



ISSN: 0975-833X

## RESEARCH ARTICLE

### APPRAISAL OF ENTREPRENEURSHIP EDUCATION MANDATE: TO PROMOTE AND ENHANCE NIGERIAN TERTIARY STUDENT'S ENTREPRENEURIAL INTENTION

\*<sup>1</sup>Adima Julius Osaremen and <sup>2</sup>Ramraini Ali Hassan

<sup>1</sup>Department of Business Administration and Management, Federal Polytechnic Bida, Niger State, Nigeria

<sup>2</sup>Faculty of Business Economics and Accountancy, Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia

#### ARTICLE INFO

##### **Article History:**

Received 23<sup>rd</sup> January, 2017

Received in revised form

15<sup>th</sup> February, 2017

Accepted 17<sup>th</sup> March, 2017

Published online 20<sup>th</sup> April, 2017

##### **Key words:**

Entrepreneurship Education,  
Entrepreneurial intention,  
Favourable business environment,  
Job Creator, Mandate,  
Matching order.

#### ABSTRACT

This study investigates the influence of entrepreneurship education's two independent teaching variables in promoting entrepreneurial intention among Nigeria tertiary students, examining the impacts of risk-taking propensity, pedagogical teaching method, and perceived importance of favourable business environment as moderator. Aim to expose the latest innovative trends and directions in entrepreneurship education training and development, via current scientific research. The respondent of 642 students, screened to 527 usable datasets, all from Nigerian universities and polytechnics taking entrepreneurship studies in six tertiary institutions from three strata stratified adopted. Structured questionnaires and Partial Least Square Structural Equation Modelling (3.2.4 version) are used for data collection and analysis. This study applauds Risk-Taking Propensity and entrepreneurial teaching variables. The study recommends that the institution given mandate to create job creators should constitute the goal and stakeholders should consciously embrace instilling risk taking propensity through dynamic pedagogical teaching methods that correlate with the real world business environment.

**Copyright©2017, Adima Julius Osaremen and Ramraini Ali Hassan.** This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

**Citation:** Adima Julius Osaremen and Ramraini Ali Hassan, 2017. "Appraisal of entrepreneurship education mandate: To promote and enhance Nigerian tertiary student's entrepreneurial intention", *International Journal of Current Research*, 9, (04), 48961-48970.

## INTRODUCTION

Some noted developed and developing countries and governments around the world have fashioned out a roadmap of bold departure from the traditional creation of job seeker to the conscious creation of job creator among students of higher education to kerb graduate unemployment in developing and some economic meltdown developed countries. The degree of sensitivity to this ideology varies from country to country due to the differences that exist in country's economic status, to those considered as economically balanced, the idea may not be popular while those at the disadvantage of favourable economic imbalance like poverty, overpopulation, and stagnant in the creation of industry. As a strategy to navigate against the ugly tide of graduate unemployment in most economic disadvantage countries, the nation has issued amatching order to institutions of higher learning, mandating tertiary institutions to promote and enhance students' entrepreneurial intention at all disciplines in every tertiary institution. Questions demandingfeasible answers havebeen on the increase in both institution and the political economy of various nations, which unavoidably form the base of this investigation. These issues till date have not convincingly

received a satisfactory answer to the quest for a concrete and dependable answer. Especially as more doubt is cast,due to the continued increase of countries grappling with economic meltdown among developed and developing countries, with significant evidence,manifesting into a continuous increase in graduates unemployment in these affected countries. It becomes apparentlyclear that resolving graduate unemployment needs active strategies to put an end as an answer to the following revolving questions:

1. What significant implication the entrepreneurship's teaching variables, (practical and theoretical methods) have on the given mandate to creating job creators as against the creation of job seekers in the past, present and future entrepreneurs in Nigeria?
2. What is the significant correlational impact between the mandate to create job creator and the Nigeria's labour market that is characterisedby over saturated graduate unemployment, extreme poverty and high rate of complexity and unpredictability in the economic environment?

Therefore, it is the aim of this present study to investigate the influence of two entrepreneurship education teaching independent variables and a unit dependent variable as entrepreneurial intention among tertiary students in Nigeria.

\*Corresponding author: Adima Julius Osaremen,

Department of Business Administration and Management, Federal Polytechnic Bida, Niger State, Nigeria.

With the view to examining the influence of risk-taking propensity and pedagogical teaching method in promoting and enhancing student's entrepreneurial intention in a tertiary institution of higher learning. Also aimed at this investigation is to expose the latest innovative trends and direction in entrepreneurship education, training and knowledge development via current scientific research in Nigeria educational sector, by focussing and synchronising the moderating strength of the perceived favourable business environment and student's mindset change. And lastly to evaluate and demonstrate the quantum impact the risk taking propensity, entrepreneurial teaching methods and perceived importance of favourable business environment moderation effect have on the entrepreneurial intention of the students.

## **Review of literature**

### **Risk Taking Propensity**

The risk variable in the entrepreneurial activity encompasses a dominant part of the entrepreneurship, ranging from the tactical decision, operational and strategic decision in entrepreneurial operations; it is also characterised by the high level of unpredictability, challenging, and changes with a highlevel of uncertainty of future and its environments. Available literature has found support for entrepreneurs to possess moderate risk taking propensity. However, it does not indicate the non-possibility of having high-risk takers entrepreneurs who occupied the skimming leadership positions in entrepreneurship practice (Brush, 2003). Understanding entrepreneurial risk behaviour in this study becomes crucial in aligning the entrepreneurship education area of focus in developing and promoting the entrepreneurial intention of tertiary students in Nigerian. With the view to consciously redesign their entrepreneurship education variables to accommodate the conscious introduction and development of high propensity to a risk-taking mindset among tertiary students who are the future entrepreneur.

### **The interface of risk in entrepreneurship**

Entrepreneurs are known to a person with some levels of risk behaviour in any enterprise undertakings, as someone who receives an uncertain income (Mikuli and Prebeac, 2011), (Mill, 1848) Autio, Keckley, R, Klofsten, Parker, and Hay, (2001). Entrepreneurs are those who see challenges as an opportunity to showcase un-experimented talents and superiority over others in situations that others have considered as challenging and threat toward success and profit realisation. To exhibit these characteristics by the entrepreneurs needs more extraordinary inbuilt features as self-confidence, self-efficacy, and I can do it spirit and attitude to propel the innate risk-taking propensity to subdue the fear of failure tendency. And alternatively, equally, be willing to learn from the worst as failure, by seen such situation as un uncommon opportunity to practically learn from failure experience, (Landqvist and Stålhandske, 2010). In Landström, Hans, (1999), entrepreneurship is seen as a multidisciplinary phenomenon that encompasses all enterprise activities. Including the individual, the society, although there is still an absence of a universally accepted definition for the concept "entrepreneurship" which further increases the difficulties in synchronising empirical findings within different areas in the field as a discipline (Landqvist and Stålhandske, 2010). However, risk taking propensity has consistently continued to

maintain a common theme featuring in all the various multidisciplinary fields, sectors and the multivariate definitions in the domain of entrepreneurship practice.

