

# PERSONAL CHARACTERISTICS AND ENTREPRENEURIAL INTENTION: THE ROLE OF ENTREPRENEURSHIP EDUCATION

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## ABSTRACT

*Entrepreneurship education programme has been implemented in all Nigerian higher institutions due to graduates persistent problem of unemployment, yet the unemployment rate is at increase and the main cause factors are not evidently identified. Hence, the objective of this study is to examine the moderating roll of entrepreneurship education on personality traits and entrepreneurial intention of university students. Survey research design was employed in the study. The data were collected from a sample of 484 out of a population of 23,502 students of Ahmadu Bello University, Zaria, Bayero University Kano and Usman Danfodio University Sokoto respectively. The data collected were analysed using PLS-SEM version 3. The result of the study revealed that, perceived need for achievement, perceived locus of control and perceived risk propensity have positive and significant relationship on entrepreneurial intention. While perceived self-efficacy and perceived entrepreneurial creativity have insignificant direct relationship with entrepreneurial intention. Entrepreneurship education was found to moderate the relationship between perceived locus of control, perceived creativity, perceived self-efficacy and entrepreneurial intention. Meanwhile, entrepreneurship education failed to moderate the relationship between perceived risk propensity and entrepreneurial intention. However, the study concludes that, inorder to increase students' intention, they need to be exposed into how they can identify their personal level of achievement and properly guided on how to apply it into real entrepreneurial action. Thus, the study recommends that universities should provide enabling environment where students can be assessed in order to fishout the direction of their individual thinking.*

**Keywords:** Entrepreneurship, Intention, Personal Characteristics

## 1. Introduction

Entrepreneurship, which is vital for advanced and developing countries, stem from entrepreneurial intentions (Karimi, *et al.*, 2015). Entrepreneurial intent is necessary for the development of entrepreneurship (Bae, Qian, Miao & Fiet, 2014). The emergence of entrepreneurial intention is critical, as the process represents the first step of the actual development of a business, (Fragoso, Rocha-Junior, & Xavier, 2020). Intentionality is a mental state that allows a person to turn his actions into actual behaviors, it is one of the main components that contribute to the creation and growth of entrepreneurship, promotes autonomy, and leads to initiatives (Al-Shammari & Walid, 2018). As a result, Zhang and Yang (2006) argue that studying entrepreneurial intention is critical in order to comprehend how to promote entrepreneurial activity.

Despite the mentioned importance of this entrepreneurial intention, it is observed that the level at which Nigerian graduates join entrepreneurial activities is considered to be very low when compared with other countries in Africa (Muogbo, & John-akamelu, 2018). In the study of Hill, Ionescu-Somers, Coduras, Guerrero, Roomi, Bosma, & Shay (2022) Global Entrepreneurship Monitor (GEM) 2021/2022 report showed that in ten Sub-Saharan African countries, Nigeria's entrepreneurship level was 44 percent, which is low for a continent giant when compared to Uganda's 79 percent, Botswana's 72 percent, Angola's 70 percent, and Malawi's 70 percent.

Similarly, Global Entrepreneurship Index (GEI) study puts Nigeria 101 out of 137 nations and 12th in Africa with a 20% entrepreneurship rate of growth (Rotimi, Enimola, & Ochidi, 2021).

The present menace has attracted much attention of the policy makers in Nigeria

due to the excessive need for government job by the Nigerian university graduates (Gwangwazo, 2021) despite acquiring entrepreneurship skills during their course of study at their various institutions of learning.

Though, entrepreneurship education programme has been implemented in all Nigerian higher institutions (Babatunde, El-Gohary & Edwards, 2021) with intended need to eradicate graduate persistent problem of unemployment (Eyibio, 2021). Nevertheless, the unemployment rate is at increase (Uduji, Okolo-Obasi & Asongu, 2021). And studies failed to clearly establish the factors that led to the mentioned menace (Yalcintas, Iyigun, & Karabulut, 2023; Salisu *et al.*, 2022). However, studies conducted in relation to personal characteristics and entrepreneurial intentions have produced inconsistent (mix) result (Yi, 2020; Hill, *et al.*, 2022) some of the studies (Wahyudono, 2023; Elnadi, & Gheith, 2023) suggested employment of a different variable to study the relationship between personal characteristics and entrepreneurial intention. In order to fill this gap the present study introduced entrepreneurship education to study the relationship between personal characteristics and entrepreneurial intention.

