán, 2011). Thus, a main objective of the current study is to add to the body of research through studying the impact of entrepreneurship education on the development of entrepreneurial career intentions and actions.

In Nigeria, annually hundreds of thousands of school leavers, university graduates and vocational education and training institutes' graduates enter the job market searching for first jobs. And in

most of the cases they fail. For many, entrepreneurship can be an alternative career choice, provided that prior intention exists. Over the past five years, more attention was given to spread entrepreneurship among students, specifically through vocational training and formal education systems. Nevertheless, these initiatives have not been examined closely for evidence of influence.

1.2 Statement of Problem

In developing countries, entrepreneurship is considered vital for enhancing employment opportunities. Such impact of entrepreneurship is also evident from territories which reported declines in the unemployment levels because they have the higher level of increase in entrepreneurial initiative indexes (Audretsch, 2012). In spite of such global recognition, entrepreneurship remains limited in Nigeria. This happens due to limited attention of policy maker and government toward entrepreneurship in the past, and lower level of growth in key indicators for starting new business of Nigeria's, limited economy to absorb shocks (Haque, 2013). Such attitude towards entrepreneurship in the past have affected the entrepreneurial attitude and intentions of people in Nigeria which is just 23% as per Global Entrepreneurship Monitor (GEM) report on Nigeria (Sarfraz & Qureshi, 2011). While the report of GUESS (2011) has ranked Nigeria at lowest on student's intention to become an entrepreneur by starting their own business after completing the study.

Although the importance of entrepreneurship education had been recognized in the literature, but limited empirical studies have been conducted to analyze the impact on entrepreneurial intention separately from general education (Peterman & Kennedy, 2013). As mentioned by Byabashaija and Katono (2011): "The effect of general education has been explored but only a few studies have looked at entrepreneurial education, particularly at university and tertiary institution level." According to Byabashaija and Katono (2011), the effect of entrepreneurship education on entrepreneurial intention is limited and still undergoing empirical testing. In their study Zhang et al. (2013) concluded that despite the importance of entrepreneurship education it's unusual to observe that few studies have been conducted to see the impact of entrepreneurship education on intention.

1.3 Objective of the Study

- i. To examine whether students who received entrepreneurship education have higher entrepreneurial career intentions than students who did not receive entrepreneurship education.
- ii. To determine whether exposure to entrepreneurship education influence students' perceived desirability of entrepreneurship.
- iii. To investigate if exposure to entrepreneurship education influence students' perceived feasibility of entrepreneurship.
- iv. To find out if students' perceived desirability of entrepreneurship influence their entrepreneurial intentions.
- v. To determine if students' perceived feasibility of entrepreneurship influence their entrepreneurial intentions.

1.4 Research Questions

- i. What is the effect of entrepreneurship education on the entrepreneurial career intentions of students?
- ii. How do exposure to entrepreneurship education influence students' perceived desirability of entrepreneurship?
- iii. How do exposure to entrepreneurship education influence students' perceived feasibility of entrepreneurship?
- iv. What is the effect of perceived desirability of entrepreneurship on students' entrepreneurial intentions?
- v. How do students' perceived feasibility of entrepreneurship influence their entrepreneurial intentions?

1.5 Statement of Hypotheses

1. H1: Students who received entrepreneurship education have higher entrepreneurial career intentions than students who did not receive entrepreneurship education.
H0: Students who received entrepreneurship education have lower entrepreneurial career intentions than students who did not receive entrepreneurship education.
2. H1: Exposure to entrepreneurship education influence students' perceived desirability of entrepreneurship.
H0: Exposure to entrepreneurship education do not influence students' perceived desirability of entrepreneurship.
3. H1: Exposure to entrepreneurship education influence students' perceived feasibility of entrepreneurship.
H0: Exposure to entrepreneurship education do not influence students' perceived feasibility of entrepreneurship.
4. H1: Students' perceived desirability of entrepreneurship influence their entrepreneurial intentions.
H0: Students' perceived desirability of entrepreneurship do not influence their entrepreneurial intentions.
5. H1: Students' perceived feasibility of entrepreneurship influence their entrepreneurial intentions.
H0: Students' perceived feasibility of entrepreneurship do not influence their entrepreneurial intentions.