### **Pedagogical Teaching Methods**

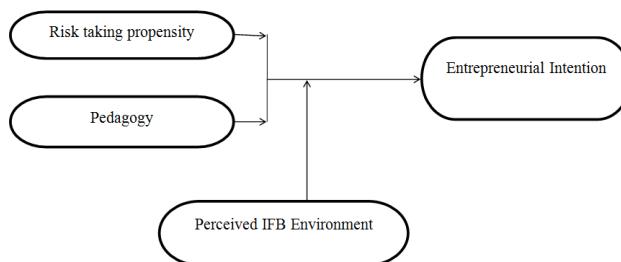
As reported in (Gibb, A, 1987; A. Gibb, 2011; Mwasalwiba, 2010), that the use of traditional methods (e.g. lectures) has had some impact on the development of attitudes related to entrepreneurship but does not support entrepreneurial learning (Järvi, 2012) Attitudes in entrepreneurial learning have been noted to be influenced by practical work experience and role models as reported by Peterman & Kennedy (2003); Nkirina (2010). The extant study holds that practical/learning by doing is important for entrepreneurial learning (J. O Fiet, 2000); (Nkirina 2010), as well as active participation in joint activities with the teacher taking the role of advisor (Leffler & Svedberg., 2005). Additionally, exposure and cooperation with the environment and the region's entrepreneurs builds learning networks, trust, and confidence and assimilation of the environment (Laukkanen, 2000); (Leffler and Svedberg., 2005) In (Cope, 2005), entrepreneurial learning requires an environment where potential entrepreneurs are encouraged to develop an entrepreneurial mindset and learn from their practical experiences. Entrepreneurial learning as summarised by Cope (2005) entails learning (what and How) meaning the content, purpose and the process perspective, with a caution to balance the combination of theoretical learning with practical learning pedagogy, (Pittaway and Cope, 2007). Designing the course content for the entrepreneurial intention program have been so created for in proportion and weight of theoretical learning and practical learning content, the implementation of which is the responsibility of the colleges. Gibb (2011), observed that the vital element in the dissemination of entrepreneurship knowledge in real practice, experience huge limitation as regulation and control due to the webs of rules, institutional culture, and norms for teaching entrepreneurship. It places the educator in the role of robot agent of change because what the entrepreneurship teacher teach and how he teaches it are also reflective of the kinds of institutions within which he works and shares cultures and values (A.A. Gibb 2002b), (Järvi, 2012)

### **Perceived importance of favourable business environment**

The favourable business environment standout as real-world tenable and accurate platform to learn and evaluate, to assess and promote those enablers, and to discourage possible inhibitor with the view to enhancing entrepreneurial intention. The dimension of the environment could be described as an internal or external factor, favourable or unfavourable as perceived by the evaluator, background of the assessor about personality traits is significantly impactful on the final perception and intention. However, the environment in the literature have received some empirical research attentions, but however, an effort to achieves a unified standard measurement remain non-feasible due to the different assessment instrument involve in both micro (individual) and macro (society) level. Despite these shortcomings, studies have a superlative position of a business environment parameter of assessing entrepreneurial intention over psychological and trait variables. As confirmed by, (Mazzarol, Volery, Doss, & Thein, 1999) holding that environmental variable is widely adopted. And also, (Neal, 1996) Give credence to the environmental factor as a core enabler that motivates entrepreneurial intention and

also functions as a pointer of the final perception either as favourable or unfavourable, which give direction to either effect or drop entrepreneurial intention for an alternative course of a career.(Bradbury, 1992), maintained that availability of large market with robust customer demand goods and services encourages entrepreneurial intention as he perceives the economic environment to be favourable.

## Research model



**Figure 1. Research Model.** The designed research model debits the framework showcasing the interaction and existing correlations among the dependents and independent variables as well as the moderator in the research study

### Applicability of Ajzen's TPB model on the conceptualised frame and hypothesis

Haven scanned through the background epistemology of risk taking propensity, pedagogical teaching method, and perceived importance of the business environment. As exogenous constructs of this research framework with the applicability of Ajzen's three elements of planned behaviour theory of this study as the dispositional attitude of the potential entrepreneur, the subjective norms and the perceived behavioural control, the **H1**, **H2**, and **H3**, are developed as direct relationship hypotheses of this study. Secondly, the outcome of the direct relationship between entrepreneurship education and entrepreneurial intention assessed under the joint elements of Ajzen theory of planned behaviour is partially expected to either be positive or negative. However, the need to ensure a favourable outcome, or at least reduce the level of unfavourable entrepreneurial intention and promote favourable entrepreneurial intention as a goal is on the increase. Most nations with this goal constitute intervening forces to moderate the relationship between the two subjects of the study, with the view to promoting entrepreneurial intention. For the purpose of this study, perceived importance of favourable business environment variable is functioning as the moderator of this framework. Improving the interactive relationship between the entrepreneurship education and the entrepreneurial intention, possibly with the view to changing the negative perception to positive and favourable perception, is not only important but a mandate to be achieved, as it is complimented with a matching order. The conscious improvement of the business environments under the same Ajzen's theory of planned behaviour as a moderator of the three elements, the following sub-hypothesis **H4&H5** is drawn as H4 under risk-taking propensity and H5 under pedagogy respectively.

### Research Hypotheses Development

#### Risk taking propensity

Bromiley & Curley, (1992), revealed that risk propensity affects attitudes towards risk specific context. Cantillon

(1755); Mill (1848), who described entrepreneur as risk bearer and that entrepreneur are those who assumed both identified and unidentified risk of the firm. Therefore, it becomes apparent without prejudice to hypothesised that:

**H1:** Positive relationship exists between risk taking propensity and entrepreneurial intention among Nigerian tertiary students of higher learning.

### Pedagogical Teaching Approach

Kelly, (1995) maintained that knowledge is not something out there waiting to be collected like pebbles on the beach. Rather, learners are expected to seek meaning to an understanding level, for it to become useable knowledge. Therefore;

**H2:** Favorable relationship exists between the pedagogical teaching method and entrepreneurial intention among Nigerian tertiary students of higher learning.

