International Journal of Advances in Engineering and Management (IJAEM)
Volume 4, Issue 11 Nov. 2022, pp: 991-1012 www.ijaem.net ISSN: 2395-5252

Entrepreneurship Education and Entrepreneurial Intention in North Central Federal Polytechnics: The Mediating Effect of Innovation

IBRAHIM, Muhammad Saiwaai
Department of Social Science and Humanities, Federal Polytechnic Offa, Kwara State, Nigeria

Date of Submission: 21-11-2022 Date of Acceptance: 30-11-2022

ABSTRACT: This study investigated the mediating effect of innovation on the relationship between entrepreneurship education and entrepreneurial intention using partial mediation analysis in two selected north central federal polytechnics. The study used a cross-sectional approach using self-administered close-ended questionnaires through research assistants for the analysis. A stratified random sampling technique was used to select 380 samples, and items in the questionnaire were measured using seven points (7) modified Likert scale. Data were analysed using smart partial least squares and structural equation modelling (PLS-SEM 4). Findings confirmed the mediating role of innovation. Similarly, both direct and indirect relationships between entrepreneurship curriculum and entrepreneurial intention were significant. In case of entrepreneurship teaching method and entrepreneurial intention, the indirect relationship was significant, but the direct relationship was insignificant. A separate data analysis for the two institutions indicated similar result for the federal polytechnic Nasarawa. However, the data from federal polytechnic Offa was contrary, except for the indirect relationship between the entrepreneurship curriculum and entrepreneurial intention was significant. However, based on the findings' outcome, the study concluded that entrepreneurship education was significantly related to entrepreneurial intention.

Key Words: Entrepreneurship Curriculum, Innovation, Entrepreneurship Teaching Method, Entrepreneurial Intention,

I. INTRODUCTION

As a business vehicle, the global economic trends showed a growing role for entrepreneurship to provide a product to the free market. In the process, employment opportunities are created. Thus, entrepreneurs have become key drivers of business growth (Wathanakom, et al, 2020). The relevance of entrepreneurship has attracted much attention and recognition. For some time memorial, Nigeria's federal government had embraced the establishment of small-scale industries, credit schemes, etc to reduce unemployment (Metu and Nwokoye, 2014). These programmes were not effectively implemented because of a lack of basic amenities and infrastructures that hindered the realisation of desired results (Metu and Nwokoye, 2014).

Nigeria's economy is experiencing a high rate of unemployment (Trading Economics, 2018) and this had resulted in some serious concerns, such as a fall in income, social and security challenges in the economy, etc. The unemployment rate reported in the fourth quarter of the year 2020 among youths (15-34 years) was 42.5% up from 34.9% (Proshareng.com, 2020). The youth unemployment statistics remained at 42.5% in 2021 (National Bureau of Statistics, 2021).

Meanwhile, studies revealed that the intentions of students to become self-employed could be increased through entrepreneurship classes (Tkachev and Kolvereid, 1999). This informs the development of entrepreneurship education as an important course at all levels of education in recent times. Its main objective is to provide learners with adequate knowledge, skills, courage, and aptitude to engage them in entrepreneurial ventures of various sectors (Brinda, and Dileep, 2011). The goal of educational agencies globally is the promotion of entrepreneurial intention to create business ventures through entrepreneurship education or orientation to graduates. It is expected that entrepreneurship courses can increase the number of start-ups (Kakouris and Georgiadis, 2016). The growing interest in entrepreneurship in Nigeria can be traced to recent development programmes like the National Directorate of Employment (NDE), Youth with Innovation (YOUWIN! connect), National Poverty

International Journal of Advances in Engineering and Management (IJAEM)
Volume 4, Issue 11 Nov. 2022, pp: 991-1012 www.ijaem.net ISSN: 2395-5252

Eradication Program (NAPEP), and Industrial Training Fund (ITF) that had been embarked upon over the years by the government. The growth indicates the belief of the government in the positive impact entrepreneurship has on socio-economic and political developments (Matlay, 2008).

However, tertiary institutions have been graduating graduates who lack the intention and courage to establish ventures at graduation, consequently, the negative effect of unemployment on the economy triggered the need to measure students' entrepreneurial intention. By extension, it provides some measures that can cushion the effect of unemployment on the economy, because, entrepreneurship is a means of employment generation that facilitates economic development. There is a need for a study that not only determined the predictive influence of entrepreneurship curriculum and teaching methodologies on students' entrepreneurial intentions but also measured the mediating effect of innovation on entrepreneurial intention. Based on the review, it's obvious that no study has combined these constructs in a study, and there are few studies in the field of entrepreneurial intention in Polytechnics to cushion the effect of the high rate of unemployment in Nigeria. Hence, prompting the need for this research, the specific questions this research addressed are as follows:

- Is there any impact of entrepreneurship curriculum on students' entrepreneurial intentions?
- In what ways do teaching methodologies affect students' entrepreneurial intentions?
- Does innovation have any mediating effect on students' entrepreneurial intentions?

II. OBJECTIVES OF THE STUDY

The development of self-motivated graduates that can create ventures and compete favourably in a globally competitive market is one of the core objectives of economic managers in their quest for entrepreneurship education in Nigeria. Thus, the study is significant to the following stakeholders: policymakers, potential graduates, institutions imparting entrepreneurship, and researchers. Similarly, the general objective of this study was to determine the effect of entrepreneurship education on entrepreneurial intentions. Specifically, the study's objectives are:

- to determine the effect of entrepreneurship curriculum on students' entrepreneurial intentions.
- to determine the effect of teaching methodologies on students' entrepreneurial intentions.
- to determine the mediating effect of innovation on students' entrepreneurial intentions.

III. LITERATURE REVIEW

This section reviewed existing literature works regarding the study topic to familiarise with the body of literature on entrepreneurship education and entrepreneurial intention.

The Concept of Entrepreneurship Education

Entrepreneurship education was conceived as the structured formal communication of entrepreneurial competencies that consists of skills and mental awareness used by people for the expression of entrepreneurial behaviour and action (Alberti, et al, 2004). It is the whole set of education and training activities within the educational system that tries to develop in the participants the intention to perform entrepreneurial behaviour or some elements that affect such intentions, such as entrepreneurial knowledge, the desirability of entrepreneurial activity, or its feasibility (Linan, et al, 2013). In this study, entrepreneurship education is conceived as any medium used in imparting to students, the attitude and behaviour which inculcate entrepreneurial intention that motivates the pursuit of a career in entrepreneurship and the ability to recognise commercial opportunities to act on them.

The Theory of Planned Behaviour

Recent researchers have tried to explain entrepreneurial behaviour from the perspective of cognition, due to the important role it plays in the entrepreneurial process. For instance, the theory of planned behaviour (TPB) (Ajzen, 1991) developed from the theory of reasoned action on beliefs, attitudes, and intentions as the determinants of human behaviour (Ajzen, 1991, 1985). A major factor in the TPB is the individual's intention to perform a given behaviour. Intentions are assumed to capture factors that influence behaviour; the indications of how hard people are willing to try to exert the behaviour (Ajzen, 1993). Further, this posits that people intend to perform behaviour when they evaluate it positively when they experience social pressure to perform it, and when they believe that they have the means and opportunities to do so (Ajzen, 2011; Badura, 1993; Ajzen and Fishbein, 1980). This is because the stronger the intention to engage in a particular behaviour, the more likely its performance (Ajzen, 1991; 1988). Entrepreneurship is regarded as a planned behaviour since intentions precede the starting of a new venture (Mwasalwiba, 2010). For future entrepreneurial expression of actions, like self-employment, intentions could provide a reliable lead. Similarly, it has been observed that entrepreneurship intentionality served as an indicator of the programmes of entrepreneurship education (Rengiah, 2013).

International Journal of Advances in Engineering and Management (IJAEM)
Volume 4, Issue 11 Nov. 2022, pp: 991-1012 www.ijaem.net ISSN: 2395-5252

Students may have the ability of to exercise some measure of control over their thoughts, actions, and feelings based on their self-beliefs (Bandura, 1986). Thus, in teaching entrepreneurship, educators are faced with the challenge of improving the academic learning and confidence of students. Entrepreneurship educators are expected to improve students' emotional states and to correct faulty self-beliefs and habits of thinking to inculcate entrepreneurial skills (Pajares, 2002). Understanding these factors and considering them will enhance and promote the teaching of entrepreneurship. Otherwise, the knowledge of entrepreneurship acquired will be insufficient to be able to motivate the students' entrepreneurial intention. Hence, access to quality entrepreneurial experiences would enhance the students' intention toward venture creation, and assist in minimising the high rate of unemployment in the economy.