## 2. Literature review and hypotheses

### 2.1. Theoretical perspectives

Theories have been developed to explain personality trait or attribute. Most of them see it as a set of integrated features that identify the source of emotional, cognitive, and behavioral patterns that reflect who a person is and bear remnants of psychological characteristics. A theory that underpinned this study is personality trait theory (PTT) integrated by (McClelland, 1961 & Rotter 1966), which consider intention as a function of five antecedents; need for achievement, locus of control, creativity, risk taking

and self-efficacy. The theory presumes that human beings have strong desire to succeed, accomplish their goals and attain greater achievement. Meanwhile, locus of control has to do with one perception that the consequence of their actions depend on what they have done or from event beyond they can control, in which a person with internal locus is thought to have a good probability of succeeding as an entrepreneur. It also regards individuals with risk appetite and creativity skills to have entrepreneurial intention (Babatunde, El-Gohary & Edwards, 2021). As such skills encourage one to be ever ready to venture into new business despite the risk attached to it and comes up with unusual way of doing things that can give them success.

Personal traits are one of the most widely utilized psychological theories to describe and predict human behavior, including entrepreneurial goals (Al-Shammari & Waleed, 2018). In the 1960s, the psychological approach to entrepreneurship became popular; it was attributed to McClelland's work at Harvard University. His research found a correlation between the need for achievement and entrepreneurial traits. Entrepreneurs, he discovered, had a greater thirst for achievement than non-entrepreneurs. He also discovered that entrepreneurs were risk takers who took fair risks. Personal traits are defined by Fragoso, et al., (2020) as "stable attributes that a person demonstrates in most contexts." Traits, according to theoreticians, are a person's individual and potential qualities that naturally make him an entrepreneur.

### 2.1.1 Entrepreneurial Intention

Entrepreneurial intention is "a self-acknowledged conviction by a person that intend to set up a new business venture and consciously plan to do so at some point in the future" (Muogbo, & John-akamelu, 2018). Entrepreneurial intent is one of the key elements that contribute to founding, development,

promoting autonomy, entrepreneurial initiatives and solutions (Al-Shammari & Waleed, 2018). This makes entrepreneurial intention to play critical role in the development of entrepreneurship, which results creation of new ventures.

Entrepreneurial Intention is also understood as human attitudes toward the consequences of consequential decisions and their desirability of belief, self-efficacy, and probability of responding to opportunities (Yi, 2020). This takes into account ambition, unwavering commitment and the desire to be self-reliant.

Entrepreneurial intention can also be developed by providing a better understanding of the deep assumptions that underlie that intention (Fragoso, 2020). Thus, businesses with an entrepreneurial approach are always ready and able to modify fundamental changes in their external environment and plan their strategies to change environmental needs (Salisu et al., 2022). In such cases, entrepreneurial intention can significantly help businesses in recognizing and understanding entrepreneurial behavior.

### 2.2 Concept of Personality Traits

The persistence of the personality trait approach in research on entrepreneurial intentions gave valuable insight into the mind of an entrepreneur (Shahab et al., 2019). Works on personality and psychological factors emphasize the innate complexities of personality and cognition, with a wide range of variables that influence the way people see, interpret and respond to reality. Salisu et al., (2022) found a significant relationship between the constructs of personality trait and entrepreneurial intention.

Also, Uduji, Okolo-Obasi and Asongu, (2021) discovered that the most relevant factors used to explain entrepreneurial intention are perceived behavioural and personality traits. Shapero (1982) event

model has been the one usually used to explain the relationship between personality trait and entrepreneurial intention. The model is similar to that of Ajzen (1991) and comprises three components: perceived feasibility, propensity to act and desirability. Studies have been carried out and five factors have emerged to characterize the construct of personality traits: These are; **Need for Achievements:** is a desire for achievement stems from a strong desire to succeed. **Locus of Control:** is a quality that implies a sense of control over one's life or a degree to which a person attributes success or failure to his or her own efforts or initiatives. **Entrepreneurial Creativity:** is a person's ability to look at things in an innovative way and find unique solutions to problems. **Risk Propensity:** is the individual's ability to make certain decisions and action even under conditions of uncertainty. **Self-Efficacy:** is a person's cognitive evaluation of his or her capacity to use motivation, available cognitive resources, and necessary actions to overcome problems in his life (Uduji, et al., 2021). Therefore, the following hypothesis was formulated:

**Hypothesis 1-** personality traits do not have significant effect on the students' entrepreneurial intention

### 2.3 Concept of Entrepreneurship Education

The lack of a coherent definition of entrepreneurship education is compounded by some scholars who offered different views of entrepreneurship education (Shahab, et al., 2019). Entrepreneurship education is seen as the intervention that educators give to students in order to affect their entrepreneurial abilities and attributes (Mahmoud &Nadia, 2018). It is an instructional program targeted at enticing those interested in starting a new business (Baranik, Gorman & Wales, 2018). In his study, Frago, (2020) agreed that education and

business organization have a favorable association. From these studies we can deduce that entrepreneurship education equips students with the knowledge and abilities they will need to start a new corporation or enterprise.