**H3:** There will be a direct positive effect of perceived importance of favourable business environment on the existing relationship between the moderator and the entrepreneurial intention.

**Perceived IFB Environment (Moderator):** There is a favourable Moderating Influence of perceived business environment on the relationship between entrepreneurship teaching variables and the entrepreneurial intention.

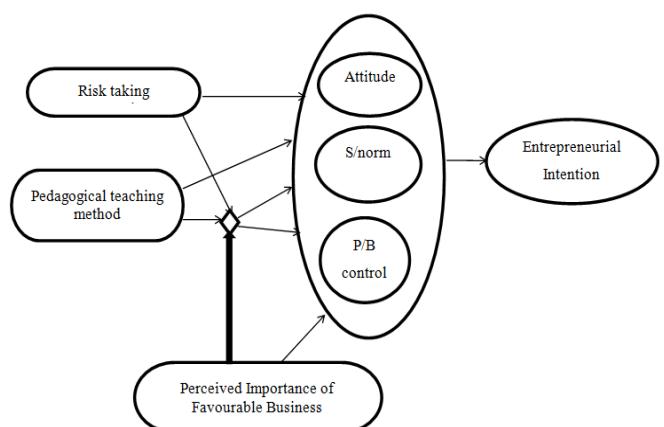
Therefore:

#### H4: Risk Taking Propensity:

Positive moderating influence of perceived importance of favourable business environment exists between the relationship of risk-taking propensity and the entrepreneurial intention of Nigerian tertiary student of higher learning.

#### H5: Pedagogy:

Positive moderating influence of perceived favourable business environment exists between the relationship of pedagogical teaching approach and the entrepreneurial intention of Nigerian tertiary student of higher education.



**Figure 2 Conceptualized Framework & Hypotheses with TPB.** This represents the conceptualised framework with the adoption of the Theory of Planned Behaviour by Ajzen and practical development of hypotheses for the interaction of Attitude, subjective norm and perceived behavioural control in a relationship between dependent and the designed three independents variables

## RESEARCH METHODOLOGY

### Research Design and Sampling

This research investigation is focused on students in a tertiary institution of higher learning studying as undergoing entrepreneurship education program in Nigeria universities and polytechnics. Among which, respondents of 643 were drawn using questionnaire instrument, to attain a usable response rate of 600 respondents before the treatment of outliers with 12%, after which the respondents maintained a dataset of 527 samples. Also, the 527 datasets were subjected to Principal component factor analysis technique to confirm the fitness of the already screen dataset for further analysis. And with the outcome yielding fourteen factors, explaining a cumulative of 60% of the variance with the first factor explaining 19% of the total variance, which is less than 50% Kumar & Dillon, (1992). Indicating that no single factor accounted for the majority of covariance in the predictor and criterion variables following (MacKenzie, Podsakoff, & Jarvis, 2005; Podsakoff & Organ, 1986). The PLS 3.2.4 version is used to analyse the data with a complimentary application of SPSS.

### Measurements

A self-report questionnaire was used, composed of seven sections with a cover page explaining the purpose of the study, every information received will adhere to the ethical practice. All variables are vividly described with their corresponding liker scale of 1-5. Risk taking propensity: The respondent level of agreement or disagreement were sorted, as it relates to the (9 items) which were adopted from Calvert Gene (1993), Salleh & Mohamed Dahlan Ibrahim (2011), as a source.

**Pedagogy:** The respondent's level of agreement or disagreement was asked, on a liker scale of (1-5) on (8 items questions) as adopted and adapt from Ohe, (1996), (J.L. Oyugi 2014) source.

**Perceived IF Business Environment:** The respondents, who are students of University or polytechnics, were asked to indicate their level of agreement as relate to the (10 items) statement. On perceived environment in a liker scale of (1-5) ranging from 1(very unimportant) to 5(very important), as adopted and adapt from Taormina & Sammi Kin-Mei Lao (2007) source.

Discriminant validity according to Duarte & Raposo (2010), refers to the level which a particular latent construct varies from other latent constructs. The determination of discriminant validity as suggested by Fornell & Larcker (1981) that to ensure the AVE square root is higher or greater than the correlations among latent constructs. In the present study, discriminant validity was ascertained using Fornell & Larcker (1981) AVE recommendation. By embarking on AVE comparison with the correlations among the latent constructs with square roots of average variance extracted as presented below, which suggest adequate discriminant validity for the study. The composite reliability coefficient as conceptualised by Bagozzi & Yi (1988) as well as Hair *et al.* (2012), refers to the internal consistency reliability of a model design. As formulated by these researchers, Bagozzi & Yi (1988) and Hair *et al.* (2012), that the composite reliability coefficient of every construct should be at least .70 or more to guarantee the

composite reliability of the model. In the present study, as presented in Table 2, the composite reliability coefficient of each latent constructs ranged from 0.757 to 0.906. With each exceeding the minimum acceptable level of 0.70, this by implication connoting compliance to required internal consistency reliability of the measures instruments used in this study (Bagozzi & Yi, 1988; Joseph F. Hair *et al.*, 2012).