2.0 REVIEW OF RELATED LITERATURES

2.1 Theoretical Literature

2.1.1 Entrepreneurship Education

Entrepreneurship education has come to denote all forms of knowledge delivery that seek to empower the individual to create real wealth in the economic sector, thereby advancing the cause of development of the nation as a whole. According to Bassey and Archibong (2012), the goal of entrepreneurship education is intended to empower our graduates irrespective of their areas of

specialization with skills that will enable them to engage in income yielding venture, if they are unable to secure jobs in the public sector. It is a reorientation from job seekers to job creators.

According to Shane (2013) entrepreneurship process consist of capability to identify opportunity, collect resources, organize them and adapt strategy so that opportunity can be exploited. The knowledge, skills and information he obtained through education will likely improve the expected returns for exploiting the opportunity. Entrepreneurship education not only improves knowledge skill and information which needed to pursue an opportunity but also equip individual with analytical ability and knowledge of entrepreneurial process which improve the entrepreneurial judgment (McMullen & Shepherd, 2016).

The study of European Commission (2016) reported that entrepreneurship specific education encourage students in accumulating entrepreneurial intentions which results in creation and supply of new firms by the students. Researchers agreed that the influence of “push” and “pull” while studying entrepreneurship may determine their entrepreneurial career path (Matlay & Storey, 2013). Galloway and Brown (2012); Henderson and Robertson (2014) in their studies also showed that linkages between entrepreneurial education and entrepreneurial activity of students. While the study of the Potter (2015) highlighted the function of entrepreneurship education is vital in enhancing the entrepreneurship attitudes of individuals at tertiary level of education. Therefore, entrepreneurship education initiatives at university level are considered vital for increasing potential entrepreneurs supply by making more students conscious and interested choosing entrepreneurship as a career option.

Accordingly, entrepreneurship education in the form of courses is correlated to entrepreneurial intentions for three reasons. First, entrepreneurship education helps the students to learn and identify new business opportunities. Such knowledge leads to enhance the number and innovativeness of opportunities which are linked with the technology (Shepherd & DeTienne, 2012). Learning important entrepreneurial skills and competencies will lead to perceive new feasible venture by students, thus affect PBC (Krueger et al., 2014; Zhao et al., 2012). Second, research found positive association between social desirability and entrepreneurship career intention (Tkachev & Kolvereid, 1999). While the important role of education is counted in socializing individuals into entrepreneurial careers (Krueger & Brazeal, 1994) which can form attitude toward behaviour and social norms. Third, through entrepreneurship courses one get knowledge about starting new business venture in a better and faster way the that result in more value from the identical opportunity (Zhao et al., 2012; Davidsson & Honig, 2013).

It is also argued in the studies that learning important entrepreneurial skills and competencies will lead to perceive new feasible venture by students, thus affect Perceived Behavioural Control (PBC) (Krueger et al., 2014; Zhao et al., 2012).

Entrepreneurship researchers have identified various determinants of individual entrepreneurial intentions. Entrepreneurship education has been recognized as one of the important determinant of entrepreneurial intentions. Various studies like Galloway and Brown (2012); Fayolle, Gailly and Lassas-Clerc (2016); Potter (2015); Henderson and Robertson (2014); Zhang, Duysters, and Cloudt (2013) empirically demonstrated the entrepreneurial education as an important determinant of entrepreneurial intentions. **2.1.2 Entrepreneurial Career Intention**

Although, there is no universally accepted definition of entrepreneurship, there is an agreement that it is a process entailing recognition of a need, exploiting an opportunity to fulfil the need and building an enterprise around it. This behaviour would be best predicted by the entrepreneurial intentions (Liñán et al., 2010). For some scholars, venture creation is an outcome of intentions (Maina, 2011).

Entrepreneurial intention is a determinant element to perform entrepreneurial behaviour (Pribadi, 2012). It is a state of mind which directs and guides the actions of individuals towards the development and implementation of new business concepts (Bird, 1998). The intention to carry out a given behaviour can be predicted by the person's attitudes towards that behaviour (Maina, 2011; Pribadi, 2012), that is, whether the performance of this behaviour is positively or negatively valued. These attitudes converge with situational factors to drive or hinder the establishment of new businesses (Boyd & Vozikiz, 1994). According to London (1983) situational factors include prior exposure to entrepreneurship, availability of role models and social attitudes towards entrepreneurship; all together are likely to have a positive bearing on individual's decision to venture into business.

