

## Moderating Effect of Individual Entrepreneurial Orientation on the Relationship between Entrepreneurship Education and Student Entrepreneurial Intention

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### Abstract

*The persisting rise in unemployment, high population growth and low entrepreneurial intention especially among Nigerian graduates has become a major concern to government and other stakeholders. These prompted the government to introduce entrepreneurship education into the curriculum of higher education across the country. Therefore, this study examined the moderating effect of individual entrepreneurial orientation on the relationship between entrepreneurship education and student's entrepreneurial intention among FUD final year students. The study used cross-sectional research design with quantitative questionnaire approach to collect the data. To validate the model, data from 282 final year students were analysed using the Partial Least Squares Structural Equation Modelling (PLS-SEM). Overall, the study revealed that both entrepreneurship education and individual entrepreneurial orientation are significantly and positively related to entrepreneurial intention. It was also discovered that individual entrepreneurial orientation as a unidimensional construct moderates the relationship between entrepreneurship education and entrepreneurial intention. The study used Human Capital Theory HCT as a theoretical basis of the study. This study served as one of the pioneering studies with regard to using individual entrepreneurial in moderating the relationship between entrepreneurship education and student entrepreneurial intention. This study recommended that other researchers should use the dimensions of entrepreneurial orientation to test their separate moderating effects for further validation. As implication to policy, the government should ensure not only enriching students with entrepreneurship education but also well-built entrepreneurial orientation among youths as it has a direct effect as well as strong interaction with other factors in explaining entrepreneurial intention.*

**Keywords:** Entrepreneurship Education; Entrepreneurial Orientation; Human Capital Theory; Entrepreneurial intention.

### Introduction

The persisting rise in unemployment, high population growth and low entrepreneurial intention especially among Nigerian graduates has become a major concern to government and other stakeholders. Statistic indicated that unemployment increased from 19.7% in the 3<sup>rd</sup> quarter 2016 to 21.0% in the 4<sup>th</sup> quarter of same year (NBS 2017), while employability status of Nigerian university graduate is 36.26% based on (STUTERN Report 2016), the Nigerian population rises from 184.6 million as of 2016 to 188,906,160 as at 2017 (NBS, 2017) and the level of entrepreneurial intention is 44% based on GEM 2017 Sub-Saharan African ranking which is low in comparing to other African countries like Angola, Botswana, and Malawi with 70, 72, and 70 respectively. This could be the reasons behind the inclusion of entrepreneurship education into Nigeria tertiary education system in 2007\ 2008. Norman, Douglas, Takaruzi and Morgen (2016) posited that the world currently requires people with creative, complex and diversified entrepreneurial knowledge and skills to answer to the twin challenges of shrinking economics and unemployment.

In view of this, there have been an increase studies on factors that affects entrepreneurial intention especially in developed economies. Some of these studies includes entrepreneurship education (Daniela, Rainer, Norbert, & Birgit, 2015; Peter & Moses, 2014; Muhammad, 2013), entrepreneurial orientation (Boltone, 2012; Boltone & Lane 2012; Koe, 2016) environmental factors (Fini *et al.*, 2009; Sadeghi *et al.* 2013) among others.

However, with all the reported growth in the number of studies on factors effecting entrepreneurship intention worldwide, there appears to be very little study about entrepreneurship education in Africa, particularly in the sub-Saharan Africa, including Nigeria and also inconsistencies of research findings (Ajetunmobi & Ademola, 2014; Akande & Alabi, 2015) and specifically northern Nigeria (Nuhu, Loon & Bello, 2016). Many researchers provide evidences of positive relationship between entrepreneurship education and entrepreneurial intention and there are others whose studies in this area generally differ considerably. For instance, (Idogho & Ainabor, 2011; Ojeifo 2012; Famous & Okafor, 2010; Baba, 2014; Ekundayo and Babatunde, 2014; Emmanuel, Adejoke, Olugbenga &

Olatunde, 2012; Ooi & Nasiru, 2015) found that entrepreneurship education as a means of developing entrepreneurial skills and potentials of students had a positive relationship with the entrepreneurial intention while others like; (Abiodun, Isaac & Titilayo, 2015; Ksenija, Irena & Dina, 2015; Muhammad, 2013) reported entrepreneurship education have no significant impact on the entrepreneurship skills and potentials of students. Moreover, Nuhu, et al. (2016) in their systemic review of entrepreneurship education literature draw the sample of 213 studies from 5 different online data base and reported that All the regions in the northern parts (North-central, north-east, north-west) are under researched with 5.2% as the least in that part and 11.7% as the highest (north-central). Consequently, as suggested by (Baron & Kenny 1986), when there is weak or inconsistent relationships exist between independent and dependent variables, a typical moderating variable can be introduced. As such this study would employ entrepreneurial orientation to moderate the relationship between entrepreneurship education and entrepreneurial intention among Federal university Dutse (FUD) students. It is against this background the following hypothesis where formulated to guide the study.