**Table 1. Discriminant Validity**

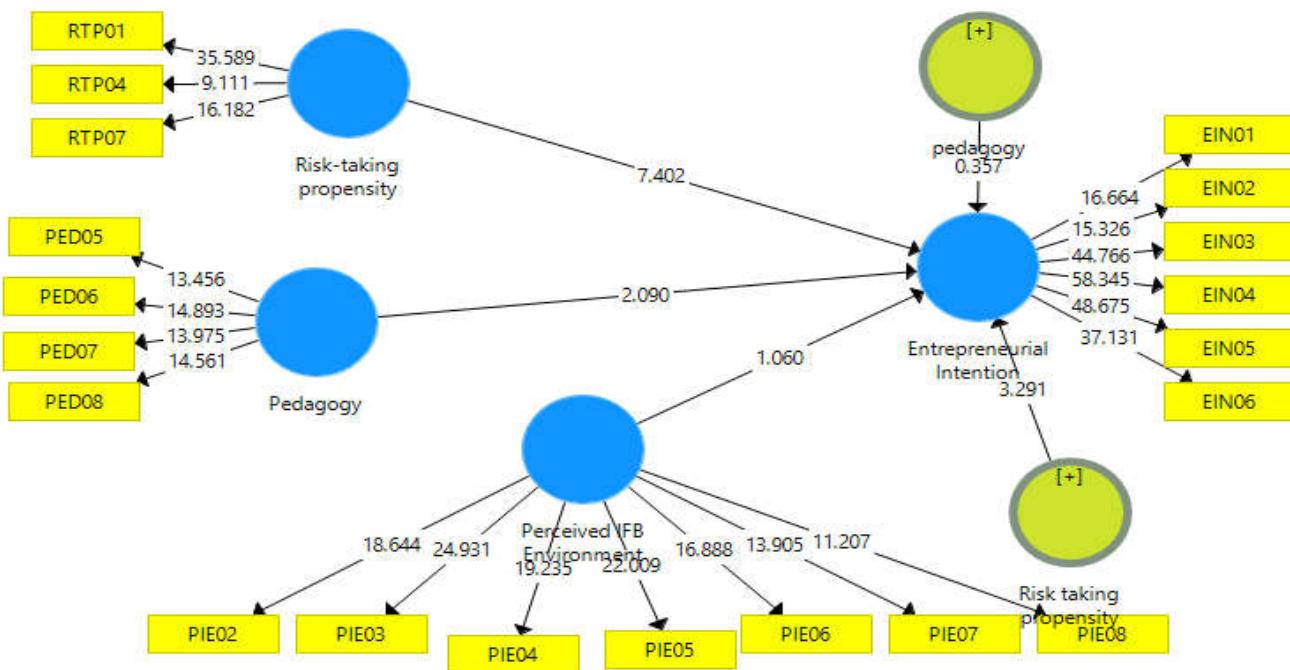
	Entrepreneurial Intention	Pedagogy	Perceived IFB Environment	Risk-taking propensity
Entrepreneurial Intention	0.787			
Pedagogy	0.252	0.748		
Perceived IFB Environment	0.241	0.225	0.727	
Risk-taking propensity	0.501	0.342	0.351	0.718

**Table 2. Consistency Reliability Measurement**

Constructs	Measurement Loadings	Composite Reliability CR	Average Variance Extracted AVE
EIN01	0.624		
EIN02	0.642		
EIN03	0.856		
EIN04	0.872		
EIN05	0.861		
EIN06	0.828	0.906	0.620
PED05	0.740		
PED06	0.750		
PED07	0.761		
PED08	0.741	0.836	0.560
PIE02	0.717		
PIE03	0.771		
PIE04	0.733		
PIE05	0.770		
PIE06	0.722		
PIE07	0.722		
PIE08	0.649	0.887	0.529
RTP01	0.860		
RTP04	0.564		
RTP07	0.701	0.757	0.516

Convergent validity as amplified by Hair *et al.* (2012) it debits the level of conformance of actual latent constructs represent or correlates with other measures of the same projected latent construct. While Fornell & Larcker (1981) and, Chin (1998) formalized the Average Variance Extracted (AVE) in a latent model construct, to achieve adequate convergent validity, recommends that the AVE of each latent construct should be .50 or more. The present investigation as reported in the above table 2 indicated the AVE values of high loadings, exceeding 0.50 on their respective constructs, (0.516 – 0.620) indicating adequate convergent validity as recommended by Chin (1998).

At the beginning of this study, Hypothesis 1 predicted that risk-taking propensity perceived is positively related to entrepreneurial intention. The result (Table 3, figure3) revealed a significant support of the positive relationship between risk taking propensity and entrepreneurial intention. ( $\beta=0.034$ ,  $t=3.293$ ,  $f^2=0.022$ ,  $VIF=1.708$ ) Where  $f^2 = 0.022$  is denoting small effect size as classified by Cohen (1988) effect size and  $VIF=1.708$  representing variance inflated factor, indicating none existence of multi-collinearity of the risk-taking propensity as exogenous latent construct among other latent constructs.



**Figure 3. Structural Model with Moderator (Full Model).** This represents the full model of the study, presenting both the outer model Exogenous, inner model and the outer model Endogenous, (Structural model, measurement model, and the moderator structure). As an observed and unobserved variable, lastly, as reflective measurement model and formative model in a single framework

**Table 3. Reporting and Discussion**

#### REPORTING

Hypothesis	Relationship	Std Dev	Strd Error	T value	Decision	R square	F square	VIF	Predictive Relevance
H1	Risk taking propensity > Entrepreneurial Intention	0.034	-0.113	3.293	Supported	0.287	0.022	1.708	
H2	Pedagogy>Entrepreneurial Intention	0.034	0.072	2.095	Supported		0.006	1.237	$Q^2=(1-SSE/SSO)$
H3	Perceived IFB Environment > Entrepreneurial Intention	0.035	0.037	1.049	Not Supported		0.002	1.187	0.158
H4	Risk taking propensity * Perceived IFB Environment > Entrepreneurial Intention	0.054	0.394	7.241	Supported	0.157	1.392		
H5	Pedagogy * Perceived IFB Environment > Entrepreneurial Intention	0.037	-0.013	0.359	Not Supported		0.000	1.580	

Hypothesis 2, predicted that pedagogical teaching method for entrepreneurship positively influences entrepreneurial intention. The result (Table 3, figure3) indicated a significant positive relationship between pedagogical teaching methods and entrepreneurial intention. ( $\beta= 0.034$ ,  $t= 2.095$ ,  $f^2=0.006$ ,  $VIF=1.237$ ), where  $f^2=0.006$  is indicating a non-significant effect size, as classified by Cohen (1988) and  $VIF= 1.237$  as its variance inflated factor, denoting a non-existence of a multi-collinearity issue of the pedagogical teaching method among other latent constructs.

Hypothesis 3, predicted that perceived importance of favourable business environment positively influences entrepreneurial intention among Nigerian tertiary students. The result (Table 3, figure 3) revealed no positive influence on the relationship between perceived importance of favourable business environment and the entrepreneurial intention among Nigerian tertiary students. ( $\beta=0.035$ ,  $t=1.049$ ,  $f^2=0.002$ ,  $VIF=1.187$ ) where  $f^2=0.002$  is indicating a non-significant

effect size, using Cohen (1988) threshold, and  $VIF=1.187$  as the variance inflated factor of perceived importance of favourable business environment latent construct, thereby denoting none existence of possible multi-collinearity of the construct among other latent constructs.

Hypothesis 4, also predicted that risk-taking propensity and moderation of perceived importance of favourable business environment will positively influence entrepreneurial intention among Nigerian tertiary students. The result (Table 3, figure3) revealed a significant support of positive moderating effect of the relationship between risk taking propensity and entrepreneurial intention ( $\beta=0.054$ ,  $t=7.241$ ,  $f^2=0.157$ ,  $VIF=1.392$ ). Where  $f^2=0.157$  indicates a moderately significant effect size, using Cohen (1988) threshold, and with a variance inflated factor of ( $VIF= 1.392$ ), showing a non-existence of possible multi-collinearity of the risk-taking propensity and moderation of perceived importance of favourable business environment and entrepreneurial intention constructs.