According to Maina (2011) 'entrepreneurs discover entrepreneurship opportunities depending on the information they already have'. This information can be obtained from education programmes that aim at building knowledge and skills either 'about' or 'for the purpose of' entrepreneurship, generally, as a part of recognised education pro-grammes at primary, secondary or tertiary level educational institutions (Corduras et al., 2010). Enterprise education may, therefore, have a positive impact on entrepreneurial intentions by providing entrepreneurial skills and knowledge (Peterman & Kennedy, 2013; Rae, 2016).

A prior research in Anglo-Nations has demonstrated marked differences between students who are intending to be entrepreneurs and those who are not (Levenburg & Schwarz, 2015). Henderson and Robertson (1999) found that 67 per cent of those studying entrepreneurship expressed a desire for self-employment. A key assumption under entrepreneurship education is that entrepreneurial skills can be taught and are not fixed personal characteristics (Oosterbeek, Van Praag & Ijsselstein, 2013), which complies with Drucker's (1985) view of entrepreneurship as a discipline and like any discipline it can be learned, and Rushing's (1990) contention that entrepreneurship education can enhance and develop traits that are associated with entrepreneurship and provide skills needed to start businesses.

2.1.3 The role of entrepreneurship education in entrepreneurial intentions

One construct in the intentions theory that has not featured enough in literature is entrepreneurial education. The effect of general education has been explored (Hisrich and Peters, 1989; Gartner *et al.*, 2004) but only a few studies have looked at entrepreneurial education, particularly at university and tertiary institution level. Exceptions include Audet (2013), Wong, Wang and Lu (2001), and Autio *et al.* (1997). These studies have however not used similar measures for entrepreneurial education. The temptation has been to capture entrepreneurship education as a dichotomous yes/no variable. The dissimilarity stems from the lack of a universally accepted definition of entrepreneurship. Definitional differences have meant equally different perspectives of what constitutes the construct space for entrepreneurship and by extension, entrepreneurial education.

Researchers who view entrepreneurship merely as the starting of a business venture are only concerned about the logistics of a start up. Others see entrepreneurship education from a broader perspective. For example, Drucker (1994), Bygrave and Zacharakis (2004), and Timmons and Spinelli (2004) believe that entrepreneurship education should create a capacity for imagination, flexibility, creativity, willingness to think conceptually, and the art to see change as an opportunity. This should be in addition to the basic skills of starting and managing a business. This qualitative distinction in entrepreneurial education was emphasized Tounés (2016) study done in French universities.

2.2 Theoretical Framework

The research is built on Liñán's model (2004), which integrates Ajzen's the Planned Behaviour Theory (1991) and Shapero and Sokol's Theory of the Entrepreneurial Event (1982).

Liñán (2004) proposed that the education of an entrepreneur should be based on strengthening the participant's intention of becoming an entrepreneur. He integrated the two theories of Ajzen's the Planned Behaviour Theory (1991) and Shapero and Sokol's Theory of the Entrepreneurial Event (1982) into an entrepreneurial intention model by adding the additional element of entrepreneurial knowledge acquired through education.

2.2.1 The Theory of Planned Behaviour

The Theory of Planned Behaviour (TPB) explains the individual's actions in terms of intentions through establishing a link between attitudes and behaviour. It is based on the premise that much of human behaviour is planned and, therefore, predicted by intention towards that behaviour (Izquierdo & Buelens, 2015), especially in cases where the behaviour is difficult to observe, rare and involves unpredictable times lags (Basu & Virick, 2015). TPB includes three components that predict behavioural intentions (Miller, Bell, Palmer, Gonzalez & Petroleum, 2009):

(1) Personal attitude towards outcome of behaviour: The degree to which a person has a favourable or unfavourable evaluation of behaviour (Ajzen, 1991). (2) Perceived social norm (subjective norms), or pressure to perform the behaviour (Ajzen, 1991). (3) Perceived behavioural control—the perception of ease or difficulty of performing certain behaviours (Ajzen, 1991). In more recent work, Ajzen (2002) affirmed that the measures of perceived behavioural control need to incorporate self-efficacy (dealing largely with ease or difficulty of performing the behaviour) and controllability (the extent to which performance is up to the actor).