However, significant amount of research have been conducted on the impact of education on entrepreneurial behavior. Nevertheless, the area needs to be well researched due to the unrelenting growth in the number of universities offering entrepreneurship courses, (Nowinski, et al., 2019) at the same time the current studies' results are contradictory. While some academics believe that formal education reduces an individual's entrepreneurial drive (Shaper, 1982), others believe that education increases people's entrepreneurial intentions (e.g., shahab, et al., 2019). Secondly, existing researches have primarily concentrated on the direct influence of education on entrepreneurial intentions, ignoring the potential deterrent effect of education.

#### 2.3.1 Entrepreneurship Education and Entrepreneurial Intention

In several European and African countries, including Nigeria, promoting entrepreneurship through university education and training has recently been part of the national strategic goal. Its implementation is a huge contribution to the economic development and eradication of the threat of unemployment, which is becoming alarming for these countries (Mahmoud & Nadia, 2018). On the same hand, those holding political offices are mostly interested on the impact of entrepreneurship education on graduate career choices and how policy might influence it.

#### 2.3.2 Moderating Role of Entrepreneurship Education

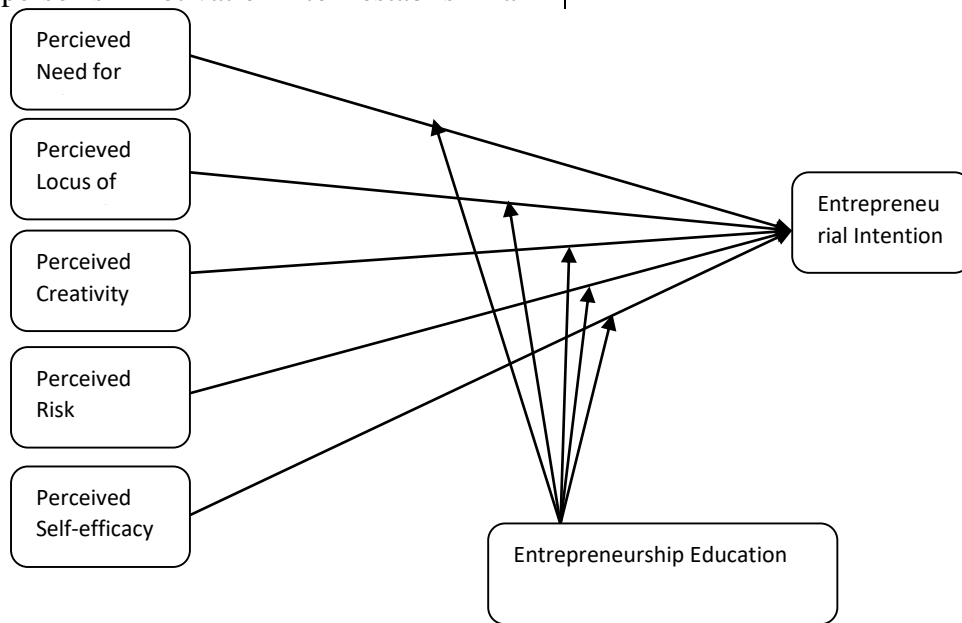
Entrepreneurial effectiveness may not necessarily be economic, but may include institutional changes that shape the personality and support the environment (Nowiński, &Haddoud,

2019). Universities intend to promote entrepreneurship by providing entrepreneurship training and additional support needed to stimulate potential intentions to create businesses and further growth; therefore, they are key players in providing learning. Baraniket *al.*, (2018), on the other hand, claims that colleges and business schools can only generate entrepreneurs after a major shift in intellectual and educational emphasis.