Hypothesis 5, lastly predicted that pedagogical teaching method and moderation of perceived importance of favourable business environment will positively influence entrepreneurial intention among Nigerian tertiary students. However, the result (Table 3, Figure 3) revealed a non-support moderating effect of the perceived importance of favourable business environment on the relationship between pedagogical teaching method and entrepreneurial intention ( $\beta=0.037$ ,  $t=0.037$ ,  $f^2=0.000$ , VIF=1.580). Where  $f^2=0.000$  indicates a non-significant effect size, using Cohen (1988) threshold, and with a variance inflated factor of (VIF 1.580), showing a non-existence of possible multi-collinearity of the pedagogical teaching method, moderation of perceived importance of favourable business environment and entrepreneurial intention constructs.

The  $R^2$  reporting in a scientific research study is now and henceforth a necessary criterion worthy of reporting due to its importance roles in any research investigation, ranging from measuring the quantum value of any research venture and the structure evaluation of a structural design model in PLS-SEM. This singular term has been arrogated many names, yet portraying the same concept (Joseph F. Hair, Ringle, & Sarstedt, 2013; Joseph F. Hair *et al.*, 2012) termed it as the coefficient of determination. Coding the meaning of  $R^2$ , as the proportion of variation in the dependent variables, that can be explained by one of the dependent or more dependents variables in a unified framework construct. An acceptable minimum rate value has not been universally agreed by researchers, to Hair *et al.* (2010) and (Falk & Miller, 1992) proposed 0.10 while Chin (1998) suggests 0.67, 0.33, and 0.19 in PLS-SEM as substantial, moderate and weak, respectively. Therefore adopting the Hair *et al.* (2010) recommendation by this investigation, the  $R^2$  value reported in (Table 3) has met minimum acceptable level of 0.10. The implication of this is that the 0.287 from the only endogenous latent variable "Entrepreneurial intention" with its three exogenous latent variables (risk taking propensity, pedagogical teaching method and the perceived importance of favourable business environment). Could only explain 28.7% while another variable could account for the remaining 72.7% to fully explain entrepreneurial education and entrepreneurial intention among tertiary students in Nigeria. The predictive relevance of research investigation is the last but not the least criterion in a valid study. It denotes the extent to which it can predict accurately to the expected outcome. It is also used to measure the quality of research findings and the level of its dependability of findings and recommendations. Chin (1998), and Hair *et al.* (2014) maintained that the  $Q^2$  is a criterion for measuring how well a conceive frame accurately forecast the empty data spaces in a dataset. While Henseler *et al.* (2009) revealed that model with a  $Q^2$  value greater than zero is considered to have predictive relevance, however, research model with higher positive  $Q^2$  values suggests more predictive relevance. As reported in table4, of this study, the cross-validated redundancy measure of this investigation as  $Q^2$  for the endogenous latent variable was (0.158) which is above zero, suggesting the predictive relevance of the research design model.

## RESULTS AND DISCUSSION

The result in Table 3, indicated that risk-taking propensity (( $\beta=0.034$ ,  $t=3.293$ ,  $f^2=0.022$ , VIF=1.708) and pedagogy (( $\beta=0.034$ ,  $t=2.095$ ,  $f^2=0.006$ , VIF=1.237) were positively related to entrepreneurial intention among tertiary students in Nigeria

universities and polytechnics. The risk-taking propensity is reported to have small effect size while pedagogy maintained non-significant effect size, as graduated by Cohen (1988) threshold. And also both risk-taking propensity and pedagogy exogenous constructs showed variance inflated factor to indicate a non-existence of possible multicollinearity among other constructs. Hence, both are less than five tolerance value as opined by Hair *et al.* (2011). In Table 3, the moderating effect of perceived importance of the favourable business environment was reported to moderate positively the relationship between risk taking propensity and entrepreneurial intention among Nigerian tertiary students in universities and polytechnics (( $\beta=0.054$ ,  $t=7.241$ ,  $f^2=0.157$ , VIF=1.392). Therefore, H1, H2, and H4 are supported while H3, and H5 had no support.

Table 3, also indicated  $R^2$  of 0.287 indicating the variance explained by the designed model, which by this research is composed of risk taking propensity, pedagogy and the perceived importance of the favourable business environment. Explaining 28% of all possible factors that can explain entrepreneurial intention, while the remaining 72% need a further study that can explain other possible additional variables.

Still, in Table 3, it was reported in this study that the predictive strength of this design model as  $Q^2$  as 0.158. Adopting Henseler *et al.* (2009) predictive relevance assessment of a model, revealed that model with a  $Q^2$  value greater than zero is considered to have predictive relevance. However, research model with higher positive  $Q^2$  values suggests more predictive relevance and as  $Q^2$  of this study is reported to be greater than zero,  $t_i$  indicates that the model predictive relevance in predicting entrepreneurial intention among tertiary students. This result is consistent with (Begley, 1995), Cantillon (1755). McClelland (1961) explained that individual with the high need for achievement must have moderate risk bearing propensity. Since then prominent researchers have been affirming this position at different location and field, this is evidenced in Ramraini & Wafa (2012), Cromie (2000), Master. & Meier (1988). Liñán (2004) who reported that individual entrepreneurial risk behaviour and intention. And there is a favourable significant relationship between the risk-taking propensity characteristic of a student as a potential entrepreneur in entrepreneurship education and the level of entrepreneurial knowledge orientation, self-confidence, and self-efficacy, Locus of control, Perseverance, commitment, creativity and innovation toward their entrepreneurial intentions. An entrepreneur assumed both identified and unidentified risks that are associated with the venture, invention, uncertainty in innovation and high probability ventures, supported by Cantillon (1755), Mill (1848), and Schumpeter (1934) as risk-bearer. Enough level of risk-taking is linked to innovation and creativity which are a requirement for a successful entrepreneur, to ignite conscious economic destruction tendency. In other to initiate new method, product, service, productive system and gain dominance in the market environment as a market leader who set the pace for other to follow, rather than a follower or niche. The second result that dwells on pedagogy is also found to be consistent with existing research on pedagogical teaching methods in entrepreneurship education in a tertiary institution of higher learning (Transformative learning model: According to Mezirow (1981), (Kolb, 1984) Kolb's experiential learning pedagogical model. According to Kolb (1984) Constructivist