H0<sub>1</sub>: There is no significant relationship between EED and EIT

H0<sub>2</sub>: There is no significant relationship between IEO and EIT

H0<sub>3</sub>: IEO does not moderates the relationship between EED and EIT

### **Concept of Entrepreneurial Intention (EI)**

Commonly, intention is the cognitive state immediately prior to executing behaviour (Krueger, 2005). Thus, an entrepreneurial intention is concerned with the inclination of a person to start an entrepreneurial activity in the future (Davidson, 1995). It is a key determinant of the action of new venture creation moderated by exogenous variables such as family background, position in one's family, parent(s) occupation, education and training (Bird & Jelinek, 1988).

Thompson (2009) defined entrepreneurial intention as “a self-acknowledged conviction by a person that they intend to set up a new business venture and consciously plan to do so at some point in the future. Previous studies have indicated that entrepreneurial intention is a strong predictor of planned behaviour (Ajzen, 1991; Bird, 1988; Covin & Slevin, 1989). Pittaway & Cope (2007) suggested that more studies on entrepreneurial intention should be linked to employability in small and medium enterprises to provide a justification that is more than merely economical. Universities are being regarded as a source of technological development that is worthwhile to entrepreneurial activity (Shane, 2004)

According to Bird (1988); intentionality is a state of mind directing a person's attention, which leads to experience and action in order to achieve something. Entrepreneurial intention is a state of mind that people wish to create a new firm or a new value driver inside existing organizations. (Bird & Jelinek, 1988). Intentionality therefore acts as a force that propels entrepreneurial actions and behaviour. It gives direction to someone attention and determines experience one gets in life.

Cooper & Dunkelberg (1986) indicated that various paths to achieving business ownership are related to the background characteristics, motivations, attitudes and employment history of owner-managers, as well as the support they receive and the processes they employ to start a new business. Cooper & Dunkelberg (1986) further reported that entrepreneurs who establish firms differ considerably from those promoted or hired. Moreover, those who inherit or purchase a firm fall between these two extremes.

Therefore, examining individuals' intention to be self-employed would offer a worthwhile bright idea for researchers to realize entrepreneurial stages and forecast entrepreneurship activities in an effective way by keying out forerunners of entrepreneurship intention (Davidsson, 1995; Kolvereid & Isaksen, 2006; Krueger, 2007; Liñán, 2004; Peterman & Kennedy, 2003).

To date, various studies were conducted on entrepreneurial intentions. However, the debates still continue on which, among the theories is comprehensive because their focuses of study and attributes varies in one way or the other. For example, the psychological approach concentrated on some personality attributes/traits as determinant factors of intention to be self-employed, these include; risk taking, goal oriented, high need of achievement, internal focus of control, etc. (Bygrave, 1989; Ferreira, Raposo, Rodrigues, Dinis, & do Paço, 2012). They all

believed that to be an entrepreneur an individual must possess certain psychological attributes. While the behavioural approach, on the other hand focus on certain behaviour by joining intention with followed the action (Ajzen, 1987, 1991). They argued that personal attitude, perceived behavioural control, as well as perceived feasibility are the determinants of intention to be self-employed (Kolvereid, 1996)

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

Policy makers are primarily concerned with the effect of entrepreneurship education on the graduates' career decision and accordingly how it can be influenced by policy measures (European Commission, 2003). Consequently, over the past decade there has been a considerable increase in entrepreneurship programs worldwide designed to cultivate entrepreneurial culture at all levels of the educational system (Yakubu, & Norashidah, 2016).

