

## **Mediating role of behavioural control on the relationship between university entrepreneurship education and students' entrepreneurial intention**

Muhammad Umar<sup>1</sup>, Idris Ahmed<sup>2</sup> & Tijjani Bashir Musa<sup>3</sup>

<sup>1</sup>*Department of Business Management, Sule Lamido University, Kafin Hausa - Nigeria.*

<sup>2</sup>*Department of Actuarial Science and Insurance, Ahmadu Bello University, Zaria - Nigeria*

<sup>3</sup>*Department of Business Administration, Ahmadu Bello University, Zaria - Nigeria*

Corresponding Email: [m.umar@slu.edu.ng](mailto:m.umar@slu.edu.ng)

---

### **Abstract**

*The lackadaisical attitude of young graduates towards preference for fixed salary job above self-employed one and their inability in opportunity identification has forced universities to be more focus in providing sound entrepreneurship education that can successfully boost the prospective intentions of start-up creation as well as its growth. The aim of the study is to examine on how Behavioural Control (BC) intervenes in the relationship between University Entrepreneurship Education (UEE) and Student's Entrepreneurial Intention (SEIT). To succeed in the study, survey research design was utilized as it was cross sectional in nature. Where primary data was collected by means of issuing a self-administered questionnaire to the respondents who are undergraduates students using stratified and simple random sampling technique of 404 Sule Lamido University Kafin Hausa students by employing Structural Equation Modelling with PLS version 2. The analysis revealed that behavioural control invigorates the effect of university entrepreneurship education in enhancing student's entrepreneurial intention. The study therefore recommends opportunity scanning and business plan competition among students to encourage their capability and competency level so as to find easiness in embracing new start-ups.*

**Keywords:** University, Entrepreneurship Education, Behavioural Control, Students, Entrepreneurial Intention

---

### **1. Introduction**

World over, university entrepreneurship education is perceived as a possible remedy to the menace of unemployment and foster student's entrepreneurial intention. Mei and Symaco, (2020) have written in their recent study that innovation and entrepreneurship have now become the main promoters for countries to foster as well as maintain growth in the context of globalization and technological progress. The European Commission (EC) in its recent policies and initiatives has advocated that every child, before graduating or leaving compulsory education, should benefit from at least one practical entrepreneurial experience (Process & Report, 2020). The European

Union Report (EUR, (2021) also believed that entrepreneurship education helps in changing the psychology of university students and allow them to embrace entrepreneurial activities after graduation. This report is in agreement with the position of many policy implementers who believed that investment in entrepreneurship education will increase entrepreneurial knowledge as well as motivation in embracing intention to start a new business (Fietze & Boyd, 2017).

Youth unemployment in Nigeria for long has been a major issue especially among graduates (Abiodun & Oyejoke, 2017). The Global Entrepreneurship Index (GEI (2018)

reports ranks Nigeria 101<sup>st</sup> out of 137<sup>th</sup> countries and 12<sup>th</sup> in Africa with (20%) entrepreneurial intention. Global Entrepreneurship Monitor, (2021/2022) global report also ranked Nigeria very low in terms of low intention to create business. It is important to note that high rates of unemployment among Nigerian youth made Nigerian government to include entrepreneurship education into all Nigerian universities curriculum mandatory in 2006. In compliance with this directive, Sule Lamido University Kafin Hausa, Jigawa State is engaging their students into a mandatory skill acquisition exercise in their 4<sup>th</sup> semester. This may possibly increase students' entrepreneurial inclination.

However, despite government efforts to inculcate new mindset (entrepreneurial intention) there is still unenthusiastic attitude among youths graduate towards preference for fixed salary job as oppose to self-employment career (Aini, 2014). Student's Entrepreneurial intention simply entails to a conviction that is generally self-acknowledged by which an individual proposes to venture in to self-employment journey of creating new business venture consciously as well as persistently in the future (Thompson, 2009). Ajzen (1991) holds that entrepreneurial intention is a key mechanism which countries can appraise the state of entrepreneurship in their respective countries. It is in line with above submissions that this study investigated the effectiveness and the effect that university entrepreneurship education has on students' entrepreneurial intention, mediated by behavioural control (BC).