Similarly, for businesses to succeed, they must have the ability to innovate. Innovation is the process of transforming the industry and continues to transform the economic structure from the inside, by continuously rescinding the old structures and building new structures (Schumpeter, 1961). Innovativeness can effectively predict entrepreneurial intention among undergraduate students, because, a causal relationship between innovativeness and entrepreneurial intention was established (Wathanakom, et al, 2020). Similarly, entrepreneurship is seen as a means used by entrepreneurs to create opportunities for their businesses based on the existing changes (Kanungo and Calantone, 2002). It is believed that having acquired new orientations through entrepreneurship education, the students' perceptions about their ability to transform ideas or inventions into a new method of production have been influenced positively. Thus, perceived innovativeness should mediate the relationship between entrepreneurship education and entrepreneurial intention.

Review of Empirical Studies

Entrepreneurship education has been acknowledged by both private and public sectors as a promising way to improve the work insertion of young people and at the same time, contribute to social and economic welfare (Fasla, 2017). Globally, entrepreneurship education programmes are having an impact on students' mind-sets, self-employment intention capabilities, and eventual formation of business (Afolabi, et al, 2017; Oluwafunmilayo, et al, 2017; Daniela, et al, 2016; Heinert and Roberts, 2016). There is evidence that when people are sufficiently motivated and have the cognitive capacity, they can construct their attitudes toward an object in an effortful manner (Ajzen, 2005). Similarly, it was found that the vast majority of participants in the faculty of management at the University of Gdansk would prefer to become self-employed (Magorzata, et al, 2015). Also, findings showed that entrepreneurial intentions are strongly and positively related to entrepreneurial education (Anjum, et al, 2018).

Entrepreneurial development contextualised the effectiveness of entrepreneurship curriculum on the extent it can motivate students to develop critical thinking abilities, prioritisation of achieving entrepreneurial goals and generation of business ideas competencies at graduation (Olokundun, et al, 2018). For instance, it was reported that the entrepreneurship curriculum has significantly increased students' entrepreneurial intentions and generation of business ideas to start a business (Olokundun, 2017; Olokundun, et al, 2017; United Nations industrial development organisation, 2014), it also empowered students with the necessary skills to start a new business (Sira and Blessing, 2019). In this regard, Anene and Imam, (n.a) recommended for inclusion of skills acquisition in the curriculum, because it entrenched attitudinal and behavioural changes among participants (Obeleagu-Nzelibe and Ezekiel, 2018), and the curriculum should prepare students to have the right mind-set for entrepreneurial skills acquisition (Ekoja and Odu, 2016). This is necessary because the graduation of competent experts is dependent on the provision of the right entrepreneurial curriculum and qualified teachers (Igbokwe-Ibeto, et al, 2018). Thus, a change from a classic teaching-learning system towards self-learning and critical analysis would bring substantial improvements (Popescu, et al, 2016), and redesigning the entrepreneurship curriculum in Nigeria is imperative because the current curriculum cannot produce graduates with practical knowledge, a spirit of invention and entrepreneurial spirit (Obeleagu-Nzelibe and Ezekiel, 2018).

The impact of various teaching methodologies on the entrepreneurial intention of students indicated that the majority of the students learned through a combination of traditional techniques and methodologies like lectures and non-traditional methods like business pitch competitions (Reyes and Manipol, 2015). Also, different pedagogies like teacher-centred and student-centred pedagogical approaches (Ismail, et al, 2018), problem-based learning methods (Palomaki, 2019), assistance from external trainers, and value-creation pedagogy (Lackeus, 2020; Bell, 2020), the postmodern and practice-led learning approaches to teaching entrepreneurship (Tselepis et al, 2021), classroom teaching method and the extracurricular activity method (Yang, et al, 2021) used in teaching entrepreneurship had positive effects on learners'

International Journal of Advances in Engineering and Management (IJAEM)
Volume 4, Issue 11 Nov. 2022, pp: 991-1012 www.ijaem.net ISSN: 2395-5252

entrepreneurial intention. Similarly, the internship approach (Adesoji and Sangoleye, 2017), multidisciplinary instruments such as assessment of creativity, visioning, and dealing with ambiguity (Penaluna and Penaluna, 2021) will offer some vital benefits. In terms of perceived competency of students' entrepreneurial intention, lecturing team reported a moderate and positive correlation (Iwu, et al, 2019).

Similarly, it has been argued that there was a positive and significant relationship between innovation and entrepreneurial intention (Zahari, et al, 2018; Ibrahim and Saili, 2017; Koe, 2016), innovativeness can effectively predict students' entrepreneurial intention (Wathanakom, et al, 2020), and it is necessary for the creation of entrepreneurs (Adebayo, et al, 2017). The engineering students' innovativeness was highly related to their entrepreneurial intention (Law & Breznik, 2017), and entrepreneurship enhances the generation of feasible, viable business ideas and learning of innovation (Bodnar, et al, 2015). Entrepreneurship and innovation are means for solving global challenges, building sustainable development, generating renewed economic growth, creating jobs, and advancing human welfare (World Economic Forum, 2009).

However, a meta-analytical investigation performed on entrepreneurship education and entrepreneurial intention showed that there was no statistically significant average effect of entrepreneurship education for the intervention groups on most of the outcome measures (Martínez-Gregorio, et al, 2021). It was found that entrepreneurship curricula were insignificant and weak in influencing the knowledge, skills, and intention of students to engage in entrepreneurial ventures (Tsordia and Papadimitriou, 2018; Oyetunde, et al, 2017; Caloghirou, et al, 2013), and the curriculum was more of theory than practice (Adejana, et al, 2017). Also, Nigeria's tertiary institutions' entrepreneurship curriculum is theory based, therefore, unsuitable for developing entrepreneurial practices (Alinno, 2020). It was also reported that entrepreneurship centres in Benue state do not have a written curriculum, students were not sent for internship training and the curriculum does not recommend a practical teaching strategy (Achor, et al, 2020).

Similarly, the entrepreneurship programme was not effective in motivating students to start a business (Olokundun, et al, 2014). Likewise, Ukoha, (2017) reported that teachers routinely use ineffective traditional teaching and assessment methods in entrepreneurship education instruction. In Nigeria's tertiary institutions, entrepreneurship education pedagogical methods are not effectively developing the students' entrepreneurial mind-sets (Alinno, 2020). Thus, future researchers were encouraged to consider the pedagogical methods underpinning the impact of entrepreneurship education on entrepreneurial intention (Nabi, et al, 2017), and further studies are needed to understand the attitudes and values of teachers who are supporting students to engage in entrepreneurship (Hardie et al, 2020), and there is need for a more inclusive outcome-based model, that is more of collaboration, partnership, and engagement with key stakeholders in creating real progress (Fayomi, et al, 2019).

Further, there was no effect on the relationship between innovation and the development of entrepreneurial intention (Popescu, et al, 2016). To extend general findings, future researchers should examine students in other fields in different tertiary institutions and countries to look into the effect of innovation on entrepreneurial intention (Zampetakis, et al, 2011), to extend the research model to be able to explore the effects of other demographic parameters (Law and Breznik, 2017), as well as the individual and industry dimensions of innovation need to be explored (Padilla-Melendez, et al, 2015).

IV. METHODOLOGY

The study was conducted in two selected North Central Federal Polytechnics; the Federal Polytechnic Offa, Kwara State and Federal Polytechnic Nasarawa, Nasarawa State, Nigeria. The population comprised both full-time and part-time final year students; ND 11 (5286) and HND 11 full-time (3714), a total of 9000. Given the population size of 9000, the required sample size was 368 at a 95% confidence level and a 5.0% margin of error (Krejcie and Morgan, 1970). The analysis involved a sample of 380 out of the 478 questionnaires distributed to students (30% added) due to tendencies of unreturned and wrongly answered questionnaires. The study used a cross-sectional approach using self-administered close-ended questionnaires through research assistants for the analysis. A stratified random sampling technique was used to select the sample due to the presence of homogeneity-within and heterogeneity-between in the population. Items in the questionnaire were measured using seven points (7) modified Likert scale ranging from (strongly disagree with a given statement) to (strongly agree to given statements), except for items of demographic background. Items measuring constructs of the study were from previously established measurement scales (Linan and Chen, 2009; Rengiah, 2013). Data were analysed using Smart Partial Least Squares - Structural Equation Modelling (PLS-SEM 4). Because; PLS-SEM has capabilities for running regression, validity and reliability analysis at a time, it estimates complex models with many constructs and it's user-friendly. It

International Journal of Advances in Engineering and Management (IJAEM)
Volume 4, Issue 11 Nov. 2022, pp: 991-1012 www.ijaem.net ISSN: 2395-5252

accounts for the total variance and uses this total variance to estimate the parameters (Hair, et al, 2018; Sarstedt, et al, 2017; Francis, et al, 2016; Sylvia, and Dayang, 2016).

V. DISCUSSION OF RESULTS

The result of data analysis for the study is presented below. It involved 380 samples (students).