Pedagogical learning model: Krueger, N. F., (2007), Critical thinking and Experiential Combined pedagogical learning model: In Kakouris (2015), Work Based Learning Pedagogical Approach Taina, Jarvi (2012), Three Broad Pedagogical Learning Approach of Catalin & Romita (2014). Two Pedagogical Methods: Cognitive and non-cognitive learning approaches of Kare (2014), Theoretical – based Pedagogical Approach; Appropriate Teaching Method for Entrepreneurial Competencies (James O. Fiet, 2015). More specifically, these previous studies have found a positive association between pedagogical teaching methods on entrepreneurial intention. This study haven revealed the relevance of risk-taking propensity and entrepreneurial knowledge acquisition approach in the pursuit of producing job creators among entrepreneurial students in various tertiary institution of higher learning. But the overwhelming practice of the traditional teaching methods in the Nigerian tertiary institution of entrepreneurial teaching with less consideration of modern pedagogical approach, speaks volume against the attainment of the given mandate to produce job creator, which could be among the major reasons for ever-increasing graduate unemployment in the Nigeria economy. Significantly, the teaching for entrepreneurship and teaching about entrepreneurship is expected to have a balancing effect in the building, development and mastering of entrepreneurship knowledge and skill acquisition venture. If confidence and self-efficacy are to be earned and utilised as a core force to enhance entrepreneurial intention for a positive outcome, that could ultimately transcend to groundbreaking start-up, venturing and investment capable of increasing job creation in the economy. The risk taking habit development in the entrepreneurial institution has positive standing records of a veritable tool for enhancing and promoting student's entrepreneurial intention as indicated by this study. In a related revelation of this study, entrepreneurial teaching variables in Nigerian tertiary institutions showed more of absent of visible enterprise framework for instilling risk taking habit other than the theoretical frame. Fused with the traditional pedagogical approach, whose long run effect result in producing risk adverse entrepreneurs whose mindset contradicts opportunity discovering as the uncertainty of profit characterises it. And is willing to opt for zero risk zone as paid/salary job career, which by practice validate outright deviation from the original mandate, Often time, capital resources are not the main problem of start-up or venturing but more of lack of confidence and entrepreneurial self-efficacy. Therefore, designing a functioning and dynamic framework to inject the entire needed positive attitude toward risk venturing in every potential entrepreneur's mindset correlates toward the attainment of the entrepreneurship education mandate, to create job creator. This study has added credence to the economic and psychological relevance of risk-taking propensity and immortalization of the zeal of practice mindset through experiential teaching approaches in enhancing entrepreneurial institution, and these corroborate with entrepreneurial teaching approaches that are capable of inculcating the needful confidence and efficacy sustenance. The impact factors and theoretical significance of these crucial forces in the pursuit of the given mandate can be inferred from the practical notation that' the successful take-off of flight, is relevant and correlate to its successful arrival to its destination. However, its successful take-off and adequate alignment with its radial guaranteed its successful and safe arrival at its destination" therefore, as confidence, self-efficacy and self-motivation guaranteed entrepreneurial intention, acting on the

entrepreneurial intention is as important as an only sure way to attaining the mandate as expressed by this study.

### **Limitations and suggestion for future research**

Considerable effort hasbeen made by this study in exploring the business environment as a vital tool and platform for developing risk-taking propensity, unstructured teaching methods for building and developing confidence, entrepreneurial self-efficacy among potential entrepreneurs, as modelled, tried and tested with a predictive capacity considered adequate. However, there are still some shortcomings as limitations which the researcher wishes to note in this investigation. First and foremost, the adoption of a non-probability sampling method in this studynegates its generalizability of result. Future research should endeavour to adopt a probability sampling using the sample frame of the institution under study. Also, the non-inclusion of Colleges of education in the sample of the study is another limitation, most especially, considering the sector as a co-key player in training and developing entrepreneurs through entrepreneurship education in Nigeria as a country. Expansion of the scope of the study to include colleges of education is recommended for future researchers by this study. The limited variance explained of this study, as reported in Table 3, ( $R^2=0.287$ ) denoting 28.7% as variable explained by the designed model with risk taking propensity, pedagogy and perceived the importance of favourable business environment in the prediction and selection of factor to explain entrepreneurial intention. As more variables are needed to explain the remaining balance of 71.3%, this study to strongly recommends further study to close the gap.

### **Conclusion and Recommendations**

The aim of this study includes scientific assessment of the impact of risk-taking propensity and pedagogical teaching method on entrepreneurship education program of students on entrepreneurial intention among tertiary institution of higher learning in Nigeria Universities and Polytechnics. And to showcase its relevance in the entrepreneurship education mandate to produce job creator rather than the usual notation of producing job seekers. The findings of this study suggest that risk-taking propensity and pedagogical teaching method as modelled for entrepreneurship education knowledge economy, were related to entrepreneurial intention, and they were found to be positively related to entrepreneurial intention. The perceived importance of favourable business environment was foundpositively to moderate the risk-taking propensity and entrepreneurial intention and found to be capable of favourably influencing the negative perception of the risk-taking propensity to a favourableperception towards moderate risk venture on entrepreneurial intention among tertiary institution students. The outcome of the result finding from the study indicated that the designed model has successfully achieved all the objectives and attended to the entire five formulated hypothesis with the outstanding support of H1, H2, H4, except H3 and H5. The designed theoretical framework of this study has added yet another evidence to the theory of the plannedbehaviour of Ajzen (1991) model. Together with the provision of additional evidence to the growing body of knowledge as moderating role of perceived importance of favourable business environment as a vital element in entrepreneurship education knowledge economy. And the promotion of entrepreneurial intention and static regulation

that does not conform to the degree and dictates of the dynamic of the environment, strongly truncate entrepreneurial pedagogical approach as it draws a scenario that contradicts teaching through and for entrepreneurship.

The result of this study provide some important practical implications for the entrepreneurship policy makers, planners and entrepreneurship education regulation agencies to consider the enhancement and promotion of entrepreneurial intention among tertiary students in Nigerian universities and polytechnics as a sure way to guarantee the creation of high entrepreneurial intention and job creator instead of job seekers. The entrepreneurship education in various universities and polytechnics should maximally synchronise the risk-taking propensity and the pedagogical teaching method with the real world environment in their knowledge economy. By consciously creating and developing the students (potential entrepreneurs) intention in a real world environment with its rich heritage of complexity, challenges, unpredictability, and variability. Which in itself form a rich platform to learn, develop and imbibe entrepreneurial self-confidence, self-efficacy, inner and outward interest, self-motivation to strive for success entrepreneur. The stepping out of theoretical classroom teaching to the adoption of practical demonstration and real world feel of the business environment is capable of developing the needed scientific boldness to confront and navigate strategically in the challenging business environment. While the unstructured pedagogical teaching method will also complement the installation of active confidence, boldness and mastering, through role play by the students. Such practical have the tendency of developing the interest and boldness of the student towards venture, start-up, innovation, and creativity. And also the rigour that characterised the unstructured pedagogy as learning outside the classroom present that provides a unsimulated forum and the opportunity to the student to harmonise the theoretical knowledge acquired with the real world problem solution. And this in itself is capable of boosting confidence, efficacy, boldness and unprecedented interest for entrepreneurial intention. Hence, their familiarity has eroded the negative perception of the business environment; this stands another high tendency of enhancing the student entrepreneurial intention.