However, researchers like (Ekundayo & Babatunde 2014) documented that exposure to entrepreneurship education influences students' intentions of becoming self-employed. Also (Karimi, Biemans, Lans, Chizari & Mulder 2014) posited that both types of EEPs had significant positive impacts on students' subjective norms and perceived behavioral control. Results also indicated that the elective EEPs significantly increased students' entrepreneurial intention, although this increase was not significant for the compulsory EEPs. Furthermore, Peter & Moses (2014) analyze the influence of entrepreneurship education on beliefs, attitudes and intentions of Africa University alumni using the sample of 60 business graduates (X1) and another sample of 60 non-business graduates (X2) out of population of 438 alumni that graduated between 2009 and 2012; their study revealed that alumni who took an Entrepreneurial course have high rating scores on most indicators of entrepreneurship. On the other hand, Abiodun & Oyejoke, (2017) revealed that Entrepreneurship Education significantly influences students' Entrepreneurial intentions.

However, in a study by (Nasiru, Ooi, and Bhatti 2015) a significant negative relationship was found between perceived effective entrepreneurship education and entrepreneurial intention in their study. also (Muhammed, 2013) posited that business education has no significant impact on developing the entrepreneurship abilities of the students, he further stated that the descendants of those parents who are already engaged in any kind of business do have an explicit potential to start and operate their own business. More so (Abiodun, Isaac & Titilayo, 2015) reported that there was no significant positive relationship between new venture creation and content of entrepreneurship lectures. They also stated that venture creation requires some other factors besides entrepreneurship education. This study assumed that; innovativeness could be one of these factors. In another study (Ksenija et al., 2015) reported that entrepreneurial intentions do not increase due to exposure to entrepreneurship education.

Based on the previous review on entrepreneurship education and entrepreneurial intention, it can be deduced that most of the studies used entrepreneurship education as determinants for individual intention while individual entrepreneurial orientation neglected. There is also inconsistency in the finding from the studies; while most of them showed positive impact on intention, others indicated negative impact. No conclusion can therefore be drawn from these inconsistencies thus, the need for contingent variable to moderate the relationship as suggested by (Baron and Kenny 1986); when there is weak or inconsistent relationships exist between independent and dependent variables, a typical moderating variable can be introduced. As such this study would employ entrepreneurial orientation as proposed to moderate the relationship between entrepreneurship education and entrepreneurial intention among Federal university Dutse (FUD) students.

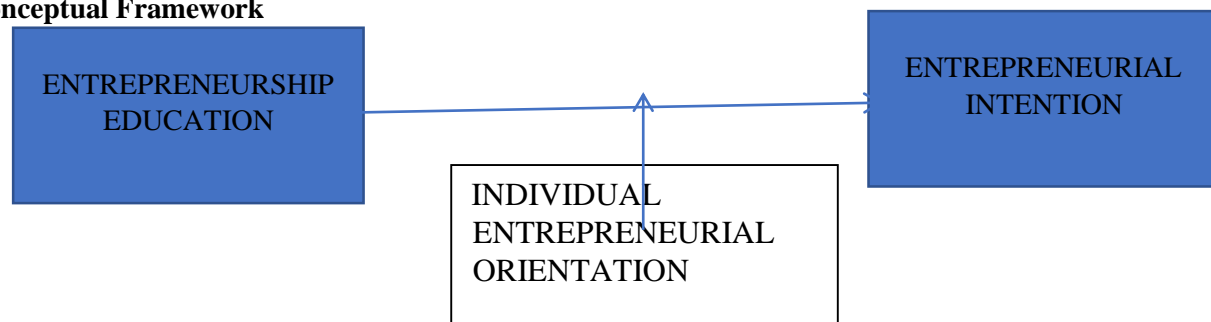
### **Entrepreneurial Orientation as a Potential Moderator Between Entrepreneurship Education and Entrepreneurial Intention**

Individual Entrepreneurial orientation is the combination of knowledge skills and awareness acquired by an individual that led to execution of entrepreneurial behaviour or creation and actualization of new venture. The concept of entrepreneurial orientation has its own origin traced back to the work of Miller (1983) who provides a significant insight especially at the firm level. He suggested that an entrepreneurial firm is one that "engages in product market innovation, undertakes somewhat risky ventures and is first to come up with 'proactive' innovations, beating competitors to the punch". In his own view "innovativeness," "risk taking," and "proactiveness" are the key factors of entrepreneurial firms.