### **Statement of the Problem**

Nigeria is bedevilled with multiple challenges that hindered its development to compete favourably with its peers, like Brazil, India, to mention but a few. These problems include enormous youth unemployment, kidnapping, banditry,

insurgency, irregular migration, exiting of foreign direct investors and many more. To turn around these challenges therefore, a massive investment in entrepreneurship education and research is critical (Israr & Saleem 2018). According to European Commission (EC), the practically empowered field of entrepreneurship education has developed during the last decade, but it still needs more attention and recognition in countries and higher institutions of learning which are lagging particularly the developing economies (Association, 2020).

Researches in the field of entrepreneurship had investigated factors that triggered entrepreneurial intention. Entrepreneurship education has been an important consideration in understanding the intention, attitude and behaviour of students. Previous studies (Israr & Saleem, 2018; Abiodun & Oyejoke, 2017; Hassan, 2016) have established a positive relationship in examining university entrepreneurship education and the intention of students to become self-employed, however, according to Dogan, (2015) what can change the entrepreneurial intentions of students during university entrepreneurship education is not what they learn about entrepreneurship itself, but rather what they learn about themselves and their own capabilities. And though some studies (e.g., Moses, Olokundun, Akinbode, Agboola, & Inelo, 2016; Najafi & Masud, 2016; & Nasiru, 2015) have used some variables to mediate some variables relationship related to university entrepreneurship education as well as intention of students in venturing into business, however, the mediating role of behavioural control (BC) have not been actually established particularly in the emerging economy like Nigeria.

Logically university entrepreneurship education matters, because it will enhance exploitation and identification of

opportunities for students to engage in entrepreneurial activities. Looking at this, it seems like there is still a vacuum because this will not matter most if you neglected the inclusion of PBC in this process, as it is an important factor that enhance the student's capability and competency level to find easiness in embracing entrepreneurial intention (Tsordia & Papadimitriou, 2015). Therefore, given the fact that previous studies have not explained how and why university entrepreneurship education influence entrepreneurial intention, it is vital to examine the intentions of students in the quest of embracing start-up creations as well as to measure the effectiveness and role of behavioural control (BC) in a relationship with university entrepreneurship education (UEE) and student's entrepreneurial intentions (SEIT).

### Research Questions

In conformity with the research problem identified, the following research questions are addressed:

- i. Does university entrepreneurship education influence students' entrepreneurial intention?
- ii. Does perceived behavioural control has influence on student's intention to self-employment?
- iii. Does perceived behavioural control mediate the relationship between university entrepreneurship education and students' entrepreneurial intention?

### Research Objectives

- i. Examine the influence of university entrepreneurship education on students' entrepreneurial intention.
- ii. To discover whether perceived behavioural control has effect on students' entrepreneurial intention
- iii. To find out how behavioural control save as a mediator in the relationship where university entrepreneurship

education and entrepreneurial intention met.

## 2. Literature Review and Theoretical Framework

### Concept of Entrepreneurial Intention

Intention is very cardinal for embarking on any human endeavours. It essentially served as a predictor of the action of an individual's action as well as a strong motivational factor that encouraged individual's behaviour, which is showing an effort of individual in planning to transform his or her behaviour to form a genuine practice/action (Ajzen, 1991; Liñán & Santos, 2007). Intention has been generally confirmed to strongly connect with the actual behaviour (Krueger, Reilly & Carsurd 2000)). A certain attribute may be possessed by individual or may have potentials of being a self-employer, however, the individual may not make any transformation to entrepreneurial pursuit until he or she has that intention of becoming an entrepreneur (Ismail et al., 2009). Additionally, Krueger, Reilly & Carsurd (2000) indicates that the actual business venture is resulted from a long period of intention to open an enterprise. This is a clear indication that, with the absence of intention an individual may not really be interested to venture into the pursuit of self-employment. In the perspective of this study, entrepreneurial intention entails to a planned intent where undergraduate be entice to embrace entrepreneurship as a career path after graduation.

### Concept of University Entrepreneurship Education

University entrepreneurship education has been defined by many scholars. In the perspective of Ediagbonya (2013) university entrepreneurship education entails a form of formal training that is aimed at helping participants in developing their entrepreneurial characteristics in such

a manner that supporting services are offered for them to successfully embark on new ventures creation and sustainability. Similarly, Fatoki, (2014) considered university entrepreneurship education as an education that actually more than mentoring an individual on the path to commence as well as to run a venture, but again there should be a strategy put in place to stimulate student's critical thinking, risk taking attitude, innovation and creativity and promoting their sense of accountability together with self-worthiness. Global Entrepreneurship Monitor (GEM) (2021), considered it as a process that developed the knowledge and skills solely the reason or as a component of education that is acceptable in respective of the level. While from the perspective of Bruyat and Julien (2000), university entrepreneurship education is considered as process that involved changed of mindset that translate for an individual's desire to create a new value that will enhance his quality of life and standard of living as well as to economic development.