PRELIMINARY ANALYSIS of DATA

Descriptive Statistics of Variables

The study demographic variables' descriptive statistics are presented in the tables below:

Statistics

		Gender	Age	Marital status	Educational Attainment
N	Valid	380	380	380	380
	Missing	0	0	0	0

Gender

		Frequency	Per cent	Valid Per cent	Cumulative Percent
Valid	male	237	62.4	62.4	62.4
	female	143	37.6	37.6	100.0
	Total	380	100.0	100.0	

Age

		Frequency	Per cent	Valid Per cent	Cumulative Percent
Valid	15-20	82	21.6	21.6	21.6
	21-25	239	62.9	62.9	84.5
	26-30	50	13.2	13.2	97.6
	31-35	5	1.3	1.3	98.9
	36-40	1	.3	.3	99.2
	41 and above	3	.8	.8	100.0
	Total	380	100.0	100.0	

Marital Status

		Frequency	Per cent	Valid Per cent	Cumulative Percent
Valid	married	37	9.7	9.7	9.7
	single	340	89.5	89.5	99.2
	divorced	1	.3	.3	99.5
	widow	1	.3	.3	99.7
	6.00	1	.3	.3	100.0
	Total	380	100.0	100.0	

Age

		Frequency	Per cent	Valid Per cent	Cumulative Percent
Valid	HND 2	186	48.9	48.9	48.9
	ND 2	194	51.1	51.1	100.0
	Total	380	100.0	100.0	

International Journal of Advances in Engineering and Management (IJAEM)
Volume 4, Issue 11 Nov. 2022, pp: 991-1012 www.ijaem.net ISSN: 2395-5252

Common Method Bias Test

A self-reported survey is associated with common method variance (CMV) (Podsakoff, MacKenzie, Lee, and Podsakoff, 2003; Lindell and Whitney, 2001). It relates to variances that occur due to measurement methods instead of constructs of the study (Podsakoff, MacKenzie, Lee, and Podsakoff, 2003). However, this study was free from CMV because the total variance explained of the 30 factors analysed was 38.6 per cent (Kumar, 2012).

Total Variance Explained (Harman's single factor test)

	Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative
1	11.589	38.629	38.629

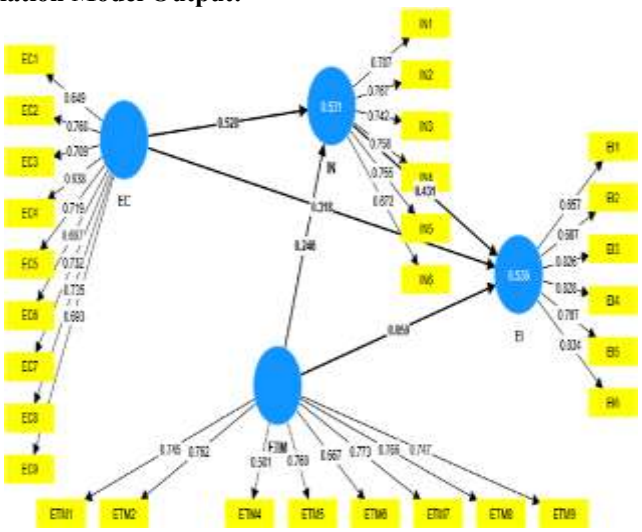
Multicollinearity Statistics

The study data obtained from the two schools as well as the individual school samples used for the analysis had no multicollinearity issues. This was because the variance inflation factor (VIF) results of all the indicators were less than the threshold (Hair et al., 2011).

THE ANALYSIS of MEASUREMENT/OUTER MODEL

The assessment of reflective measurement model validity is targeted at discriminant validity and convergent validity (Hair et al., 2011).

The Study's Partial Mediation Model Output:



One indicator (ETM3) whose loading was less than 0.4 was deleted. However, other indicators whose loadings were less than 0.7 but greater than 0.4, were retained for the analysis.

Construct Reliability and Validity

The coefficients of composite reliability were above 0.7 signifying that changes in latent constructs manifested in the reflective indicators accordingly, hence there was constructs' internal consistency (Hair et al., 2011). Similarly, the latent constructs have explained more than half of the indicators' variance. The AVE was higher than 0.50 which means that the data exhibits convergent validity (Hair et al., 2011), signifying that items of the same construct were closely related to each other.

	Cronbach's alpha	**Composite reliability (rho_a)**	**Average variance extracted (AVE)**
EC	0.865	0.867	0.515
EI	0.863	0.871	0.598
ETM	0.867	0.877	0.519
IN	0.829	0.833	0.539

International Journal of Advances in Engineering and Management (IJAEM)
Volume 4, Issue 11 Nov. 2022, pp: 991-1012 www.ijaem.net ISSN: 2395-5252

Discriminant Validity

The Heterotrait-Monotrait Ratio (HTMT) had been suggested as a reliable alternative (Henseler et al, 2015) criterion. The HTMT result indicated that there was no discriminant validity problem (Gold et al, 2001). This indicated that items of different constructs were not closely related to each other.

Heterotrait-monotrait ratio (HTMT) - Matrix

	EC	EI	ETM	IN
EC				
EI	0.762			
ETM	0.837	0.622		
IN	0.837	0.807	0.716	

THE ANALYSIS of STRUCTURAL/INNER MODEL

The hypotheses were statistically tested when the coefficient was zero (null hypothesis) as different from the alternative hypothesis which stated that the coefficient was not equal to zero (Hair et al., 2011). In the analysis, paths which were not significant or showed contrary signs to the hypothesised direction do not support a prior hypothesis, and vice versa (Hair et al., 2011). The results depicted that there was a positive and significant relationship between entrepreneurship curriculum and entrepreneurial intention, entrepreneurship curriculum and innovation, entrepreneurship teaching method and innovation, and innovation and entrepreneurial intention. However, the relationship between the entrepreneurship teaching method and the entrepreneurial intention was not significant as shown in the table below.

Test of Hypothesis
Path Coefficient

Hypotheses	Beta Value	Standard Error	T Stat	P Value	Decision
H_1: EC->EI	0.318	0.072	4.411	0.000	Rejected
H_2: EC->IN	0.528	0.070	7.577	0.000	Rejected
H_3: ETM->EI	0.050	0.059	0.833	0.405	Fail to Reject
H_4: ETM->IN	0.246	0.074	3.324	0.001	Rejected
H_5: IN->EI	0.431	0.060	7.212	0.000	Rejected
R Square EI	54%				
IN	53%				

*** p< 0.01; **p< 0.05; *p <0.1

The in-sample explanatory power of the exogenous constructs was substantial (54%) (Hair et al., 2011). Accordingly, fifty-three per cent of variances in entrepreneurial intention were captured or explained by the exogenous constructs of the study.

Confidence Intervals Bias Corrected

	Original sample (O)	Sample mean (M)	Bias	2.5%	97.5%
EC -> EI	0.319	0.318	-0.001	0.172	0.455
EC -> IN	0.528	0.528	0.000	0.386	0.657
ETM -> EI	0.049	0.049	0.000	-0.061	0.169
ETM -> IN	0.246	0.248	0.002	0.105	0.394
IN -> EI	0.432	0.433	0.002	0.314	0.544

International Journal of Advances in Engineering and Management (IJAEM)
Volume 4, Issue 11 Nov. 2022, pp: 991-1012 www.ijaem.net ISSN: 2395-5252

The absence of zero in most of the output of confidence interval bias corrected indicated that the exogenous constructs of the study (Entrepreneurship Curriculum and Entrepreneurship Teaching Method) had affected the endogenous construct except for the direct relationship between entrepreneurship teaching method and entrepreneurial intention.

Mediation Analysis

Furthermore, the variance accounted for (VAF) in partial mediation analysis gives the needed information on the strength of mediation. This is obtained by dividing the indirect effects by the total effects of the results. In this study it means dividing; EC -> IN -> EI by EC -> EI (0.228/0.547 = 0.417) and ETM -> IN -> EI by ETM -> EI (0.106/0.155 = 0.684) as obtained from the tables below:

Specific Indirect Effects
Mean, STDEV, T values, p values

	Original sample (O)	Sample mean (M)	St dev (STDEV)	T stat (|O/STDEV|)	P values
EC -> IN -> EI	0.228	0.230	0.049	4.662	0.000
ETM -> IN -> EI	0.106	0.107	0.033	3.197	0.001

Total Effects
Mean, STDEV, T values, p values

	Original sample	Sample mean	Standard dev (STDEV	T statistics (|O/STDEV|)	P values
EC -> EI	0.547	0.547	0.064	8.562	0.000
EC -> IN	0.528	0.528	0.070	7.577	0.000
ETM -> EI	0.155	0.155	0.059	2.617	0.009
ETM -> IN	0.246	0.248	0.074	3.324	0.001
IN -> EI	0.432	0.433	0.060	7.212	0.000

Based on the VAF mediation threshold limit (Hair et al., 2011), the results; 0.417 and 0.684 indicated that there were partial mediation effects, indicating the significance of mediation. Thus, students' innovativeness mediated the relationship between entrepreneurship education and their entrepreneurial intentions.