Many researchers have studied the concept of entrepreneurial orientation based on the original conceptualization of Miller (1983) e.g. (Covin & Slevin, 1989; Naman & Slevin, 1993). However, Lumpkin & Dess (1996) in addition to the concept of Miller (1983) discover and incorporate two more characteristics, which are autonomy and competitive aggressiveness. According to them, autonomy is defined as the possibility of an individual or group to develop an idea and executes it without any intervention, control or supervision. While competitive aggressiveness is described as the possibility of an individual to directly and intensely question the strategy and challenge the performance of its industrial rival.

Moreover, studies have also found a significant relationship between individual entrepreneurial orientation and entrepreneurial intention as well as business performance (Kollmann, Christofor & Kuckertz, 2007; Bolton & Lane, 2012). In addition to the direct relationship that exist between entrepreneurial orientation and intention, the study also proposed that entrepreneurial orientation will moderate the relationships that exists among entrepreneurial education and entrepreneurial intention (Ibrahim & Mas'ud, 2016; Aminu, 2016) in line with findings that the basic components of entrepreneurial orientation like pro-activeness helps in discovering and exploiting the environment toward opportunities identification better than its competitors (Smith & Cao, 2007). Furthermore, innovativeness played a significant role in the enhancement of abilities in coping with the environment towards innovating new product and services (Ireland, Covin & Kuratko, 2009; Jabeen & Alekam, 2013). Finally, risk-taking has to do with being bold enough to venture into new business, to obtain borrowing a huge amount and/or committing much resource into a new business venture in an environment that is not certain (Rauch, Wiklund, Lumpkin & Frese, 2009),

### **Conceptual Framework**



### **Theoretical Review**

#### **Human Capital Theory**

Human capital theory was originally developed by Becker in 1964 to estimate employees' income distribution from their investments in human capital. Becker defines human capital as skills and knowledge that individuals acquire through investments in schooling, on-the-job training and other types of experiences. It comprises the stock of knowledge and skills that reside within individuals. It also includes achieved attributes, accumulated work and habits that may have a positive or negative effect on productivity. It represents a resource that is heterogeneously distributed across individuals and is thus, central to understanding differences in opportunity identification and exploitation. Researchers have employed a large spectrum of variables signifying human capital such as formal education, training, employment experience, start-up experience, owner experience, parent's background, skills, knowledge among others (Muhammad, 2016).

Entrepreneurship researchers have studied the relationship between human capital and entrepreneurship outcomes at the individual. (Martin, McNally, & Kay, 2013) find a significant relationship between EET and entrepreneurship-related human capital assets and entrepreneurship outcomes. They further stated the relationship between EET and entrepreneurship outcomes is stronger for academic focused EET interventions than for training-focused EET interventions. Furthermore, Unger, Rauch, Frese, & Rosenbusch, (2011) in their meta-analysis show a significantly stronger relationship between task-related human capital and entrepreneurial performance. The Human Capital theory is adopted for this study because the study is aimed at determining the moderating effect of

individual entrepreneurial orientation on the relationship between entrepreneurship education and student entrepreneurial intention. Thus, from the theory viewpoint, individuals with more or higher human capital achieve higher intention when executing tasks. Entrepreneurship education and individual entrepreneurial orientation are therefore the human capitals that are needed for better intention to create business venture.

### **Methodology**

The study adopts survey research design which is cross-sectional in nature. This type of research design is adopted because the information about the variables represents what is going on at only one point in time. Primary data was collected from the population of the study using self-administered questionnaire. The population of the study consists of 793 final year students of Federal University Dutse (FUD) during the 2017/2018 session where the sample size of 266 obtained from the population using Yamane formula and 30% was added to the sample size as recommended this change the sample size to 346. University students are ideally suited for the study as they are about to engage in the actual entrepreneurial behaviour (Krueger, *et. al.* 2000). The researchers chose FUD final year students not by priority rather because the entrepreneurship education curriculum is considered the same across all the universities in the country and all the student took the courses in their 200 and 300 level respectively. Simple random sampling technique was adopted given the fact that the population is homogeneous in nature. Out of the 346 questionnaires distributed 305 filled and returned, 23 had more than 10% missing values and one was an unengaged response, thus they were all deleted. However, 282 were valid and useful for analysis (Hair, Balck, Babin, Anderson & Tatham, 2006). The instrument for measuring entrepreneurship education(EED) was adapted from Ooi, Selvarajah & Meyer (2011) individual entrepreneurial orientation(IEO) from Boltone & Lane (2012) and finally entrepreneurial intention (EIT) from (Liñán & Chen, 2009), all questions were in close ended form and responses were on a 5 point likert scale, thus: strongly agree, agree, undecided, disagree and strongly disagree.