### **Perceived Behavioural Control**

Behavioural control basically entails the degree to which people strongly trust and feels capable of performing behaviour, capitalizing based on their capability, know how, past experience as well as their assessment towards the possible huddles that may happened in the processes of performing the behaviour. As according to Samuel & Ernest, (2013), the stronger the level of behavioural control of an individual, the better his intention will be on performing on certain behaviour. Behavioural control formed one of the three components that made an entrepreneurial intention model developed by Ajzen, (1991) as theory of planned behaviour (TPB) which he term antecedents of entrepreneurial intention. Behavioural control, which is popularly known as perceived behavioural control (PBC),

suggest to self-assessment of the degree to which an individual strongly trust capable of successfully commencing and running a business. Ajzen, (1999) defined PBC as the individual presumption of his present competency that can translate to his perceived capability to assume the self-employment journey (entrepreneur). It is a conviction concerning the self-appraisal regarding the easiness or difficulty on implementing a specific behaviour which it also consists of two major components as; perceived self-efficacy and perceived controllability (Ajzen 2002).

*H0<sub>1</sub>: University entrepreneurship education has no significant effect on students' entrepreneurial intention.*

### **University Entrepreneurship Education and Entrepreneurial Intention**

University entrepreneurship education have been documented by many studies have positive role on developing entrepreneurial intention. The study of Ayedun, Taiwo, Ajayi and Modupe (2018) examined the entrepreneurial intention which he selected tertiary institutions in Ondo State, employed survey research design, drawn a sample from the Federal University of Technology, Akure (FUTA), Adekunle Ajasin University, AkungbaAkoko (AAUA) and Achievers University, Owo (AUO) found out that university entrepreneurship education has impact on student's intention regarding self-employment decision. Similarly, study of Amanamah Owusu and Acheampong (2018) which was conducted on barriers to entrepreneurial intention of university students in Ghana where a model was developed to measure on entrepreneurial intention of these students, the model theorised that the entrepreneurial intention of university students in Ghana is a function of four models which are; Personal, Legal, Economic and Socio-cultural factors. In the study therefore, a survey-based methodology was used in collecting data

from 731 students from public university in Ghana. The study of Israr and Saleem (2018) conducted in Italy also examined the factors that are influencing the entrepreneurial intention of students in the country. The study looks at the entrepreneurial intention of university students as well as their desire for commencing a journey of establishing new business by investigating the determining factors that restrict them to embrace self-employment as a career path. In the study primary source was used in collecting data by making utilization of the instrument of self-prepared questionnaire in assessing the role of explanatory factors that includes; the job experience of the students, their gender, their age limit, educational degree, the department they belongs to, previous education if any, past grades, job experience, business experience, family background, entrepreneurial education, personality traits (Five Factor Model), finance and government support regarding the dependent variable, student's entrepreneurial intentions. The study employed a multiple regression model in the analysis of the data, which in conclusion after the analysis the study found that Gender, the agreeableness of the students, their family background, openness to new experience as the extraversion, indicated a positive result on the other hand the student's previous grades earned, and the aging presented a negative relationship on a relationship with university student's entrepreneurial intentions.

*H0<sub>2</sub>: Behavioural control significantly has effect on student's entrepreneurial intention*

### **Relationship of Behavioural Control and Student's Entrepreneurial Intention**

Studies in the past on entrepreneurial intention that used Ajzen, (1999) model regarding the testing of relationship that existed between the behaviour of individual towards selection of venturing into business

and his intention has concluded that the relationship was significant. The study of Israr and Saleem (2018) where they utilise the deterring factors to determine the factors influencing the choosing entrepreneurship as a career among university students in Italy, found out that the deterring factors regarding their behaviour has effect on them concerning the entrepreneurial mindset and their intentions for starting a new business. Again, Utami (2017) in determining the causal effect of behavioural control on entrepreneurial intention of students at university in Indonesia, studied uses the variables of attitude, subjective norms, perceived behaviour, entrepreneurship education and self-efficacy to tested the relationship and determined the influence of these factors with the theory of planned behaviour components factors which are; attitude, subjective norm and perceived behavioural control, as well as the entrepreneurial intentions of students in East Java. The findings indicated that attitude, subjective norm, and perceived behavioural control; entrepreneurship and self-efficacy have effects on the choice of the student's intentions to business start-up.