Effect Size of Exogenous Variables

The substantive significance (effect size) of the structural model (Sullivan and Fein, 2012) is shown below:

Effect Size for the Relationships

Construct	f^2	Effect Size
EC -> EI	0.075	Small
EC -> IN	0.284	Medium
ETM -> EI	0.003	Small
ETM -> IN	0.060	Small
IN -> EI	0.185	Medium

International Journal of Advances in Engineering and Management (IJAEM)
Volume 4, Issue 11 Nov. 2022, pp: 991-1012 www.ijaem.net ISSN: 2395-5252

Predictive Relevance of Exogenous Variables

The out sample predictive relevance of the manifest variables indicated that the model had medium predictive power. This was because some values of the linear model mean of absolute error (LM_MAE) were less than the partial least square structural equation modelling means of absolute error (PLS-SEM_MAE). However, Stone-Geisser's Q2 value (Stone, 1974; Geisser, 1974) showed that the predictive relevance of the exogenous constructs was strong for both innovation and entrepreneurial intention as shown in the table.

Latent Variable prediction summary

	Q^2predict	RMSE	MAE
EI	0.433	0.763	0.522
IN	0.523	0.698	0.497

Model Fit Summary

The standardised root means residual SRMR value (0.063) of the model fit is less than 0.8. That is, the residual was quite low. Also, the normative fit index was nearer to 0.9 as recommended (Hair et al., 2011).

Model Fit Summary

	Saturated model	Estimated model
SRMR	0.063	0.063
d_ULS	1.602	1.602
d_G	0.534	0.534
Chi-square	1109.300	1109.300
NFI	0.801	0.801

Constructs Importance-Performance Map

The results of Importance-Performance showed that the constructs entrepreneurship curriculum (EC) and innovation (IN) had high importance as well as high performance. However, the entrepreneurial teaching method (ETM) had low importance and a high-performance scores as presented in the tables below. This means that a lot needs to be done on the methods of teaching entrepreneurship in polytechnics.

Importance-Performance Map [EI] (constructs)
Path Coefficient/Importance

	EI
EC	0.542
ETM	0.162
IN	0.431

Construct Performances for [EI]

	Performance
EC	78.522
ETM	76.764
IN	80.978

Through entrepreneurship education, tertiary education institutions are playing major roles in developing students' entrepreneurial intention (Hassan, et al, 2021). This study examined both the direct and indirect relationship between entrepreneurship curriculum and entrepreneurial intention, as well as entrepreneurship teaching method and entrepreneurial intention. The results showed that the mediating construct of "innovation" was positively significant to entrepreneurial intention. This supported previous studies on the direct relationship between innovation and entrepreneurial intention (Wathanakom, et al, 2020; Zahari, et al, 2018; Adebayo, et al, 2017; Ibrahim & Saili, 2017; Law and Breznik, 2017; Koe, 2016). Similarly, there was a positive significant direct and indirect relationship

International Journal of Advances in Engineering and Management (IJAEM)
Volume 4, Issue 11 Nov. 2022, pp: 991-1012 www.ijaem.net ISSN: 2395-5252

between entrepreneurship curriculum and entrepreneurial intention. This supported previous findings on significant relationship between entrepreneurship curriculum and entrepreneurial intention (Olokundun, 2017; Olokundun, et al, 2017; United Nations industrial development organisation, 2014). However, the relationship between the entrepreneurship teaching method and the entrepreneurial intention was indirectly positively significant. But, directly insignificant, confirming results of previous studies (Alinno, 2020; Ukoha, 2017).

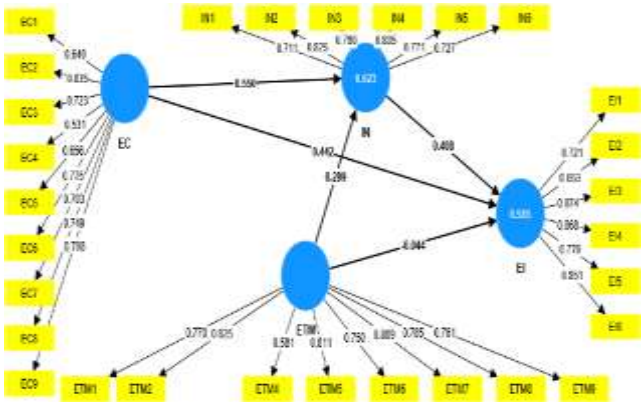
Further, the strong mediation relationship between entrepreneurship curriculum and entrepreneurial intention on one hand, and entrepreneurship teaching method and entrepreneurial intention on the other, indicated that "innovation" is a good mediator between entrepreneurship education and entrepreneurial intention. The relationship between entrepreneurship education and entrepreneurial intention was much stronger when mediated through innovation. Also, the entrepreneurship curriculum seems to be directly related to the participants' entrepreneurial intention. However, based on result of the direct relationship, the current entrepreneurship teaching method hasn't offered the desired result on students' entrepreneurial intention.

INDIVIDUAL DATA ANALYSIS FOR THE TWO SAMPLED POLYTECHNICS

However, in a bit to provide an in-depth and better understanding of the characteristics of responses, and to minimise chances of misleading generalised conclusions that may bias some aspects of the outcome of the study, the data obtained from the polytechnics were further analysed separately:

DATA ANALYSIS FOR RESPONSES OBTAINED FROM FEDERAL POLYTECHNIC NASARAWA

THE ANALYSIS of MEASUREMENT/OUTER MODEL



Construct Reliability and Validity

The result of the composite reliability test showed that there was construct internal consistency (Hair et al., 2011). Likewise, the average variance extracted result indicated that the latent constructs had explained more than half of the indicators' variance, that is, data exhibited convergent validity (Hair et al., 2011).

Construct Reliability and Validity

	Cronbach's alpha	Composite reliability (rho_a)	Average variance extracted (AVE)
EC	0.872	0.879	0.530
EI	0.881	0.893	0.632
ETM	0.900	0.913	0.585
IN	0.863	0.868	0.594

Discriminant Validity

The Heterotrait-Monotrait Ratio (HTMT) result indicated that items of different constructs were not closely related to each other, hence no discriminant validity problem (Gold et al, 2001).

International Journal of Advances in Engineering and Management (IJAEM)
Volume 4, Issue 11 Nov. 2022, pp: 991-1012 www.ijaem.net ISSN: 2395-5252

Heterotrait-Monotrait Ratio (HTMT)

EI -> EC	0.818
ETM -> EC	0.777
ETM -> EI	0.584
IN -> EC	0.877
IN -> EI	0.808
IN -> ETM	0.733

THE ANALYSIS of STRUCTURAL/INNER MODEL

Test of Hypothesis

The exogenous constructs substantially explained the mediating construct and the endogenous construct (63% of innovation and 59% of entrepreneurial intention) (Hair et al., 2011). Accordingly, the results of the hypothesis test showed evidence of a positive and significant relationship between entrepreneurship curriculum and entrepreneurial intention, entrepreneurship curriculum and innovation, entrepreneurship teaching method and innovation, and the mediating role of innovation on entrepreneurial intention. But, the direct relationship between the entrepreneurship teaching method and the entrepreneurial intention was insignificant.

Path Coefficient

Hypotheses	Beta Value	Standard Error	T Stat	P Value	Decision
H_1: EC->EI	0.442	0.095	4.746	0.000	Rejected
H_2: EC->IN	0.550	0.091	6.176	0.000	Rejected
H_3: ETM->EI	0.044	0.072	0.613	0.540	Fail to Reject
H_4: ETM->IN	0.299	0.094	3.105	0.002	Rejected
H_5: IN->EI	0.400	0.085	4.650	0.000	Rejected
R Square EI	59%				
IN	62%				

*** p< 0.01; **p< 0.05; *p <0.1

Confidence Intervals Bias Corrected

The presence of zero in the direct relationship between entrepreneurship teaching method and entrepreneurial intention further confirmed the insignificant relationship between the two constructs. However, the absence of zero in the other four relationships indicated that the exogenous constructs of the study (Entrepreneurship Curriculum and Entrepreneurship Teaching Method) have affected the endogenous construct.

Confidence Intervals Bias Corrected

	Original sample (O)	Sample mean (M)	Bias	2.5%	97.5%
EC -> EI	0.453	0.453	0.000	0.244	0.620
EC -> IN	0.561	0.562	0.001	0.367	0.729
ETM -> EI	-0.044	-0.049	-0.005	-0.187	0.099
ETM -> IN	0.292	0.293	0.001	0.108	0.475
IN -> EI	0.397	0.404	0.007	0.233	0.571

Partial Mediation Analysis

Furthermore, the result of variance accounted for (VAF) (0.223/0.676 = 0.32 and 0.116/0.072 = 1.6) indicated that there was a significant effect of the partial mediation analysis. Hence, students' innovativeness mediated the relationship between entrepreneurship education and their entrepreneurial intentions.