It is also the recommendation of this study that probability sampling method is adopted for further study of entrepreneurial intention as a field of study. Acknowledging that entrepreneurial intention as a field of study that bears both science and psychological lineage, therefore, it is necessary to study it through scientific approach instead of the mechanical approach adopted by this study. Lastly, the bound of limitation as for the scope of the study to only universities and Polytechnics, be expounded to other institution playing similar roles in enhancing and developing entrepreneurship education, for adequate representation of all stakeholders in entrepreneurship education, to guarantee generalisation of the result.

## Acknowledgement

I acknowledge the Tertiary Education Training Fund (TETFUND) and Federal Polytechnic Bida, Niger State, Nigeria, for the financial and time sponsorship for my study program, respectively.

## REFERENCES

- Ajzen, I. 1991. The theory of planned behaviour. *Organizational behaviour and human decision process*, 50, 179–221.
- Autio, E., Keckley, R. H., Klofsten, M., Parker, G. G. C., & Hay, M. 2001. Entrepreneurial intent among students in Scandinavia and the USA. *Enterprise and Innovation Management Studies*, 2(2), 145–160.
- Bagozzi, R. P. and Yi, Y. 1988. On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74–94. Retrieved from <http://link.springer.com/10.1007/BF02723327>
- Begley, T. M. 1995. Using founder status, age of firm and company growth rate as the basis for distinguishing entrepreneurs from managers of smaller business. *Business Venturing*, 10(3), 249–263.
- Bradbury, B. 1992. Unemployment, participation and family incomes in the 1980s”, *Economic Record*, 68(203), 328–342.
- Bromiley, P. and Curley, S. P. 1992. Individual differences in risk taking. In Yates, F.J (Ed.). *Risk taking behaviour*: New York:John Wiley., 87–132.
- Brush, G. J. 2003. The risk preferences of entrepreneurial firms: Measurement issues and behaviour. ANZMAC 2003 Conference Proceedings (pp. 764–772). Adelaide, Australia.
- Calvert Gene. 1993. *Highwire Management: Risk-Taking Tactics for Leaders, Innovators, and Trailblazers*. Risk taking tactics for leaders. San Francisco: Jossey-Bass.
- Cantillon, R. 1755. *Essai sur la Nature du Commerce en Général* (English Edition). Piscataway, NJ: Transaction publishers. Retrieved from <http://oll.libertyfund.org/titles/285>
- Catalin, M. and Romita, B. L. 2014. Teaching entrepreneurship to educational sciences students: 5th world conference on educational science- WCES 2013, [www.sciencedirect.com](http://www.sciencedirect.com).
- Chin, W. W. 1998. The partial least squares approach to structural equation modeling. *Modern Methods for Business Research*, 295(2), 295–336.
- Cohen, J. 1988. *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Cope, J. 2005. Toward a dynamic learning perspective of entrepreneurship. *Entrepreneurship Theory and Practice*, 29(4), 373–397.
- Cromie, S. 2000. Assessing Entrepreneurial inclination: Some Approaches and Empirical Evidence”. *European Journal of Work and Organizational Psychology*, 9(1), 7–30.
- Duarte, P. A. O. and Raposo, M. L. B. 2010. A PLS Model to Study Brand Preference: An Application to the Mobile Phone Market. *Handbook of Partial Least Squares* (pp. 449–485). Berlin, Heidelberg: Springer Berlin Heidelberg. Retrieved from [http://link.springer.com/10.1007/978-3-540-32827-8\\_21](http://link.springer.com/10.1007/978-3-540-32827-8_21)
- Falk, R. F. and Miller, N. B. 1992. *A primer for soft modeling*. Ohio: The University of Akron Press.
- Fiet, J. O. 2000. The Pedagogical Side of Entrepreneurship Theory. *Journal of Business Venturing*, 9026(99), 101–117.
- Fiet, J. O. 2015. The pedagogical side of entrepreneurship theory. *Journal of Business Venturing*, 16, 101–117.
- Fornell, C. and Larcker, D. F. 1981. Evaluating Structural Equation Models with unobservable variables and measurement error. *Journal of Marketing Research*, 18, 39–50.