### **Data Analysis Technique**

The study employed the Smart PLS 2.0 to compute the two-basic model of PLS path modelling i.e. measurement model and structural model (Anderson & Gerbing, 1988). Some of the reasons for the use of PLS are: places a very flexible restriction in respect of distribution and population of the study (Haenlein & Kaplan, 2004) and has the possibility of providing a more reliable and accurate computations of moderating effect because its accounts for error that is capable of reducing the possible relationship as well as the improvement of the validation of the theory (Helm, Eggert & Garnefeld, 2010; Henseler & Fassott, 2010).

### **Results and Discussions**

**Table 1 Measurement model results**

CONSTRUCTS	AVE	Composite reliability	R Square
EED	0.62	0.891	
EIT	0.61	0.916	0.478
IEO	0.57	0.861	0.344

In the table above, A confirmatory factor analysis (CFA) was carried out in order to confirm the reliability of the items, its convergent validity as well as its discriminant validity. Table 1 and 2 shows the items loadings are above the critical threshold of  $\geq .50$  as suggested by (Anderson & Gerbing, 1988; Bagozzi, Yi, & Phillips, 1991; Gefen & Straub, 2000). The internal consistency reliability was also achieved using composite reliability, the values were more than the required cut-off value of  $\geq .70$  (Chin, 1998; Hair et al., 2006). Additionally, the convergent validity was also achieved as average variance extracted (AVE) met the minimum criteria of  $\geq .5$ , its values range from 0.57 to 0.62 (Fornell & Larcker, 1981; Henseler et al., 2009). The discriminant validity was also achieved as the square root of the AVE were higher than the inter-correlation of each of the study's construct in relation to other constructs of the research model (Chin, 2010; Komiak & Benbasat, 2006) and also higher than the construct correlations (Chin, 2010). It is fair to say that the measurement model satisfactory met both internal consistency reliability, convergent and discriminant validity. Thus, are valid and reliable for further analyses.

**Table 2 Structural Model**

R/SHIP	Betavalues	Standard Error	T Statistics	P. Values	Decision
EED -> EIT	1.150	0.244	4.803	0.00	Rejected
EED * IEO -> EIT	0.659	0.252	2.715	0.01	Rejected
IEO -> EIT	0.800	0.150	5.378	0.00	Rejected

The study examines the moderating effect of entrepreneurial orientation on the relationship between entrepreneurship education and entrepreneurial intention. The interpretation and summary of the result are presented in Table 2. The result indicated that a positive relationship exists between entrepreneurship education with the entrepreneurial intention of FUD students ( $\beta=1.150$ ;  $t=4.803$ ;  $p=0.00$ ), thereby rejecting H1. The finding of this study is consistent with previous studies (Ekundayo & Babatunde (2014); Peter & Moses, 2016; Okafor, 2010) and contrarily to (Muhammed, 2013). The result also revealed that a positive relationship exists between entrepreneurship education and entrepreneurial orientation ( $\beta=0.590$ ;  $t=11.363$ ;  $p=0.00$ ). Hence, H2 also rejected. This relationship was not previously established in the extant literatures. This will be served as bedrock for further studies. Additionally, the study found a significant and positive relation between entrepreneurial orientation and entrepreneurial intention ( $\beta=0.800$ ;  $t=5.378$ ;  $p=0.00$ ) the finding also rejected H3. The finding with regards to H3 is in line with previous literature (Ibrahim & Mas'ud, 2016; Udding & Bose, 2012; Baba, 2015 Ibrahim, 2014). The moderating result shows that entrepreneurial orientation moderates the relationship between entrepreneurship education and entrepreneurial intention ( $\beta=-0.659$ ;  $t=2.715$ ;  $p=0.01$ ), hence H4 also rejected. This is also inconsistent with our postulation that the relationship will be weaker for individuals with lower entrepreneurial orientation than the individual with higher entrepreneurial orientation. The finding of H4 is pioneering and the major contribution of this study, because the extant literature does not reveal that the indirect (moderating) effect of entrepreneurship orientation has been investigated.