International Journal of Advances in Engineering and Management (IJAEM)
Volume 4, Issue 11 Nov. 2022, pp: 991-1012 www.ijaem.net ISSN: 2395-5252

Specific Indirect Effects
Mean, STDEV, T values, p values

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
EC -> IN -> EI	0.223	0.229	0.067	3.326	0.001
ETM -> IN -> EI	0.116	0.117	0.044	2.655	0.008

Total Effects
Mean, STDEV, T values, p values

	Original sample (O)	Sample mean (M)	Standard dev (STDEV)	T statistics (|O/STDEV|)	P values
EC -> EI	0.676	0.682	0.072	9.396	0.000
EC -> IN	0.561	0.562	0.091	6.176	0.000
ETM -> EI	0.072	0.068	0.073	0.976	0.329
ETM -> IN	0.292	0.293	0.094	3.105	0.002
IN -> EI	0.397	0.404	0.085	4.650	0.000

Effect Size of Exogenous Variables
The table below showed the results of the structural model's substantive significance (effect size) (Sullivan and Fein, 2012).

Effect Size for the Relationships

Construct	f^2	Effect Size
EC -> EI	0.176	Medium
EC -> IN	0.428	Large
ETM -> EI	0.002	Small
ETM -> IN	0.116	Medium
IN -> EI	0.142	Small

Predictive Relevance of Exogenous Variables
The exogenous constructs had strong predictive relevance on both the mediating construct of "innovation" and the endogenous construct of "entrepreneurial intention" (Stone, 1974; Geisser, 1974). Similarly, the manifest variables' out-sample predictive relevance indicated that the model had medium predictive power. This was because some values of the linear model mean of absolute error (LM_MAE) were less than the partial least square structural equation modelling means of absolute error (PLS-SEM_MAE).

LV Prediction Summary

	Q^2predict	RMSE	MAE
EI	0.510	0.722	0.525
IN	0.612	0.640	0.475

International Journal of Advances in Engineering and Management (IJAEM)
Volume 4, Issue 11 Nov. 2022, pp: 991-1012 www.ijaem.net ISSN: 2395-5252

Model Fit Summary

The standardised root means residual SRMR value (0.078) of the model fit was less than 0.8. This means the residual was low. Likewise, the normative fit index was not far from 0.9 as recommended (Hair et al., 2011).

Model Fit Summary

	Saturated model	Estimated model
SRMR	0.078	0.078
d_ULS	2.469	2.469
d_G	1.123	1.123
Chi-square	829.785	829.785
NFI	0.717	0.717

Constructs Importance-Performance Map

The results of Importance-Performance showed that the exogenous construct "entrepreneurship curriculum (EC)" and mediating construct "innovation (IN)" had high importance as well as high performance. However, the exogenous construct "entrepreneurial teaching method (ETM)" had low importance and a high-performance score. Thus, there is a need for improvement in the method of teaching entrepreneurship in polytechnics.

Importance-performance map [EI] (constructs)
Path Coefficient/Importance

	EI
EC	0.676
ETM	0.072
IN	0.397

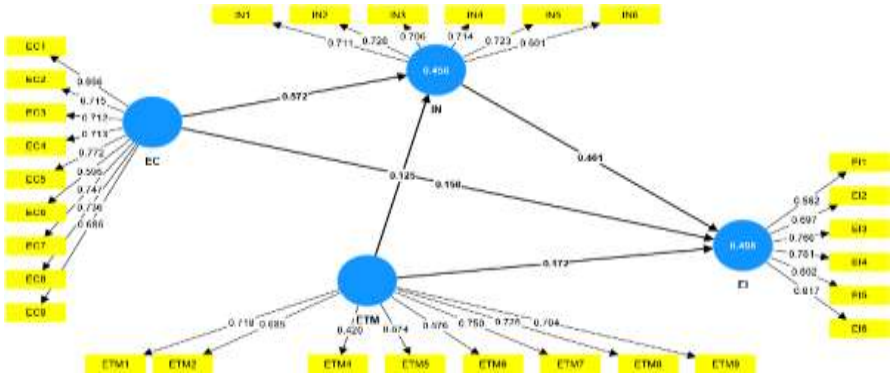
Construct Performances for [EI]

	Performance
EC	75.046
ETM	71.528
IN	77.519

The results obtained from the federal polytechnic Nasarawa were similar to the outcomes of the general findings initially discussed above. That is, there was a positive significant direct and indirect relationship between entrepreneurship curriculum and entrepreneurial intention, as well as the relationship between mediating construct "innovation" and the endogenous construct "entrepreneurial intention". An indication that "innovation" was a strong mediator between entrepreneurship education and entrepreneurial intention. However, the entrepreneurship teaching method was indirectly positively significant to entrepreneurial intention, but directly insignificantly related.

DATA ANALYSIS FOR RESPONSES OBTAINED FROM FEDERAL POLYTECHNIC OFFA
THE ANALYSIS of MEASUREMENT/OUTER MODEL

International Journal of Advances in Engineering and Management (IJAEM)
Volume 4, Issue 11 Nov. 2022, pp: 991-1012 www.ijaem.net ISSN: 2395-5252



Construct Reliability and Validity

Construct internal consistency was achieved based on the result of the composite reliability test (Hair et al., 2011), and some data exhibits convergent validity. However, some results were close to the threshold (Hair et al., 2011).

Construct reliability and validity

	Cronbach's alpha	Composite reliability (rho_a)	Average variance extracted (AVE)
EC	0.873	0.877	0.498
EI	0.834	0.848	0.552
ETM	0.744	0.804	0.390
IN	0.790	0.795	0.488

Discriminant Validity

The result of HTMT indicated that there was no discriminant validity problem. That is, items of different constructs were not closely related to each other (Gold et al, 2001).

Heterotrait-monotrait ratio (HTMT)

EI -> EC	0.701
ETM -> EC	0.913
ETM -> EI	0.654
IN -> EC	0.795
IN -> EI	0.808
IN -> ETM	0.693

The Analysis of Structural/Inner Model

Test of Hypothesis

The results of the hypothesis test showed evidence of a positive and significant relationship between entrepreneurship curriculum and innovation, and between innovation and entrepreneurial intention. However, the indirect relationship between entrepreneurship curriculum and entrepreneurial intention, as well as entrepreneurship teaching method and entrepreneurial intention were insignificant. Similarly, the direct relationship between the entrepreneurship teaching method and the mediator "innovation" was insignificant. On the other hand, the exogenous constructs substantially explained both the mediating construct and the endogenous construct (50% of innovation and 46% of entrepreneurial intention) (Hair et al., 2011).

Path Coefficient

Hypotheses	Beta Value	Standard Error	T Stat	P Value	Decision
H_1: EC->EI	0.158	0.111	1.473	0.141	Fail to Reject
H_2: EC->IN	0.572	0.099	5.781	0.000	Rejected
H_3: ETM->EI	0.172	0.102	1.657	0.097	Fail to Reject

International Journal of Advances in Engineering and Management (IJAEM)
Volume 4, Issue 11 Nov. 2022, pp: 991-1012 www.ijaem.net ISSN: 2395-5252

H_4: ETM->IN	0.126	0.110	1.139	0.255	Fail to Reject
H_5: IN->EI	0.461	0.086	5.355	0.000	Rejected
R Square EI	50%				
IN	46%				

*** p< 0.01; **p< 0.05; *p <0.1

Confidence Intervals Bias Corrected

The positive effect of entrepreneurship Curriculum on innovation, as well as innovation on entrepreneurial intention was shown by the absence of zero in the results of the confidence interval bias corrected. However, zero was present in the direct relationship between entrepreneurship Curriculum and entrepreneurial intention, entrepreneurship teaching method and entrepreneurial intention, as well as an entrepreneurship teaching method and innovation signifying the absence of their effect on the other.

Confidence Intervals Bias Corrected

	Original sample (O)	Sample mean (M)	Bias	2.5%	97.5%
EC -> EI	0.164	0.162	-0.002	-0.058	0.381
EC -> IN	0.575	0.570	-0.005	0.359	0.749
ETM -> EI	0.169	0.174	0.005	-0.020	0.379
ETM -> IN	0.125	0.139	0.014	-0.092	0.336
IN -> EI	0.460	0.462	0.003	0.274	0.614

Partial Mediation Analysis

The result of variance accounted for (VAF) (0.264/0.429 = 0.62 and 0.058/0.227 = 0.26) indicated the existence of partial mediation. Hence, students' innovativeness mediated the relationship between entrepreneurship education and entrepreneurial intentions.