However, despite numerous results that demonstrated the importance of entrepreneurship education for increasing entrepreneurial intentions. Some scholars ((Baraniket *al.*, 2018; Nowiński, &Haddoud, 2019) are of the view that, formal education decreases a person's motivation to establish a

business. In contrast, Krueger, (2007) proposed that entrepreneurship education should increase students' perceptions of business feasibility by improving awareness, building trust, and encouraging self-efficacy and personality in general. It should also increase their desire for entrepreneurship by demonstrating to students that his activity is well-liked and socially acceptable, as well as that it may be beneficial on a personal level (Farrukhet *al.*, 2018). On these bases the following hypothesis was derived;

**Hypothesis 2-**Entrepreneurship education does not moderate the relationship between personality traits and entrepreneurial intention  
Personality Traits



**Figure 1:** Conceptual Framework

**2.4 Conceptual Framework**

Thus, as presented on the conceptual framework above, it is proposed that the constraints of personality traits made up of perceived need for achievement, perceived locus of control, perceived creativity, perceived risk taking propensity and perceived self-efficacy do not have any significant influence on students' entrepreneurial intention and at the same time entrepreneurship

education does not play role in shaping them.

**3.0 Methodology**

**3.1 Data Collection and Sample**

Cross sectional and survey design was employed to study students of the three major universities in the North western region of Nigeria comprises Ahmadu Bello University (ABU), Bayero University, Kano (BUK) and Usman Danfodio University, Sokoto (UDUS). The sample comprises students from

these three universities that cut across their 43 faculties. Specifically, it was conducted among level 400 students that were taught entrepreneurship at 200 and 300 levels of their studies. Survey research was used with copies of questionnaire being distributed to extract relevant information on the study's variables and structural equation modeling (SEM) was used for analysis. The choice for the Universities was based on the fact that the entire Nigerian universities students are too large to be covered within the specified period of this study. A total of 529 students were planned and distributed among the universities; ABU (215), BUK(176) and UDUS(138). The sample components were chosen based on stratified random sampling technique because universities have different faculties and courses and there is need for them to be fairly represented.

Research assistance and entrepreneurship coordinators as well as course lecturers and class representatives of the universities were involved for administering and collection process of the questionnaire.

### 3.4 Method of Data Analysis

Data was entered using the Statistical Package for Social Science (SPSS) platform, which was used to run some preliminary and basic analyses. As well as to detect and replace missing values, test for normality, detect and treat outliers, among other things. Also, it was used to calculate descriptive statistics for demographic data and study variables such as frequency, mean and standard deviation.

In order to test the hypotheses and to examine the complex relationships involving the moderating role of the entrepreneurship education on personality traits and entrepreneurial intention, Partial Least Squares (PLS) path modelling was employed (Henseler, Ringle, & Sinkovics, 2015).

## 4.0 Result

### 4.1 Assessment of Measurement Model

To evaluate the measurement model of this study, the researcher is tasked to assess the reliability of individual items measuring each latent construct, the internal consistency reliability (i.e., construct reliability), discriminant validity, as well as convergent validity for each of reflective constructs (Hair *et al.*, 2017).

#### 4.1.1 Individual item reliability of reflective measurement model

In order to ascertain the individual item reliability and other measurement model assessments, the study performed PLS algorithm. The individual item or factor reliability of reflective construct was determined using the outer loadings of each construct's indicators (Hair *et al.*, 2017). Based on the rule of thumb of Hair *et al.* (2017), an indicator with 0.70 outer loading is reliable and acceptable for already developed scale. Hence, following Hair *et al.* (2017) rule of thumb, out of 56 items measuring for reflective constructs of this study, ten items (i.e., PLC1 = 0.299, PEC 8 = 0.54, PLC9 = 0.686, EE1 = 0.407, EE8 = 0.379, PEC 2 = 0.698, PSE 7 = 0.692, PSE 1 = 0.640, PSE 2 = 0.559, PRP 7 = 0.640) were deleted leaving the study with the remaining items that are considered acceptable for further analysis.

#### 4.1.2 Internal consistency reliability of reflective model

The traditional criterion for assessing internal consistency is the Cronbach's alpha coefficient that provides an estimate of the reliability based on the intercorrelations among indicators (Cronbach & Shavelson, 2004). Despite the popularity of alpha coefficient, it has been criticized for being sensitive to the number of items in a construct and underestimates the true internal consistency reliability, and hence Composite Reliability (CR) has been

suggested as an alternative criterion especially in SE (Hair *et al.*, 2017).

However, as CR takes account of various outer loadings of respective indicators, it provides less biased estimate of the reliability compared to the Cronbach’s alpha that assumes all items are equally reliable without considering the actual contribution of each individual item loadings (Hair *et al.*, 2017).