## Conclusions

The study concludes that entrepreneurship education, and individual entrepreneurial orientation as a unidimensional construct positively related to entrepreneurial intention. It also revealed that individual Entrepreneurial orientation moderates the relationship between entrepreneurship education and Entrepreneurial intention.

## Recommendations

The study recommends the examination of entrepreneurial orientation as a moderator in other contexts especially in studies where Human Capital Theory (HCT) served as underpinning theory. The study contributed to the HCT by integrating the moderating effect of individual entrepreneurial orientation which, to the best of the researchers' knowledge has not been studied in the extant literature. The policy implication of the study is an emphasis on entrepreneurial orientation in youth empowerment policies in Nigeria. This recommendation is for reasons that; the findings revealed that entrepreneurial orientation not only have a direct influence on entrepreneurial intention but also it interacts strongly with entrepreneurship education in explaining entrepreneurial intention. And also, within the model presented in this study entrepreneurial orientation which serves as a moderator has the highest effect size on entrepreneurial intention, describing its relevance for policy formulation. Government should ensure not only enriching students with entrepreneurship education but also well-built entrepreneurial orientation among youths as it has a direct effect as well as strong interaction with other factors in explaining entrepreneurial intention.

## References

- Abiodun, I. O., Isaac, A. I. & Titilayo, O. O. (2015) Evaluation of Entrepreneurship Education in Selected Nigerian Universities African Institute for Science Policy and Innovation (AISPI) Obafemi Awolowo University, Ile Ife, Osun State. Nigeria.
- Ajzen, I. (1991). *The theory of planned behaviour, Organizational Behaviour and Human*
- Akanbi, P. A., & Ofoegbu., E. O. (2011). An examination of the influence of some selected situational factors on entrepreneurial intentions in Nigeria. *International business and Management* 3(1), 189-196. Available from: URL: [http://www.cscanada.net/index.php/ibm/article/view/j.ibm.1923842820110301.101DOI 10.3968/j.ibm.1923842820110301.10](http://www.cscanada.net/index.php/ibm/article/view/j.ibm.1923842820110301.101DOI%2010.3968/j.ibm.1923842820110301.10), 189-196