2.2.2 Shapero and Sokol's Theory

Shapero and Sokol (1982) stated that firm creation is the result of the interaction among contextual factors, which would act through their influence on the individual's perceptions. The consideration of the entre-preneurial option would take place as a consequence of some external change (appreciating event). The person's answer to that external event will depend on his/her perception of perceived desirability and perceived feasibility. Whereas feasibility is built around perceived competency to carry out a specific behaviour, the desirability relates to how personally rewarding the behaviour/task is perceived to be (Cooper & Lucas, 2015); both are recognised to have a positive relation with entrepreneurial intentions.

The integration of the two theories results in combining personal attitude and perceived social norms under perceived desirability, while perceived feasibility is represented by self-efficacy. Controllability is not a part of this model as evidence showed that self-efficacy is superior to controllability in predicting intentions and behaviour (Rhodes & Courneya, 2013). This is supported by Boyd and Vozikis' (1994) supposition that entrepreneurial intentions are stronger with a growing degree of entrepreneurial self-efficacy due to the presence of entrepreneurial role models in close relatives.

2.3 Empirical Review

Previous research studies have shown that there is a significant relationship between entrepreneurship education and career intention. For example, a study by Kolvereid and Moen (1997) has shown that students with a major in entrepreneurship have a higher intention to engage as entrepreneurs and are likely to initiate business. Additional research by Autio, Keeley, Klofsten and Ulfstedt (1997) found that entrepreneurship education creates a positive image for the entrepreneurs and contributes to the choice of entrepreneurship as a professional alternative by graduates. Another study by Noel (2001) confirmed that students who graduated in entrepreneurship reached higher scores in entrepreneurial intention and entrepreneurial self-efficacy than students who graduated in other disciplines. Similarly, Varela and Jimenez (2001) study has shown that there is a correlation between a university's investment in the promotion of entrepreneurship and the percentage of students becoming entrepreneurs. Wilson, Kickul and Marlino (2013) found that, entrepreneurship education could also increase student's interest in entrepreneurship as a career. Bassey and Olu (2015) investigated how students' perception of tertiary entrepreneurship education relate to graduate self employment potential in Nigeria using a sample of 690 students in three universities. The findings showed that there was a significant relationship between students' perception of University administration's provision for tertiary entrepreneurship education, curriculum objectives for tertiary entrepreneurship education, instructional methods for tertiary entrepreneurship education, quality and quantity of tertiary entrepreneurship education instructors and students' entrepreneurial traits and graduate selfemployment potential.

In their study Oosterbeek (2010) concluded that entrepreneurship education has negative impact on entrepreneurship intentions. In this study they also reported entrepreneurship education impact on entrepreneurial skills/ traits was significantly zero or negative. They argued that such results may be linked to the fact that during entrepreneurship education students have acquired "realistic perspectives" about themselves and what is required to be an entrepreneur. While study of Graevenitz, Harhoff, and Weber (2010) found the effect of entrepreneurship education on entrepreneurial intentions decreased to certain extent, even though the entrepreneurship course have significantly positive impact on students' entrepreneurial skills.

Lorz, Müller and Volery (2011) in the Meta analysis of impact studies and applied methodologies of entrepreneurship education suggested mainly three reasons for such confusing results on the impact of entrepreneurship education on intentions: first in method used, for example small sample and cross section design, lack of ex-ante/ex-post and control group; second variety of different entrepreneurship programs as independent variable and third variation in participant levels.

In their study Zhang (2013) not only empirically demonstrated the impact of entrepreneurship education on entrepreneurship intention but also showed that entrepreneurship education have direct effect on entrepreneurship intentions. This conclusion is beyond the prevailing perspective which assume that entrepreneurship education indirectly have effect on entrepreneurship intentions. This study also suggested for further study on the relationship between entrepreneurship education and intentions especially from developing countries context because there is little research from that perspective.

Also, Owusu-Ansah (2014) studied the impact of entrepreneurship education on career intentions and aspirations of tertiary students in Ghana and found that an overwhelming 77.9% of the survey respondents indicated they were motivated to a large or a very large extent to initiate business startups. Indication was also that 86.7% of the survey respondents felt equip with skills and competencies to initiate and run their own businesses.