*H0<sub>3</sub>: Perceived behavioural control served as mediator between university entrepreneurship education and student's entrepreneurial intention.*

### **Behavioural Control, University Entrepreneurship Education and Student's Entrepreneurial Intention**

In examining the relationship that occurred between behavioural control, university entrepreneurship education and student's entrepreneurial intention, previous studies has made investigation to assess the this cause and effect relationship. One of these studies was that of Utami (2017) were he uses attitude, subjective norms, perceived behaviour, entrepreneurship education and self-efficacy to investigate the influence of entrepreneurial intention of university



student in Indonesia and to determine the influence of these factors in the context of theory of planned behaviour; which includes attitude, subjective norm and perceived behavioural control, of the in East Java in relation to their entrepreneurial intention. The student's population at the university was during 2012-2015 session, and the sampling techniques utilised was proportional stratified sampling of 1,237 respondents. The study findings discovered that the student's attitude, subjective norm, and perceived behavioural control, the entrepreneurship education they participated in, as well as their self-efficacy do affects their intentions to venture into entrepreneurship positively. Again, a study conducted by Israr & Saleem (2018), which was carried out to determine the possible factors affecting the entrepreneurial

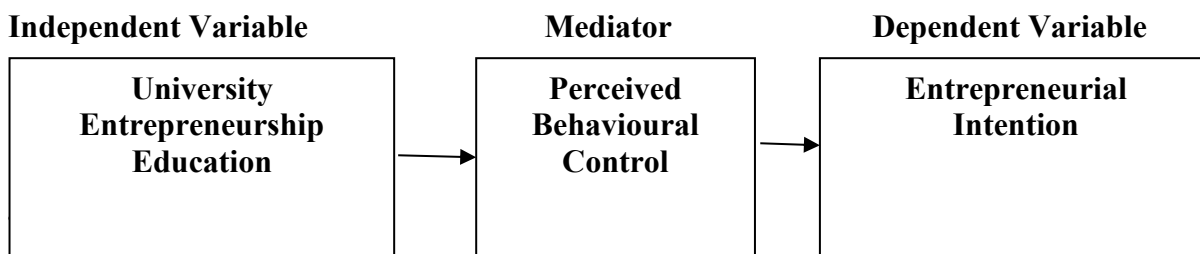
intention of university students in Italy, they found out that the deterring factors uses in the appraisal regarding their behaviour has effect on them concerning the entrepreneurial mindset and their intentions for starting a new business.

### **Theoretical Framework**

In identifying a theory that apt to underpin this study, theory of planned behaviour (TPB) developed by Ajzen, (1991) was found appropriate. The assumption of this theory was that planned behaviour is a function of intention which university entrepreneurship education is directly aimed at changing students' behaviour. As creation of venture will not likely take place if an individuals' is not having intention and feeling capable of embarking on the journey (Owoseni & Akambi, 2010).

### **Research Framework**

The framework highlights the connections in the relationship between independent, dependent and mediating variable.



*Figure 1: Study Framework*

### **3. Methodology**

The study used cross sectional research design and questionnaires were administered for data collection from the respondents in determining their entrepreneurial intention within a short period of time. Respondents who are unit of analysis represent undergraduate university students. This study population are all 404 undergraduate students from the three (3) faculties of Sule Lamido University, Kafin

Hausa (SLU). A simple random sampling technique to select the respondents from the final year students (404) of SLU at 2020/2021 using administered questionnaires. The sample of the study is selected from the entire population of the study. The sample size was arrived at in line with Dilman (2007) sample size formula. One hundred and Ninety Seven (197) students were selected as the sample size. The computation is shown below:

$$n = \frac{NP(p)(1 - P)}{(NP - 1) \left(\frac{B}{C}\right)^2 + (P)(1 - P)}$$

Where:

n = sample size

NP = Size of the population 404

P = The population proportion 0.5

B = Sampling error at 0.05

C = Confidence Level at 1.96

**Measurements of the Study Variables**

This study model has three variables measured, are: university entrepreneurship education, perceived behavioural control, and entrepreneurial intention. For entrepreneurship education 5-item and perceived behavioural control 4-item measurement scales were adapted both from Keat, et. al, (2011). On entrepreneurial intention 7-item were adapted from Linan, (2008). In grading all the items, the study used Likert scale was, where in the questionnaire’s respondents were asked to indicate their responses to each question on a five-point scale.