- 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 Volume 13, No. 2.
- Akande, O. O., & Alabi, E. (2015) Empirical study of effect of entrepreneurship education on Entrepreneurial intention among universities' students in Nigeria Retrieved from <http://www.africanscholarpublications.com>
- Aliyu, D. M., Aliyu, S., & Ahmad, S. (2015). Entrepreneurial Intention Among Nigerian University Students. *American Journal of Business Education – Fourth Quarter 2015 Volume 8, Number 4*, 238-248.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological bulletin*, 103(3), 411.
- Baba, M. (2014). Bhaumik, S., Estrin, S. & Mickiewicz, T. (2012) entrepreneurial orientation in eastern emerging markets: The impact on profitability of business Groups affiliates versus independent Firms in India: *Entrepreneurship Department London Business School P 1-45*
- Bagozzi, R. P., Yi, Y., & Phillips, L. W. (1991). Assessing construct validity in organizational research. *Administrative science quarterly*, 421-458
- 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.
- Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *Academy of management review*, 13(3): 442-453 Relationship between entrepreneurial orientation, entrepreneurial education, self-efficacy and entrepreneurial intention among undergraduate students at Nigerian universities: *Unpublished Dissertation of Othman Yeop Abdullah Graduate School of Business Darul Amana, Malaysia*
- Bolton, D. L. (2012). Individual entrepreneurial orientation: further investigation of a measurement instrument. *Academy of entrepreneurial journal*, 18(1), 91-97.
- Bolton, D. L., & Lane, M. D. (2012). Individual entrepreneurial orientation: Development of a measurement instrument. *Education+ Training*, 54, 219-233
- 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.
- Chin, W. W. (2010). How to write up and report PLS analyses. In V. E. Vinzi, Chin, W. W., Henseler, J., & H. Wang (Eds.), *Handbook of partial least squares: Concepts, Methods and Applications in Marketing and Related Fields* (pp. 655-690). Berlin: Springer.
- Covin, J. G. & Wales, W. J. (2012) The Measurement of Entrepreneurial Orientation Entrepreneurship theory and practice DOI: 10.1111/j.1540-6520.2010.00432.x (P) 677- 702
- Covin, J. G., & Slevin, D. P., (1989). Strategic management of small firms in hostile and benign environments. *Strategic management journal*, 10, PP75-87.
- Daniela, M., Harms, R., Kailer, N., & Wimmer, B.M. (2015). *The impact of entrepreneurship education on the entrepreneurial. Technological Forecasting & Social Change*.
- Davidsson, P. (1995). Determinants of entrepreneurial intentions. Paper presented at the RENT IX Conference, Workshop in Entrepreneurship Research, Piacenza, November, 23-24. Retrieved from: <http://eprints.qut.edu.au/archive/00002076>
- Ekpe, I., & Mat, N. (2012). The moderating effect of social environment on the relationship between entrepreneurial orientation and entrepreneurial intentions of female students at Nigerian universities. *International Journal of Management Sciences and Business Research*, 1, 1-16.
- Ekundayo, B. D., & Babatunde, E. B., (2014). The impact of Entrepreneurship Education on Entrepreneurial intention among Nigerian graduate: IMPACT: *International Journal of research in Humanities, Art, and Literature (IMPACT-IJRHAL)* ISSN (E)2321-8878; ISSN (P):2347-
- Fini, R., Grimaldi, R., & Sobrero, M. (2009 a). Factors fostering academics to start up new ventures: an assessment of Italian founders' incentives. *The Journal of Technology Transfer*, 34, 380-402.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 18, 39-50
- Gefen, D., & Straub, D. W. (2000). The relative importance of perceived ease of use in IS adoption: a study of e-commerce adoption. *Journal of the Association for Information Systems*, 1 (1), 8.
- Haenlein, M., & Kaplan, A. M. (2004). A beginner's guide to partial least squares analysis. *Understanding statistics*, 3(4), 283-297.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2013). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage Publications.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (Vol.6). Upper Saddle River, NJ: Pearson Prentice Hall.
- Henseler, J., & Fassott, G. (2010). Testing moderating effects in PLS path models: An illustration of available procedures. In *Handbook of partial least squares* (pp. 713-735). Springer Berlin Heidelberg.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *Advances in International Marketing (AIM)*, 20, 277-320.
- Ibrahim, N. A., & 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*
- Johnmark, D. R., & Munene, J. (2016). Discrimination in Predicting Entrepreneurial Intentions of the Disabled Students in Nigeria *International Journal of Managerial Studies and Research (IJMSR) Volume 4, Issue 1, January 2016, PP 1-13 ISSN 2349-0330 (Print) & ISSN 2349-0349 (Online) www.arcjournals.org*