- Gibb, A. 1987. Designing effective programmes for encouraging the business start-up process: Lessons from U.K experience. *Journal of European Industrial Training*, 11(4), 24.
- Gibb, A. 2011. Concepts into practice: meeting the challenge of development of entrepreneurship educators around an innovative paradigm. (E. Ramsey, Ed.) *International Journal of Entrepreneurial Behavior & Research*, 17(2), 146–165. Retrieved from <http://www.emeraldinsight.com/doi/abs/10.1108/1355255111114914>
- Gibb, A. A. 1987. Enterprise Culture — Its Meaning and Implications for Education and Training. *Journal of European Industrial Training*, 11(2), 2–38. Retrieved from <http://www.emeraldinsight.com/doi/abs/10.1108/eb043365>
- Hair, J. F., Black, W. C., Babin, B. J. and Anderson, R. E. 2010a. Multivariate data analysis (7th ed.). Upper Saddle River, New Jersey: Prentice Hall.
- Hair, J. F., Black, W. C., Babin, B. J. and Anderson, R. E. 2010b. Multivariate data analysis (7th ed.). Upper Saddle River, New Jersey: Prentice Hall.
- Hair, J. F., Hult, G. T. M., Ringle, C. M. and Sarstedt, M. 2014. A primer on partial least squares structural equation modeling (PLS-SEM). *International Journal of Research & Method in Education* (Vol. 38). Thousand Oaks: Sage Publications.
- Hair, J. F., Ringle, C. M. and Sarstedt, M. 2011. PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, 18, 139–152.
- Hair, J. F., Ringle, C. M. and Sarstedt, M. 2013. Partial Least Squares Structural Equation Modeling: Rigorous Applications, Better Results and Higher Acceptance. *Long Range Planning*, 46(1–2), 1–12.
- Hair, J. F., Sarstedt, M., Pieper, T. M. and Ringle, C. M. 2012. The Use of Partial Least Squares Structural Equation Modeling in Strategic Management Research: A Review of Past Practices and Recommendations for Future Applications. *Long Range Planning*, 45(5–6), 320–340. Elsevier Ltd. Retrieved from <http://dx.doi.org/10.1016/j.lrp.2012.09.008>
- Henseler, J., Ringle, C. M. and Sinkovics, R. R. 2009. The use of partial least Squares path modeling in international marketing. In R. R. Sinkovics & P. N. Ghauri (Eds.), *Advances in International Marketing*: Bingley:, 20, 277–320.
- Jarvi, T. 2012. Teaching entrepreneurship in vocational education viewed from the regional and field perspectives. *Journal of Vocational Education & Training*, 64(3), 365–377.
- Järvi, T. 2012. Teaching entrepreneurship in vocational education viewed from the regional and field perspectives. *Journal of Vocational Education & Training*, 64(3), 365–377. Retrieved from <http://www.tandfonline.com/doi/abs/10.1080/13636820.2012.691538>
- Kakouris, A. 2015. Entrepreneurship pedagogies in lifelong learning: Emergence of criticality? *Learning, Culture and Social Interaction*, 6, 87–97. Elsevier Ltd. Retrieved from <http://dx.doi.org/10.1016/j.lcsi.2015.04.004>
- Kare, M. 2014. Two approaches to entrepreneurship education: the *International Journal of Management Education*, 12, 512–528.
- Kelly, G. A. 1995. *The psychology of personal constructs*, Norton, New York, NY. Kolvereid, L. 1996. "Prediction of employment status choice intentions," *Entrepreneurship theory and practice*, 21(1), 47–56.
- Kolb, D. A. 1984. Experiential learning experience as a source of learning and development: New Jersey: Prentice Hall.
- Krueger, N. F. J. 2007. What lies beneath? The experiential essence of entrepreneurial thinking. *Entrepreneurship: Theory and Practice*, 31(1), 123–138.
- Kumar, A. and Dillon, W. R. 1992. An integrative look at the use of additive and multiplicative covariance structure models in the analysis. *MTMM data. Journal of Marketing Research*, 29, 51–64.
- Landqvist, H. and Stålhandske, P. 2010. Risk propensity of entrepreneurs - A study of underlying factors in background and personality in comparison with managers.
- Landström, Hans. 1999. "The!Roots!of Entrepreneurship Research. The Intellectual Development!of a Research Field". *New England Journal of Entrepreneurship*, 1(2), 9–20.
- Laukkanen, M. 2000. Exploring alternative approaches to high-level entrepreneurship education: Creating micro-mechanisms for endogenous regional growth. *Entrepreneurship & Regional Development*, 12, 25–47.
- Leffler, E. and Svedberg, G. 2005. Enterprise learning: A challenge to education? *European Educational Research Journal*, 4(3), 219–227.
- Liñán, F. 2004. Intention-based models of entrepreneurship education. *Piccolla Impresa/Small Business*, 3, 1–30.
- MacKenzie, S. B., Podsakoff, P. M. and Jarvis, C. B. 2005. The Problem of Measurement Model Misspecification in Behavioral and Organizational Research and Some Recommended Solutions. *The Journal of Applied Psychology*, 90(4), 710–730. Retrieved from <http://doi.apa.org/getdoi.cfm?doi=10.1037/0021-9010.90.4.710> <http://www.ncbi.nlm.nih.gov/pubmed/16060788>
- Master, R. and Meier, R. 1988. "Sex differences and risk taking propensity of entrepreneur" *Journal of Small Business Management*, 26(1), 31–35.
- Mazzarol, T., Volery, T., Doss, N. and Thein, V. 1999. "Factors influencing small business start-ups. A comparison with previous research", *International Journal of Entrepreneurial Behaviour and Research*, 5(2), 48–63.
- McClelland, D. C. 1961. *The Achieving Society*. Princeton, NJ: Van Nostrand, 512.
- Mezirow, J. 1981. A critical theory of adult learning and education. *Adult Education Quarterly*, 32(1), 3–24.
- Mikuli, J. and Prebeac, D. 2011. What drives passenger loyalty to traditional and low-cost airlines? A formative partial least squares approach. *Journal of Air Transport Management*, 17(4), 237–240.
- Mill, J. S. 1848. *Principle of Political Economy with some of their Applications to Social Philosophy* London; John W. Parker.
- Mwasalwiba, E. S. 2010. Entrepreneurship education: A review of its objectives, teaching methods, and impact indicators. *Education and Training*, 52(1), 20–47.
- Neal, P. 1996. "Keynesian uncertainty in credit markets", *Journal of Post Keynesian Economics*, 18(3), 397–418.
- Nkirina, S. P. 2010. The challenges of integrating entrepreneurship education in the vocational training system. Insight from Tanzania's Vocational Education Training Authority. *Journal of European Industrial Training*, 34(2), 153–166.
- Oyugi, J. L. 2014. Effectiveness of the methods of teaching entrepreneurship courses to developing self-efficacy and intention among university students in Uganda. *International Journal of Social Sciences and Entrepreneurship*, 1(11), 491–513.

- Peterman, N. E. and Kennedy, J. 2003. Enterprise Education: Influencing students' perceptions of entrepreneurship. *Entrepreneurship Theory and Practice*, 28, 129–144.
- Pittaway, L. and Cope, J. 2007. Simulating entrepreneurial learning. Integrating experimental and collaborative approaches to learning. *Management Learning*, 38(2), 211–33.
- Podsakoff, P. M. and Organ, D. W. 1986. Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12, 531–544.
- Ramraini, A. H. and Wafa, S. A. 2012. Predictors towards entrepreneurial intention: *Asian Journal of Business and Management Service.*, 1(11), 10.
- Salleh, F. and Mohamed Dahlan Ibrahim, 2011. Demographic characteristics differences of risk taking propensity among micro and small business owners in Malaysia. *International Journal of Business and Social Scienc*:., 2(9), 149–153. Retrieved from [ijbssnet.com/journals/Vol\\_2\\_No\\_9\\_\[Special\\_Issue\\_-\\_May\\_2011\]/18.pdf](http://ijbssnet.com/journals/Vol_2_No_9_[Special_Issue_-_May_2011]/18.pdf)
- Schumpeter, J. A. 1934. The theory of economic development (Redvers Opie, trans.). Cambridge: Harvard University Press.
- Taormina, R. J. and Lao, S. K.M. 2007. Measuring Chinese entrepreneurial motivation: Personality and environmental influences. *International Journal of Entrepreneurial Behaviour & Research*, 13(4), 200–221.

\*\*\*\*\*