3.0 METHODOLOGY

This study makes use of survey research design that allow for the use of questionnaires to elicit data from the respondents. This study explored the impact of entrepreneurship education on the development of entrepreneurial career intentions and actions. This study assesses the impact of a dedicated entrepreneurship education module offered to a cohort of undergraduate students within a Nigerian university on their entrepreneurial intentions. However, due to limited financial and time resources, the study was limited to selected tertiary institutions in Delta State as case study.

The research used questionnaire and oral interview to collect his primary data, while secondary sources included consulted books, journals, magazines, newspapers and other documents not within the mentioned categories. The population of this study consisted of 10,279 students who were, at the time of the survey, in their final year of study (2015/2016 academic session) at Delta State Polytechnic Ogwashi-uku and Delta State University. A study sample of 400 students was taken using random sampling technique. In determining the sample size, the researcher used Alien Taro Yamane (1967) method.

A pilot test was conducted by the researcher on independent samples to test the tools, which were selected respondents (students) at Tansian University, Anambra State. Thereafter, necessary modification was made before the survey proper. The reliability coefficient of the questionnaire by test-retest was 0 .84. The questionnaires were administered to all the sampled students by the researchers. Out of the 400 copies of the questionnaire distributed, 386 were returned/ representing a return rate of 97%.

The data collected were analyzed using descriptive statistics such as Frequency counts, percentages and population t-test were the statistical techniques deployed to test the study hypotheses and also answer the research questions.

4.0 PRESENTATION AND ANALYSIS OF DATA

4.1 Presentation of Data

Table 1: Sex distribution of the respondents.

Gender	No of Respondents	Percentage (%)
Male	210	54.4
Female	176	45.6
Total	386	100

Source: Field Work 2017.

Table 1 shows that a total of 386 respondents completed the questionnaire and were subjected to analysis, of which 54.4 per cent were males, 45.6 per cent were females.

Table 2: Age distribution of respondents.

Age distribution	No of respondents	Percentage (%)
18-24	173	45.0
25-30	151	39.0
31 and above	62	16.0
Total	386	100

Source: Field Work 2017.

Table 2 shows that 173 respondent representing 45% of the total respondents are between 18-24 years, 151 respondents representing 39% of the total respondents are between 25-30 years, 62 respondents representing 16% of the total respondents are between 31-40 years, 35 respondents representing 9% of the total respondents are 41 years and above.

Table 3: Distribution of the respondents based on faculties

Faculties	No of Respondents	Percentage (%)
Engineering	197	51.1
Business/Management (BM)	122	31.5
Science	67	17.4
Total	386	100

Source: Field Work 2017.

In terms of faculties, 51.1 per cent of respondents were Engineering students, 17.4 per cent were Science students and 31.5 per cent were Business/Management students.

Table 4: Whether respondents have previously taken a class in entrepreneurship

Entrepreneurship Module	No of Respondents	Percentage (%)
Yes	197	51.0
No	189	49.0
Total	386	100

Source: Field Work 2017.

As shown in With regard to studying the entrepreneurship module, 51 per cent said no, they have not previously taken a class in entrepreneurship as opposed to 49 per cent who said yes. **Table 5:** Career intention of respondents after graduation

Career Intentions	No of Respondents	Percentage (%)
Further Studies	58	15.0%
Self Employment	103	26.8%
Employment	114	29.6%
Further Studies & Part Time Business	29	7.6%
Employment & Part Time Business	82	21.0%
Total	386	100

Source: Field Work 2017.

Table 5 outlines the career intentions of students. The respondents were asked to indicate their career intentions after graduation. Results revealed that majority of the respondents 29.6% (114) indicated employment, 26.8% (103) indicated self employment, 21.0% (82) employment and part time business, 15% (58) further studies, further studies and part time business 7.6% (29). **Table 6:** Level of skills acquired to start a business

Career Intentions	No of Respondents	Percentage (%)
High Skills	111	28.8%
Moderate Skills	182	47.2%
Low Skills	93	24.0%
Total	386	100

Source: Field Work 2017.

The students in this study were asked to rate the level of skills acquired after undertaking entrepreneurship education. The level of skills was grouped into three, low, moderate and high. As shown in Table 6, clearly, a significant proportion of the participants indicated moderate skills 182 (47.2%); 111 (28.8%) high skills and 93 (24%) low skills. The result of this study upholds the previous findings of Thandi and Sharma (2004) that, entrepreneurship courses can indeed raise the level of students' skills on entrepreneurial activity.