- Karali, S. (2013). *The Impact of entrepreneurship education programs on entrepreneurial intentions: An application of the theory of planned behavior*. A master thesis 357726 Erasmus Centre for Entrepreneurship, Erasmus University of Rotterdam
- Kennedy, E. (2013). The Roles of Entrepreneurship Education in Ensuring Economic Empowerment and Development, *Journal of Business Administration and Education* ISSN 2201-2958 Volume 4, Number 1, 2013, 35-46
- Kiiru, D. Iravo, M., & Kamou, J. (2015). Determinants of entrepreneurial intention among vocational technical training institute students in Kenya: a survey of cap youth empowerment institute. *The strategic journal of business and change management issn:2312-9492 volume 2, number 19*.
- Koe, W. (2016) The relationship between Individual Entrepreneurial Orientation (IEO) and entrepreneurial intention: *Journal of Global Entrepreneurship Research* DOI10.1186/s40497-016-0057-8
- Komiak, S. Y., & Benbasat, I. (2006). The effects of personalization and familiarity on trust and adoption of recommendation agents. *Mis Quarterly*, 941-960
- Liñán, F. (2008). Skill and value perceptions: How do they affect entrepreneurial intentions? *International Entrepreneurship and Management Journal*, 4(3), 257–272. DOI 10.1007/s11365-008-0093-0
- 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
- Lucky, E. O., & Ibrahim, N. A. (2014) Environmental Factors and Entrepreneurial Intention among Nigerian Students in UUM International Journal of Business and Technopreneurship Volume 4, No. 2, P [187-203]
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of management review*, 21, 135-172
- Muhammed, Y., & Haruna, T. H. (2016). Application of Ajzen Model on Entrepreneurial Intention of Business Administration student in Ahmadu Bello University Zaria. *International conference Federal University Dutsin-ma Katsina State*.
- Malebana, M. J. (2016). Does entrepreneurship education matter for the enhancement of entrepreneurial intention? *Southern African Business Review* Volume 20 2016, 365-387.
- Muhammad, Z. (2013) Entrepreneurial characteristics among university students: Implications for entrepreneurship education and training in Pakistan Institute of Management Sciences, Hayatabad, Peshawar, Pakistan.
- Muhammed, Y. (2016). Effect of Entrepreneurial Competencies on the Performance of SMEs in Kaduna State. An Unpublished Master Thesis of the Department of Business Administration Ahmadu Bello University, Zaria.
- Nasiru, A., Ooi, Y. K., & Bhatti, M. A. (2014,. Influence of perceived university support, perceived Effective entrepreneurship education, perceived creativity disposition, entrepreneurial passion for inventing and founding on entrepreneurial intention. *Paper presented at The 3rd International Conference on Entrepreneurship and Business Management, Penang, Malaysia*
- Nuhu, L. Y., Loon, M. & Bell, R. (2016). A systematic review of entrepreneurship education literature in Nigeria: where is the focus of research? *University Forum for Human Resource Development (UFHRD) Conference 2016*  
<https://www.researchgate.net/publication/303920963>
- Ooi. Y. k., Selvarajah, C., & Meyer, D. (2011). Inclination towards entrepreneurship among university students: An empirical study of Malaysian university students. *International Journal of Business and Social Science*, 2, 206-220.
- Oyugi, J. L. (2015). The Mediating Effect of Self-Efficacy on the Relationship Between Entrepreneurship Education and Entrepreneurial Intentions of University Students. *Journal of Entrepreneurship Management and Innovation (JEMI)*, Volume 11, Issue 2, 2015: 31-56.
- Peter, W. D., & Mosses, T. (2014). The influence of entrepreneurship education on beliefs, and attitudes. *European Journal of Business and Social Sciences*, Vol. 3, No. 9, December 2014. P.P. 01 - 13.
- Peterman, N.E., & Kennedy, J. (2003). Enterprise Education: Influencing students' perceptions of entrepreneurship. *Entrepreneurship Theory and Practice*, 28, 129– 144. <http://dx.doi.org/10.1046/j.1540-6520.2003.00035.x>
- Pulka, B. M., Rikwentshe, R. & Ibrahim, B. (2014). An Evaluation of Students' Attitude towards Entrepreneurship Education in some Selected Universities in North East Nigeria. *Global Journal of Management and Business Research: Volume 14 Issue 8 Version 1.0*
- Raposo, M., do Paço, A., & Ferreira, J. (2008). Entrepreneur's profile: a taxonomy of attributes and motivations of university students. *Journal of Small Business and Enterprise Development*, 15, 405-418.
- Sadeghi, M., Mohammadi, M., Nosrati, M., & Malekian, (2013). The Role of Entrepreneurial Environments in University Students Entrepreneurial Intention *World Applied*
- Samuel, Y. A., Ernest, K., & Awuah, J. B. (2013). An assessment of entrepreneurship intention among Sunyani Polytechnic marketing students. *International Review of Management and Marketing*, 3, 37-49.
- Shane, S. (2004). *Academic entrepreneurship: University spinoffs and wealth creation*. Cheltenham: Edward Elgar Publishing.
- Tsordia, C., & Dimatira, P. D. (2017). The role of theory of planned behavior on entrepreneurial intention of Greek business students. *Pobrane z czasopisma International Journal of Synergy and Research* <http://ijsr.journals.umcs.pl> DOI: 10.17951/ijsr.2015.4.1.2
- Uddin, M. R., & Bose, T. K. (2012). Determinants of Entrepreneurial Intention of Business Students in Bangladesh; *International Journal of Business and Management*; Vol. 7, No. 24; ,ISSN 1833-3850 E-ISSN 1833-8119, URL: <http://dx.doi.org/10.5539/ijbm.v7n24p128>
- Yakubu, A. Y., & Norashidah, B. H., (2016). Influence of Entrepreneurial Self-efficacy on Relationship among Entrepreneurship Education and Entrepreneurial Career Optio *European Journal of Business and Management* [www.iiste.org](http://www.iiste.org) ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online) Vol.8, No.29, 2016