Specific indirect effects
Mean, STDEV, T values, p values

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
EC -> IN -> EI	0.264	0.266	0.077	3.437	0.001
ETM -> IN -> EI	0.058	0.062	0.051	1.142	0.253

Total effects
Mean, STDEV, T values, p values

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
EC -> EI	0.429	0.428	0.110	3.880	0.000
EC -> IN	0.575	0.570	0.099	5.781	0.000
ETM -> EI	0.227	0.237	0.099	2.298	0.022
ETM -> IN	0.125	0.139	0.110	1.139	0.255
IN -> EI	0.460	0.462	0.086	5.355	0.000

International Journal of Advances in Engineering and Management (IJAEM)
Volume 4, Issue 11 Nov. 2022, pp: 991-1012 www.ijaem.net ISSN: 2395-5252

Confidence Intervals Bias Corrected

	Original sample (O)	Sample mean (M)	Bias	2.5%	97.5%
EC -> IN -> EI	0.264	0.266	0.002	0.128	0.426
ETM -> IN -> EI	0.058	0.062	0.005	-0.043	0.159

Effect Size of Exogenous Variables

The strength of substantive significance (effect size) of the structural model (Sullivan and Fein, 2012) was shown below:

Effect Size for the Relationships

Construct	f^2	Effect Size
EC -> EI	0.018	Small
EC -> IN	0.254	Medium
ETM -> EI	0.024	Small
ETM -> IN	0.012	Small
IN -> EI	0.229	Medium

Predictive Relevance of Exogenous Variables

The mediating construct "innovation" and the endogenous construct "entrepreneurial intention" were strongly predicted by the exogenous constructs (Stone, 1974; Geisser, 1974). Similarly, the manifest variables' out-sample predictive relevance indicated that the model had medium predictive power. This was because the values of the linear model mean of absolute error (LM_MAE) were less than the partial least square structural equation modelling means of absolute error (PLS-SEM_MAE) except for one endogenous indicator (EI2).

LV prediction summary

	Q^2predict	RMSE	MAE
EI	0.346	0.828	0.544
IN	0.423	0.777	0.531

Constructs Importance-Performance Map

The results of the exogenous construct "entrepreneurship curriculum (EC)" and mediating construct "innovation (IN)" had high importance as well as high performance. However, the exogenous construct "entrepreneurial teaching method (ETM)" had low importance, with a high-performance score. Thus, a lot needs to be done to improve the teaching method of entrepreneurship in polytechnics.

Importance-Performance Map [EI] (Constructs)

Construct Total Effects for [EI]

	EI
EC	0.429
ETM	0.227
IN	0.460

Construct Performances for [EI]

	Performance
EC	80.038
ETM	80.092
IN	83.121

International Journal of Advances in Engineering and Management (IJAEM)
Volume 4, Issue 11 Nov. 2022, pp: 991-1012 www.ijaem.net ISSN: 2395-5252

Analysis of data from the federal polytechnic Offa showed that the direct relationship between entrepreneurship curriculum and the entrepreneurial intention was insignificant. This was consistent with some previous studies (Alinno, 2020; Obeleagu-Nzelibe and Ezekiel, 2018; Tsordia and Papadimitriou, 2018; Oyetunde, et al, 2017; Caloghirou, et al, 2013). This signified a possibility that the contents of entrepreneurship education in use might not have met students' expectations, thus, failed to motivate them to consider taking up the creation of ventures at graduation as a part to follow. Similarly, the entrepreneurship teaching method used to impart knowledge of entrepreneurship to students had no significance to their entrepreneurial intention both directly and indirectly. This further confirmed the inability of the current teaching method to meet the desired expectation of students. This was consistent to some previous studies (Alinno, 2020; Ukoha, 2017). However, the indirect relationship between entrepreneurship curriculum and the entrepreneurial intention was found to be significant. Thus, it indicated that innovation was a strong mediator between the two. This was further confirmed by the significant relationship between innovation and entrepreneurial intention (Wathanakom, et al, 2020; Zahari, et al, 2018; Adebayo, et al, 2017; Law & Breznik, 2017; Ibrahim & Saili, 2017; Koe, 2016).

VI. CONCLUSION

This article focused on the influence or contribution of entrepreneurship education on students' perceived intention to create ventures at graduation. Firstly, imparting entrepreneurship seems to encourage students to take up entrepreneurial activity as a career. Secondly, innovative students will most likely create ventures at graduation. Thirdly, the entrepreneurship teaching method in use was not considered to be the most relevant to students' entrepreneurial needs. Fourthly, the entrepreneurship curriculum at federal polytechnic Offa was insignificant to students' entrepreneurial intention. Hence, it may not optimally motivate them to consider venture creation at graduation.

Study Implications

Theoretical Implications

The goal of educational institutions is to promote students' entrepreneurial intention through entrepreneurship education course that creates business ventures and increase the number of start-ups (Kakouris and Georgiadis, 2016). However, Nigeria's tertiary institutions' entrepreneurship curriculum was unsuitable for developing entrepreneurial practices (Alinno, 2020), and therefore called for possible solutions. Based on the aforementioned, this study determined the effect of entrepreneurship curriculum on entrepreneurial intention. In so doing, the study has contributed to the body of literature on the relationship between entrepreneurship curriculum and entrepreneurial intention. Similarly, future researchers were encouraged to consider the pedagogical methods underpinning the impact of entrepreneurship education on entrepreneurial intention (Hardie et al, 2020; Nabi, et al, 2017). Against this basis, this study confirmed that the entrepreneurship teaching method used in the study area may not provide the best-desired result, hence, is not the most relevant to students' entrepreneurial needs. Lastly, to extend general findings, research models and dimensions of innovation, future researchers should examine students in other fields in different tertiary institutions and countries to look into the effect of innovation on entrepreneurial intention (Law and Breznik, 2017; Padilla-Melendez, et al, 2015; Zampetakis, et al, 2011). Thus, this study examined the mediation effect of innovation on the relationship between entrepreneurship education and entrepreneurial intention. Innovation was found to have a strong effect on entrepreneurial intention. Hence, the study has added to the existing literature on this aspect.

Practical Implications

The study is relevant to educational institutions imparting entrepreneurship, future researchers in a similar study area, and policymakers. Thus, educational measures should be directed to provide the desired entrepreneurial experiences needed by learners. Similarly, the promotion of innovativeness will enhance students' desire to venture into entrepreneurial activities. In addition, training and educating students on entrepreneurship skills will enhance students' capacity building in terms of self-employment potential, thereby relieving the government of the burden of unemployment.

Declaration of Conflicting Interests

This is to declare that the article's authorship and publication have no conflicting interests.

Funding

This study was funded by Nigeria's tertiary education trust fund (TETfund Institution-Based Research Intervention).

REFERENCES

[1]. Achor, E.E., Agogo, P. O., and Dodo, E. A. (2020). Curriculum content of entrepreneurship programme and its impact on basic students' skills acquisition in entrepreneurship in Benue state Nigeria. International Journal of Vocational and Technical Education Research, 6(2), 11-34.

[2]. Adebayo, E. A., Olashebikan, A. T., Agumadu, M. A., Peter, A. O., Akinsulire, H. W., and Ikumapayi, T. A. (2017, June 12-14). Analysis of the role of creativity and innovation in entrepreneurship. In: 1st Covenant University International Conference on Entrepreneurship, Conference Proceedings, 388-396, Department of Business Management, Covenant University, Nigeria.

[3]. Adejana, O., Moses, C. L., Vivienne, A., Tadema, T. A., and Adejana, T. B. (2017, June 12-14). Impact of entrepreneurship education on entrepreneurial activities of university undergraduates. 1st Covenant University International Conference on Entrepreneurship, Conference Proceedings, 358-365.

[4]. Adesoji, F. A., and Sangoleye, S. A. (2017). Pedagogical practices in teaching entrepreneurship education in universities in south-west Nigeria. Advances in Social Sciences Research Journal, 4(21), 157-170. https://doi: 10.14738/assrj.421.3635.

[5]. Afolabi, M. O., Kareem, F. A., Okubanjo, I. O., Ogunbanjo, O. A., and Aninkan, O. O. (2017). Effect of entrepreneurship education on self-employment initiatives among Nigerian science and technology Students. Journal of Education and Practice, (8), ISSN 2222-1735 (Paper) ISSN 2222-288X (Online), www.iiste.org

[6]. Ajzen, I. (2011). The theory of planned behaviour: reactions and reflections. Psychology & Health, 26(9), 1113–1127. http://dx.doi.org/10.1080/08870446.2011.613995

[7]. Ajzen, I. (2005). Attitude, personality and behavior. McGraw-Hill Education. www.Books.google.com

[8]. Ajzen, I., (1993). Attitude theory and the attitude-behaviour relation: New directions in attitude measurement, Walter de Gruyter, https://www.researchgate.net/publication/264655146

[9]. Ajzen I., (1991). The theory of planned behaviour. Organizational Behavior and Human Decision Processes, 50(2), 179-211. https://www.sciencedirect.com/science/article/pii/074959789190020T

[10]. Ajzen, I. (1988). Attitudes, personality and behavior. Milton Keynes: Open University Press. https://trove.nla.gov.au/work/17527947.