Table 7: Population t-test of the benefit of Entrepreneurship Education (E.E)

Variable	n	x	μ	SD	t	
Benefit of E. E	386	—	31.90	-	5.09	30.314*
Reference score	-	-	-	25.0	-	-

*significant at .05, df = 385 critical t=1.65

The results in Table 7 indicate that the calculated t-value of 30.314 is greater than the critical tvalue of 1.65 at 0.05 level of significance with 385 degrees of freedom. This means that the benefit of entrepreneurship education to students is significantly high. By this result the null hypothesis is rejected.

Table 8: Population t-test of the perceived barriers to business start-up by students

	n	x	μ	t	SD
Variable					
Perceived Barriers	386	26.93	6.68	6.443*	
Reference score	-		-	25.0	-

*significant at .05, df = 385 critical t=1.65

Results in Table 8 shows that the calculated t-value of 6.443 is greater than the critical t-value of 1.65 at 0.05 level of significance with 385 degrees of freedom. This means that students' perceived barriers to business start up is significantly high.

Table 9: Test for Normality of the Constructs

	Shapiro-Wilk		
	Statistic	df	Sig.
Entrepreneurial Intentions	0.903	178	0.011
Perceived Desirability	0.562	178	0.000
Perceived Feasibility	0.610	178	0.045
Exposure to Entrepreneurship Education	0.636	178	0.000

4.2 Test of Hypotheses

The analyses were conducted in several stages. The first stage is to test H1, H2 and H3 to investigate the impact of education on intentions, perceived desirability and perceived feasibility of entrepreneurship. Before proceeding further with testing the hypotheses, normality test was conducted. Since the significance value of the Shapiro-Wilk test is below 0.05 then the data significantly deviate from a normal distribution (see Table 9), hence the Mann-Whitney U-test was used to test the hypothesis.

Table 10 shows the mean rank and sum of ranks for the two groups tested at significance level (α) = 0.05. Initially it can be said that the students who studied entrepreneurship showed higher levels of entrepreneurial intentions and perceived desirability compared to students who never studied entrepreneurship, showing that mean rank is higher for the students who said yes, whereas perceived feasibility was lower among those students.

Source: Generated by Author using SPSS.

Note: df: degree of freedom.

Results of Table 10 (combined with that of Table 9) were used to accept/reject the hypotheses. H1 will be accepted as the p -value (α) = 0.000 < 0.05 and the sum of ranks for the group who studied entrepreneurship > Wilcoxon W. Hence, it is confirmed that entrepreneurship education has an impact on the entrepreneurial intentions of university undergraduate students. Also H2 is accepted as the p -value (α) = 0.001 < 0.05 and the sum of ranks for the group who studied entrepreneurship > Wilcoxon W; hence, it is confirmed entrepreneurship education has an impact on the desirability of creating a business. H3 is rejected as the p -value (α) = 0.624 > 0.05 and the sum of ranks for the group who studied entrepreneurship < Wilcoxon W; hence, entrepreneurship education does not impact the level of feasibility.

The paired Samples t-Test was conducted to complement the hypotheses testing, where unit of analysis was the science students before and after being exposed to entrepreneurial education. The assumption is there is no difference before and after exposure to entrepreneurship education. The analysis reveals there is a difference in students' intentions to start a business as well as in perceived desirability before and after exposure to entrepreneurship (see Table 11); thus, null hypothesis is rejected. Regarding the feasibility of creating a business, the p -value = 0.464 > 0.05; hence, the null hypothesis is accepted that difference does not exist.

In the second stage, multiple regression analyses were conducted to test hypotheses 4 and 5. As a start, p -value of the F -test is checked to see

Table 10: Ranks of the Constructs

Have You Studied Entrepreneurship Before?	Mean Rank	Sum of Ranks	Mann-Whitney U	Wilcoxon W	Asymp. Sig. (2tailed)

Table 11: Paired Samples t-Test

t.	(Sig.)	<i>M</i>	Std. Deviation				
		<i>p</i> -value	Item	Before	After	Before	After

Feasibility of creating business	26.30	25.66	2.7	3.64	0.743	0.464
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Source: Generated by Author using SPSS.

Notes: *M*: Mean and *t*: t-test value.