**Measurement Model Assessment**

Measurement model basically concerns with the measurement that has to do with the component, which determines on how appropriate the items indicators load theoretically as well as link with respective constructs. It simply does the analysis of the outer model that clearly authenticates that the survey items measure the constructs

they were designed to measure, hence ensuring that they are valid and reliable.

**Reliability and Convergent Validity Result**

Table 4.1 below explained the values that in are the reflective multiple-items of latent variables which begin from 0.856205 to 0.908594, therefore, showing higher levels of reliability (Hair *et al.*, 2014). A convergent validity where average variance extracted (AVE) values were investigated and all the AVE values in the findings are higher than the threshold value of 0.50 (Ringle, 2006; Hair *et al.*, 2014). The value of 0.587102 was found to be the least value and therefore convergent validity was rightly established as seen in the table.

The path coefficients were estimated through bootstrapping procedure in SmartPLS 2.0 (Ringle *et al.*, 2005). As suggested by Hair *et al.*, (2014), the number of bootstrapping subsamples was set at 5,000 with 201 bootstrap cases in the data set and a no sign change.

**Table 4.1 Structural Model Assessment**

Relationship	Beta Values	Standard Error	Tvalues	Pvalues	Decision	Rsquare
UEE -> EIT	0.226	0.060	3.741	0.00	Reject	0.575
PBC -> EIT	0.418	0.068	6.145	0.00	Reject	
UEE -> PBC	0.068	0.0624	1.090	0.28	Failed	

Table 4.2 here shows the path coefficients, the t-values, as well as the p-values. The significance level represents  $p < 0.05$ , and as such the UEE and EIT relationship

shows positive effect (tvalue:3.741,  $p=0.00$ ). On this null hypothesis was rejected which suggested that UEE has no significant effect on EIT. For PBC and EIT,

the result discovered a significant and positive effect (t value: 6.145, P=0.00). Hence, null hypothesis which stated that PBC has no significant effect on EIT was rejected. On UEE and PBC, the result

indicated that UEE has an insignificant effect on PBC (tvalues:1.090, p=0.28). Base on this relationship we accepted the null hypothesis that states UEE has no significant effect on PBC.

**Table 4.2 Competing Model Analysis**

<b>R/Ship</b>	<b>Direct Effect (Model A)</b>	<b>Partial Mediation Model (Model B)</b>
	<b>Path Coefficient</b>	
UEE -> EIT	0.00	0.00
PBC -> EIT		0.00
UEE -> PBC		0.30
	<b>Variance Explained</b>	
Rsquare	0.46	0.57

P<0.05

On investigation of determination of coefficient for (R<sup>2</sup>), endogenous latent variables as established by (Henseler *et al.*, 2009). For this examination was proposed by Chain (1998), the threshold of acceptable values for R<sup>2</sup> are: 0.19 weak, 0.33 moderate, and 0.67 as good. Overall, R<sup>2</sup> values of 0.575 (57%) obtained indicated a positive predictive power regarding the exogenous latent variables as against endogenous latent variables in the determination.

**Tests for Effect Size**

In this test for explaining effect size according to Cohen (1988) values suggest varied levels of impact, which were 0.02 shows small, 0.15 medium, while 0.35 represent large effects of the exogenous latent variables accordingly. Thus, constructs UEE and PBC explained the endogenous latent variables EIT to have effect sizes of 0.089 and 0.275. Therefore, in line with Cohen (1988) the effect sizes are small for UEE and medium for PBC as shown in Table 4.3

**Table 4.3 F2 Effect Size**

<b>R2Included</b>	<b>R2Excluded</b>	<b>F2</b>	<b>Effect Size</b>
UEE 0.575	0.537	0.089	Small
PBC 0.575	0.458	0.275	Medium

As shown in the above Table 4.3, the effect sizes for the UEE and PBC on EIT were 0.089 and 0.275 respectively. Thus, based on Cohen (1988), the effects sizes of the two variables on EIT are considered as small and medium respectively.