[11]. Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl, & J. Beckmann (Eds), Action-control: From Cognition to Behaviour. Heidelberg, Springer. 11-39.

[12]. Ajzen, I., and Fishbein, M. 1980. Understanding attitudes and predicting social behaviour. Englewood Cliffs, Prentice-Hall.

[13]. Alberti, F., Sciascia, S. and Poli, A. (2004, 4–7 July). Entrepreneurship education: Note on an ongoing debate. The 14th Annual International Entrepreneurship Conference Proceedings, University of Napoli Federico, Italy.

[14]. Alinno, F. C. (2020). Entrepreneurship education curriculum and framework for its implementation in tertiary institutions in Nigeria: Implication for developing entrepreneurial mindset of students. Journal of Economics and Sustainable Development, 11(22), 40-56.

[15]. Anene, J., and Imam, H. (n.a). Entrepreneurship Education Curriculum Content for Undergraduate Students in Nigerian Universities. Journal of Education and Practice, 2(3), 1-11. ISSN 2222-288X (Online).

[16]. Anjum, T., Ramzani, S. R., Nazar, N., and Shahzad, I. A. (2018). Entrepreneurial Intention: Does Entrepreneurial Education Matter in Pakistan? International Journal of Human Resource Studies, 8(3), 147-161. https://doi.org/10.5296/ijhrs.v8i3.13213. ISSN 2162-3058

[17]. Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. Educational Psychologist, 28(2), 117-148.

[18]. Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, Prentice-Hall.

[19]. Bell, R., (2020). Developing entrepreneurial behaviours in the Chinese classroom through value creation pedagogy. Innovations in Education and Teaching International, 1-15. https://doi: 10.1080/14703297.2020.1793800

[20]. Bodnar, A. C., Renee, M. C., and Mary, B. S. (2015). Lesson learned through sequential offerings of an innovation and entrepreneurship boot camp for sophomore engineering students. Journal of Engineering Entrepreneurship, 6(1), 52-67.

[21]. Brinda, K. P. R. and Dileep, K. M. (2011). Motivational factors, entrepreneurship and education: Study with reference to women in SMEs. Far East Research Centre, 3(3), 15-16.

[22]. Caloghirou, Y., Protogerou, A., and Deligianni, I. (2013). How could education systems cultivate knowledge-intensive

entrepreneurship? An example from engineering education. Paper presented at the 35th DRUID Cerebration Conference, Athens, Greece.

[23]. Daniela M., Rainer H., Norbert, K., and Birgit, W. (2016). The impact of entrepreneurship education on the entrepreneurial intention of students in science and engineering versus business Studies University programs. Elsevier Technological Forecasting & Social Change, 104, 172–179.

[24]. Ekoja, I. I., and Odu, A. O. (2016). Developing and implementing entrepreneurship curriculum in Nigerian library and information science programmes. International Journal of Library and Information Science, 8(6), 48-53.

[25]. Fasla, N. P. (2017). A study on entrepreneurship attitude among College Students. International Journal of Research Science and Management, Thomson Reuters ENDNOTE, 4(4), ISSN: 2349-5197. http://www.ijrsm.com

[26]. Fayomi, E. J., Fields, Z, Arogundade, K. K., Ojugbele, H. O., Ogundipe, F., and Ganiyu, I. O. (2019). Complementary approach to teaching and learning entrepreneurship in Nigerian universities: A conceptual framework. Universal Journal of Management, 7(2), 57-77. http:doi:10.13189/ujm.2019.070203.

[27]. Francis, C., Hiram, T., Ernest, C. R., and Jun-Hwa, C. (2016). Reconsidering what entrepreneurial intention implies: The evidence from Malaysian university students. International Journal of Business and Social Sciences, 7(9), 85-98.

[28]. Hair, J. F., Risher, J. J., Sarstedt, M., and Ringle, C. M. (2018). When to use and how to report the results of PLS-SEM. European Business Review, https://doi.org/10.110B/EBR-11-2018-0203

[29]. Hassan, A., Anwar, I., Saleem, I., and Islam, K. M. B. (2021). Individual entrepreneurial orientation, entrepreneurship education and entrepreneurial intention: The mediating role of entrepreneurial motivations. Industry and Higher Education 1–16. https:doi:10.1177/09504222211007051

[30]. Hardie, B, Highfield, C., and Lee, K. (2020). Entrepreneurship education today for students' unknown futures. Journal of Pedagogical Research, 4(3), 401–417. http://dx.doi.org/10.33902/JPR.2020063022

[31]. Heinert, S., and Roberts, T. G. (2016). Engaging rural youth in entrepreneurship through extracurricular and co-curricular systems: Innovation for Agricultural Training and Education, USAID/BFS/ARP-Funded Project, Award number: AID-OAA-L-12-00002.

[32]. Ibrahim, N. H., and Saili, A. (2017). Assessment of entrepreneurial inclination among the seaweed operators at Sernporna, Sabah using entrepreneurial attitude model (EAO). Nurul/Journal of International Business, Economics and Entrepreneurship, 2(1), Article e-ISSN: 2550-1429.

[33]. Igbokwe-Ibeto, C. J., Agbodike, F. C., and Osakede, K. O. (2018). Entrepreneurial curriculum in African universities: A panacea to graduates' unemployment if? Africa's Public Service Delivery and Performance Review, 6(1), a222. https://doi.org/10.4102/apsdpr.v6i1.222

[34]. Ismail, A. B. T., Sawang, S., and Zolin, R. (2018). Entrepreneurship education pedagogy: Teacher-Student centred paradox. Education+Training, 1-30.

[35]. Iwu, C. G., Opute, P. A., Nchu, R., Eresia-Eke, C., Tengeh, R. K., Jaiyeoba, O., and Aliyu, O. A. (2019). Entrepreneurship education, curriculum and lecturer-competency as antecedents of student entrepreneurial intention. The International Journal of Management Education, 19(2021)100295 1-13 https://doi.org/10.1016/j.ijme.2019.03.007

[36]. Kakouris, A., and Georgiadis, P. (2016). Analysing entrepreneurship education: A bibliometric survey pattern. Journal of Global Entrepreneurship Research, 6(6), 1-18. ISSN 2251-7316.

[37]. Kanungo and Calantone, 2002). A critical look at technological innovation typology and innovativeness terminology: A literature review. Journal of Product Innovation Management, 19, 110-132.

[38]. Koe, W.L. (2016). The relationship between individual entrepreneurial orientation and entrepreneurial intention. Journal of Global Entrepreneurship Research, 6(13), 1-11.

[39]. Krejcie, R.V., and Morgan, D. W. (1970). Determining sample size for research activities. Educational and Psychological Measurement, 30, 607-610.

[40]. Lackeus, M. (2020). Comparing the impact of three different experiential approaches to entrepreneurship in education. International Journal of Entrepreneurial Behavior &

Research, 26(5), 937-971. https://doi:10.1108/IJEBR-04-2018-0236.

[41]. Law, K. M. Y., and Breznik, K. (2017). Impacts of innovativeness and attitude on entrepreneurial intention: Among engineering and non-engineering students. International Journal of Technology and Design Education, 1-19. https://doi:10.1007/s10798-016-9373-0

[42]. Linan, F., and Chen, Y. W. (2009). Development and Cross-Cultural Application of a Specific Instrument to Measure Entrepreneurial Intentions. Entrepreneurship Theory and Practice, 33(3), 593-617. http://institucional.us.es/vie/documentos/resultados/LinanChen2009.pdf

[43]. Linan, F., Nabi, G., and Krueger, N. (2013). British and Spanish entrepreneurial intentions: A comparative study. Revista de Economía Mundial, núm. Sociedad de Economía Mundial, Huela, Espana, (33), 73-103. http://www.redalyc.org/articulo.oa?id=86626373004

[44]. Magorzata, Z. W., Anna, S. T., and Tatiana, P. (2015). The quality of entrepreneurial attitudes among students of the faculty of management at the University of Gdañsk, The pilot study. Zarz dzanie Finanse Journal of Management and Finance, 2(13), 2.

[45]. Martínez-Gregorio, S., Badenes-Ribera, L., and Oliver, A. (2021). Effect of entrepreneurship education on entrepreneurship intention and related outcomes in educational contexts: a meta-analysis. The International Journal of Management Education, 19(2021) 1-15, 100545 https://doi.org/10.1016/j.ijme.2021.100545

[46]. Matlay, H. (2008). The impact of entrepreneurship education on entrepreneurial outcomes. Journal of Small Business and Enterprise Development, 15(2), 382-396.