Table 12: ANOVA Analysis for the Desirability and Feasibility of Starting a Business

		Unstandardised		Standardised			
		Coefficients		Coefficients			
<i>R</i>							
<i>F</i>	Square ^b Model	<i>B</i>	Std. Error	Beta	<i>T</i>	Sig.	
					7.824		
0.000	0.954 1 Desirability	0.389	0.050	0.577			
					0.000		
	Feasibility	0.409	0.074	0.407	5.520	0.000	

Source: Generated by Author using SPSS.

Notes: *F* = F-test value, *B* = Beta and *T* = t-test value.

If the overall model is significant, with a *p*-value of zero (Table 12), the model is statistically significant. The *R*-squared is 0.954 (Table 12), meaning that approximately 95 per cent of the variability of dependent variable is accounted for by the variables in the model. In this case, the adjusted *R*-squared indicates that about 95 per cent of the variability of intentions is accounted for by the variables in the model (desirability and feasibility).

The *p*-value of desirability and feasibility coefficient is zero (< 0.05), indicating the significance of these variables (Table 12). The *B* value for each of the independent variables is positive, signifying that any increase in each of these variables will have a positive impact on the dependent variables (intentions); therefore, H4 and H5 are accepted, that is, the perceived desirability and feasibility have an impact on intentions to start a business. At the end, multiple correlation analysis was conducted to measure the strength of the relation between the different variables (see Figure 9).

5.0 SUMMARY, CONCLUSSION AND RECOMMENDATIONS

5.1 Summary of Findings

The specific findings of this research are as outlined below:

- i. Students who received entrepreneurship education have higher entrepreneurial career intentions than students who did not receive entrepreneurship education.
- ii. Exposure to entrepreneurship education influence students' perceived desirability of entrepreneurship.
- iii. Exposures to entrepreneurship education do not influence students' perceived feasibility of entrepreneurship.
- iv. Students' perceived desirability of entrepreneurship influence their entrepreneurial intentions.
- v. Students' perceived feasibility of entrepreneurship influence their entrepreneurial intentions.

5.2 Conclusion

Over the last decades, entrepreneurship education has been spreading; it has been introduced in universities at the under/postgraduate pro-grammes, schools and vocational training centres due to the importance of entrepreneurship graduates in contributing to the economic growth and development of their countries.

The results show that the percentage of students across three faculties of Engineering, Sciences and Business Management aspiring to pursue entrepreneurial careers is somewhat high. However, the percent-age of students who confirmed their disinterest in entrepreneurship was higher among Engineering students, who were never exposed to entrepreneurship education. Among the group who studied entrepreneur-ship, Business /Management students were more inclined towards starting their own businesses compared to Sciences students. This result is consistent with Richardson's study (1993) that there is a significant difference between perceived contributions of education with different academic majors. It is anticipated that business students would be more disposed towards starting their own business, due to the nature of courses they are exposed to, including marketing, accounting and management courses. These courses provide students with further knowledge and know-how of starting and growing a business. Students of non-business specialisations lack the exposure to the business world as their courses are more focused on technical aspects.

It has been proved that education has a positive impact on students' perceived desirability of selfemployment. Education was found to increase the degree of favourability of entrepreneurship among Nigerianstudents, a result that is consistent with Jones et al.'s (2015) conclusion that entrepreneurial education can positively reinforce students' attitudes towards an entrepreneurial career choice in a developing country. However, its impact is less evident on the perceived feasibility; no effect for entrepreneurial education was found on the self-efficacy of students; a result that is not consistent with some of the previous studies. Students' self-efficacy is the confidence that they can successfully engage in entre-preneurial behaviour which stems from their capabilities and skills. This indicates that entrepreneurial education did not contribute to enhancing students' entrepreneurial competences. This implies a deficiency in the design of curriculum that did not tackle the necessary topics to equip them with the necessary skills.

5.3 Recommendations

Based on the findings of this study, the following recommendations are made:

- i. Entrepreneurship education should be practical oriented so as to sustain students' interest.
- ii. The duration and intensity of the entrepreneurship education should be increased beyond a semester's course to realize a maximum impact on university students.
- iii. Entrepreneurship education should not only be offered at the university level but should be entrenched and made compulsory at all other levels of education.
- iv. There is a need to consider the contents of the courses and delivery pedagogy in a way to encourage entrepreneurial personality development
- v. Access to finance by micro, small and medium enterprises must be well liberalized by the government. There should be unhindered access to micro-credit for young graduates.

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