**Separate Test of Mediating Role: Using Competing Models Analysis**

In the analysis of this model (competing model analysis), a comparison as well as estimation between two models was used (Singh *et al.*, 1994).



In the first model analysis, (model 1) is only the direct analysis between University Entrepreneurship Education (UEE) in relation to Entrepreneurial Intention (EIT) no PBC as the mediating variable in the study. Second model analysis is called a partial mediation model (model 2), where mediator was included, and it proved direct effect of PBC on EIT, as well as direct effect of UEE on PBC.

#### 4. Discussion of Results

Hypothesis one was formulated as H01: university entrepreneurship education does not have significant effect on intention of students towards self-employment, representing positive effect of UEE on EIT of students in SLU. H01 hypothesised that UEE is positively related to students' entrepreneurial intention as postulated was found to be positively significant with statistical finding as ( $B= 0.226$ ,  $T= 3.741$ ). The study corroborated with that of Ayedun, Taiwo, Ajayi & Modupe (2018) and Israr and Saleem (2018). Hypothesis H02 was formulated as perceived behavioural control has no significant effect on entrepreneurial intention. Findings drawn from the study confirmed perceived behavioural control has a positive and significant effect on relationship with entrepreneurial intention ( $\beta = 0.418$ ,  $T= 6.145$ ). This study is in line with that of Israr and Saleem, (2018) and Utami, (2017). It discovered that the higher students feel competent and capable of venturing into entrepreneurship the better their entrepreneurial intention. In essence, the result suggested that the feeling of student's competency and capability on his self for entrepreneurship increases the intention to be an entrepreneur.

On hypothesis (H03), investigations from the study confirmed an effect of perceived behavioural on university entrepreneurship education and student's entrepreneurial intention to be fully mediated. This has been attained by using competing model in

the mediation analysis as one of the techniques of testing indirect effect. During the mediation investigation, two tests were used on PBC, UEE on EIT. On the analysis of the relationship the result prided a complete mediation (0.57) against (0.46) without the mediator. The result proved PBC to have effect on why UEE was linked to EIT. UEE first increased PBC of students and when PBC elevated, EIT increased among the students.

#### 5. Conclusion and Recommendations

The study investigated the effect of PBC in the relationship between UEE and EIT. In the study H01 hypothesised that UEE is positive influence on students' entrepreneurial intention and as postulated, the effect was found to be positively significant with statistical finding as ( $B= 0.226$ ,  $T= 3.741$ ). On the test of mediating effect, the study divulged that our correlation is higher with intervening variable than without. The relationship was established using competing model, were our  $R^2$  is 0.46 in model A for direct effect while 0.57 for indirect effect model B. Going by this result thus, we assumed that there is a full mediation.

It is therefore recommended that universities, specifically lecturers taking entrepreneurship courses should pay more attention on re-orientation of the students on the imperative of venture creation to economic development and encourage opportunity scanning together with business plan competition among students to enhance their capability and competency level on finding easiness for embracing entrepreneurial intention. The limitation encountered in this study is that the cross-sectional design adopted suggests that interpretation of finding is limited to a group examined at a particular point, thus future studies should adopt a longitudinal design to have another perspective as to allow for drawing of conclusion about the causality of the relationship which is difficult using the cross-sectional design.