[47]. Metu, A. G., and Nwokoye, E. S. (2014, 28-30, May). Entrepreneurship development in Nigeria: Prospect and challenges. Presented at the international conference on entrepreneurship: Strategy for socio-economic advancement in emerging economies, organised by department of business administration, faculty of social and management sciences, Bowen university Iwo, Nigeria. http://www.researchgate.net/publication/277021008

[48]. Mwasalwiba, E. S. (2010). University entrepreneurship education in Tanzania: Teaching context, students' profile, expectations and outcome. (Unpublished dissertation), Vrije Universiteit Amsterdam, 176.

[49]. Nabi, G., Linan, F., Fayolle, A., Krueger, N., and Walmsley, A. (2017). The impact of entrepreneurship education in higher education: A systematic review and research agenda. Academy of Management Learning & Education, 16(2), 277–299. https://doi.org/10.5465/amle.2015.0026

[50]. National Bureau of Statistics, (December 15, 2021). Unemployment statistics. http://www.nigerianstat.gov.ng/

[51]. Obeleagu-Nzelibe, G. C., and Ezekiel, B. D. J. (2018). Redesigning entrepreneurship curriculum in Nigerian universities for knowledge creation and labor market competition. Nile Journal of Business and Economics, 10, 3-18

[52]. Olokundun, A. M., Stephen, I. A., Hezekiah, F. O., Paul, S. O., and Oyafunke-Omoniyi, C. O., (2018). Entrepreneurial curriculum contents and entrepreneurial development of university students in Nigeria. International Journal of Entrepreneurship, 22(1), 1939-4675-22-1-125. https://www.abacademies.org/articles/Entrepreneurship-curriculumof-university-students-in-nigeria-1939-4675-22-1-125.pdf

[53]. Olokundun, A. M. (2017). Perception of students on entrepreneurship education and entrepreneurial intentions in selected Nigerian universities (Unpublished Doctoral Thesis). Department of Business management, College of Business and Social sciences, Covenant University Ota, Ogun State, Nigeria.

[54]. Olokundun, A. M., Chinonye, L. M., Oluwale, O. I., Stephen, A. I., Augusta, B. A., and Fred, P., (2017). Perception of students on entrepreneurship curriculum contents and open-mindedness: Implications for business idea generation of Nigerian university students. Academic of Entrepreneurship Journal, 23(2), ISSN: 1528-2686-23-2-102

[55]. Olokundun, M., Hezekiah, F., Stephen, I., and Fred, I. (2014). An assessment of the taught entrepreneurship program in Nigerian secondary schools. Merit Research Journal, 2(11), 257-275

[56]. Oluwafunmilayo, A. M., Moses, C. L., Olokundun, M. A., and Grace, A. C. (2017,

June 12-14). Impact of entrepreneurship education self efficacy, attitude and entrepreneurial intentions. Proceedings of the 1st international conference on entrepreneurship, Covenant University Ota, Nigeria, 374-384.

[57]. Oyetunde, T. O., Orji, M. G., Akeem, J. B., and Omale, S. A. (2017, June 12-14). Effect of entrepreneurship education on student independence-oriented intentions in selected private universities in Abuja. Proceedings of the 1st international conference on entrepreneurship, Covenant University Ota, Nigeria, 337-346.

[58]. Padilla-Melendez, A., Dieguez-Soto, J., and Garrido-Moreno, A. (2015). Empirical research on in family business: Literature review and proposal of an integrative framework. Revista Brasileira de Gestao de Negocios, 17(56), 1064-1089. https://doi: 10.7819/rbgn.v17i56.1915

[59]. Pajares, F. (2002). Overview of social cognitive theory and of self-efficacy. (2018, September 30). http://www.emory.edu/EDUCATION/mfp/eff.html

[60]. Palomaki, S. (2019). Impacts of a challenge-based innovation project course on the entrepreneurial intentions of multidisciplinary student teams. CERN IdeaSquare Journal of Experimental Innovation, 3(1), 3-7. https://doi.org/10.23726/cij.2019.870

[61]. Penaluna, A., and Penaluna, K. (2021). In search of entrepreneurial competencies: Peripheral vision and multidisciplinary inspiration. Industry and Higher Education, 35(4) 471–484. https://doi:10.1177/0950422220963796.

[62]. Popescu, C. C., Bostan, I., Robu, I., Maxim, A., and Diaconu, L. (2016). An analysis of the determinants of entrepreneurial intentions among students: A Romanian case study. Sustainability, 8(771), 1-22. https://doi:103390/su8080771.

[63]. Proshareng.com, (2020, May 23). Nigreia's unemployment rate increases to 33.3% in Q4 2020 from 27.1% in Q2 2020– NBS. https://www.proshareng.com/news/Nigeria%20Economy/Nigeria-s-Unemployment-Rate-Increases-to-33.3Percent-in-Q4-2020-from-27.1Percent-in-Q2-2020---NBS/56302

[64]. Rengiah, P., (2013). Effectiveness of entrepreneurship education in developing entrepreneurial intentions among Malaysian university students' (DBA thesis), Southern Cross University, Lismore, NSW.

[65]. Reyes, G. U., and Manipol, N. E. P. (2015). Impact of various Teaching Methodologies on the Entrepreneurial awareness and intention of Students at the University of the Philippines Los Banos. International Journal of Academic Research in Business and Social Sciences, 5(7), 350-362. http://dx.doi.org/10.6007/IJARBSS/v5-i7/1746 ISSN: 2222-6990

[66]. Sarstedt, M., Ringlr, C. M., and Hair, J. F. (2017). Treating unobserved heterogeneity in PLS-SEM: A Multi-method approach. 197-217. https://www.researchgate.net/profile/

[67]. Schumpeter, J. A. (1961). The theory of economic development. Cambridge MA, Harvard university press.

[68]. Sira, A. P., and Blessing, W. (2019). Extent of attainment of entrepreneurship education instructional objectives as perceived by lecturers in rivers state universities. International Journal of Innovative Education Research, 7(2), 66-74.

[69]. Sylvia, N. A. A., and Dayang, H. D. D., (2016). Determinants of Entrepreneurial Intention among Undergraduate Students in Malaysia. International Conference on Marketing and Retailing, Elsevier, Procedia Economics and Finance, 5(37), 108 – 114. www.sciencedirect.com

[70]. Tkachev, A., and Kolvereid, L. (1999). Self-Employment Intentions among Russian Students. Entrepreneurship and Regional Development, 11(3), 269-280.

[71]. Trading Economics, (2018, 29th December). Nigeria Unemployment Rate. https://tradingeconomics.com/nigeria/unemployment-rate.

[72]. Tselepis, T. J., Nieuwenhuizen, C., and Schachtebeck, C. (2021). To Live and to Learn: Practice-Led Learning Through Entrepreneurship Education. Иновације у настави, 34(2), 12–26 https://doi: 10.5937/inovacije2102012T.

[73]. Tsordia, C., and Papadimitriou, D. (2018). The role of theory of planned behaviour on entrepreneurial intention of Greek business students. Pobrane z czasopisma International Journal of Synergy and Research, 4(1), 23-37. https://doi:10.17951/Ijsr.2015.4.1.23, http://Ijsr.journals.umcs.pl

[74]. Ukoha, U. A. (2017). Assessing Entrepreneurship Education Pedagogies in Three Federal Colleges of Education in Nigeria's South-South Geo-Political Zone.

Africa Journal of Teacher Education, 6(1), 1-21.

[75]. United Nations industrial development organisation, (2014). Fostering entrepreneurial youth. V.14-05836, Vienna international centre, Austria. https://www.unido.org/sites/default/files/2016-06/ECP_brochure_FINAL_0.pdf

[76]. Wathanakom, N., Khlaisang, J., and Songkram, N. (2020). The study of the causal relationship between innovativeness and entrepreneurial intention among undergraduate students. Journal of Innovation and Entrepreneurship, 1-13. https://doi.org/10.1186/s13731-020-00125-5

[77]. World Economic Forum, (2009). Educating the next wave of entrepreneurs. A report of global education initiative. Switzerland.

[78]. Yang, Q., Chen J., Yang, L., and Liu, Z. (2021). How to develop entrepreneurial talent more effectively? A comparison of different entrepreneurship educational methods. Frontiers in Psychology, 12, 1-14. htttps://doi: 10.3389/fpsyg.2021.644113

[79]. Zahari, A., Tamyez, P. F. M., Azizan, N. A., and Hashim, F. (2018). Student spin-off intention in malaysian higher educational institutions: Founders' characteristics and university roles. Journal of Entrepreneurship Education, 21(3), 1-15.

[80]. Zampetakis, L. A., Gotsi, M., Andriopoulos, C., and Moustakis, V. (2011). creativity and entrepreneurial intention in young people empirical insights from business school student. International Journal of Entrepreneurship and innovation, 3(12), 189-199. https://doi: 10.5367/ijei.2011.0037