**References**

- Abiodun O.Y & Oyejoke O.O., (2017). The Relationship Between Entrepreneurship Education and Student's Entrepreneurial Intentions in Ogun State- Owned Universities, *Nigeria British Journal of Education*. Vol.5, No.3, pp.9-20
- Aini, M. A. (2014). Factors Affecting Entrepreneurial Intention Among Students in GIATAMARA Wilayah Persekutuan. *Unpublished dissertation of Othman Yeop Abdullah Graduate School of Business, Universiti Utara Malaysia*.
- Ajzen, I. & Cote, N. G. (1991). Attitudes and the prediction of behaviour. In W. D. Crano & R. Prislin (Eds.) *Attitudes and attitude change*. New York, Psychology Press, 289-311).
- Ajzen, I. (2002). Perceived Behavioral Control, Self-Efficacy, Locus of Control, and the Theory of Planned Behavior. *Journal of Applied Social Psychology*, 32(4), 665–683. <http://doi.org/10.1111/j.1559-1816.2002.tb00236.x>
- Akanbi, S. T. (2013) Familial factors, personality traits and self-efficacy as determinants of entrepreneurial intention among vocational based college of education students in oyo state, Nigeria. *The African Symposium: An online journal of the African Educational Research Network* 66 13(2)
- Bandura, A. (1977). Self-efficacy: Toward a Bae, T. J., Qian, S., Miao, C., & Fiet, J. O. (2014). The relationship between entrepreneurship education and entrepreneurial intentions: A meta-analytic review. *Entrepreneurship theory and practice*, 38(2), 217-254.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173.
- Bruyat, C. & Julien, P.A. (2000). Defining the field of research in entrepreneurship. *Journal of Business Venturing*, 16(2), 165-80.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), *Modern methods for business research* (pp. 295-336). Mahwah, NJ: Lawrence Erlbaum Associates.
- Cohen, J. (1988). Statistical power analysis. *Current directions in psychological science*, 1(3), 98-101.
- Dillman, D. A. (2007). *Mail and internet surveys: The tailored design method* (2nd ed., Vol. 2). New York: John Wiley & Sons, Inc.
- Drucker, P. F. (1993). *The innovation and the entrepreneurial system*. Bucharest: Encyclopaedic Publishing House.
- Ebewo, P. E., Rugimbana, R., & Shambare, R. (2017). Effects of entrepreneurship education on students' entrepreneurial intentions: A case of Botswana. *Management*, 5(4), 278-289.
- EU, (2012) "Effects and Impact of Entrepreneurship Programmes in Higher Education." Accessed October 26, 2015. [http://ec.europa.eu/enterprise/policies/sme/promoting-entrepreneurship/files/educationeffects\\_impact\\_high\\_edu\\_final\\_report\\_en.pdf](http://ec.europa.eu/enterprise/policies/sme/promoting-entrepreneurship/files/educationeffects_impact_high_edu_final_report_en.pdf).
- F. Hair Jr, J., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM) An emerging tool in business research. *European Business Review*, 26(2), 106-121.



- Fietze, S., & Boyd, B. (2017). Entrepreneurial intention of Danish students: a correspondence analysis. *International Journal of Entrepreneurial Behavior & Research*, 23(4), 656-672.
- Fatoki, O. (2014). The Entrepreneurial Intention of Undergraduate Students in South Africa: The Influences of Entrepreneurship Education and Previous Work Experience. *Mediterranean Journal of Social Sciences*, 5(7), 294-299.
- Fizza, S. (2017). Measuring Entrepreneurial Intentions: Role of Perceived Support and Personality Characteristics.
- Global Entrepreneurship Monitor 2010, <http://www.gemconsortium.org/docs/download/266> (Accessed on June 23 2014)
- Hair Jr., J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106–121.
- Hassan, R. (2016). Effect of entrepreneurship education on entrepreneurial intentions among students of universities in Kano State. *Unpublished Dissertation* of Department of Business Administration, Bayero University, Kano.
- Israr, M., & Saleem, M. (2018). Entrepreneurial intentions among university students in Italy. *Journal of Global Entrepreneurship Research*, 8(1), 20.
- Krueger Jr, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of business venturing*, 15, 411-432.
- Linan, F. (2008). Skill and value perceptions: how do they affect entrepreneurial intentions? *International Entrepreneurship and Management Journal*, 4(3), 257-272.
- Liñán, F., & Chen, Y. W. (2009). Development and Cross-Cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship theory and practice*, 33, 593-617.
- Liñán, F., Urbano, D., & Guerrero, M. (2011). Regional variations in entrepreneurial cognitions: Start-up intentions of university students in Spain. *Entrepreneurship and Regional Development*, 23, 187-215.
- Najafi Auwalu I., & Mas'ud, A. (2016). Moderating role of entrepreneurial orientation on the relationship between entrepreneurial skills, environmental factors and entrepreneurial intention: A PLS approach. *Growing Science Management Science Letters homepage: [www.GrowingScience.com/msl](http://www.GrowingScience.com/msl)*
- Nasiru, A. (2015). The Relationship between Perceived Effective Entrepreneurship Education and Entrepreneurial Intention: The Role of Perception of University Support, Perceived Creativity Disposition and Entrepreneurial Passion. *Unpublished PhD thesis*, School of Business Management, Uversiti Utara Malaysia.S