**4.1.3 Convergent validity of reflective models**

Construct is assumed to have convergent validity when its items or indicators converged or share a high proportion of variance (Hair *et al.*, 2017). According to these authors, the most common method of establishing the convergent validity of the reflective construct is the average variance extracted (AVE). They further argued that AVE is the grand average of the squared loadings of the indicators of a particular construct. Generally, scholars recommend that the AVE value of 0.50 or above indicates that the construct has a convergent validity (Chin, 1998). This is logical

because an AVE with 0.50 signifies that the latent construct explains half of the variance of its items or factors (see Hair *et al.*, 2017). Consequently, following the threshold level of 0.50 value for the AVE, all reflective constructs have convergent validity as each construct has an AVE level above 0.50..

**4.1.4 Discriminant validity of reflective models**

Traditionally, researchers have relied on two basic approaches to assess discriminant validity i.e. cross loadings and Fornell-Larcker criterion. Recently, however, the new heterotrait–monotrait (HTMT) ratio of correlation measure was proposed by Henseler, Ringle, and Sarstedt. (2015). They argued that neither the Fornell-Larcker criterion nor the cross-loadings allows users of variance-based SEM to determine the discriminant validity of their measures. Therefore, the three methods for assessing the discriminant validity were employed in this study in order to ensure the establishment of discriminant validity of the constructs.

**Table 3: Measurement Model: Discriminant Validity (Fornell-Larcker Criterion)**

Construct	EE	EI	PEC	PLC	PNA	PRP	PSE
EE	<b>0.81</b>						
EI	0.20	<b>0.80</b>					
PEC	0.05	0.14	<b>0.81</b>				
PLC	0.26	0.18	0.01	<b>0.79</b>			
PNA	0.09	0.75	0.17	0.07	<b>0.77</b>		
PRP	0.11	0.54	0.26	0.14	0.48	<b>0.78</b>	
PSE	0.14	0.09	0.25	0.21	0.15	0.17	<b>0.79</b>

As can be seen from Table 3, all the reflective latent constructs of this study have discriminant validity as the square roots of their respective AVEs are above their correlation with other constructs of the study. In a nutshell, each of the reflective latent constructs of the present study is distinctively different from one another as none of them is highly correlated with each other. More importantly, each of the said constructs

is unique and captures phenomena not represented by other reflective latent constructs based on Fornell and Larcker's (1981) criterion analysis.

The second method of assessing the discriminant validity of reflective constructs is by examining the cross-loadings of their respective indicators (Hair *et al.*, 2017). Specifically, for a reflective latent variable to have discriminant validity using cross-

loadings method, all its indicators loadings should be greater than their corresponding loadings (cross-loadings) on other constructs. Hair *et al.* (2017) are of the view that cross loading is generally considered a rather liberal

criterion in terms of establishing discriminant validity. Thus, the assessment of the discriminant validity based on the cross-loadings criterion is presented in Table 4 below

**Table 4 : Measurement Model: Discriminant Validity (Cross Loading)**

Construct	EE	EI	PEC	PLC	PNA	PRP	PSE
EE2	0.807	0.155	0.069	0.248	0.062	0.045	0.121
EE3	0.823	0.181	0.061	0.21	0.099	0.116	0.141
EE4	0.824	0.157	0.042	0.251	0.062	0.107	0.077
EE5	0.822	0.219	0.035	0.195	0.104	0.112	0.072
EE6	0.824	0.114	0.033	0.187	0.018	0.072	0.158
EE7	0.771	0.123	0.013	0.171	0.067	0.072	0.165
EI1	0.194	0.754	0.195	0.182	0.603	0.474	0.115
EI2	0.224	0.779	0.155	0.193	0.579	0.371	0.117
EI3	0.185	0.819	0.144	0.149	0.668	0.528	0.076
EI4	0.171	0.838	0.162	0.156	0.619	0.424	0.052
EI5	0.128	0.837	0.112	0.167	0.613	0.453	0.024
EI6	0.096	0.772	0.041	0.117	0.614	0.359	0.061
EI7	0.135	0.825	0.056	0.109	0.588	0.452	0.085
EI8	0.172	0.791	0.049	0.143	0.574	0.431	0.076
PEC1	0.052	0.094	0.725	0.051	0.107	0.183	0.243
PEC3	0.034	0.108	0.804	0.014	0.153	0.253	0.181
PEC4	0.044	0.108	0.821	0.082	0.089	0.216	0.161
PEC5	0.004	0.048	0.757	0.055	0.089	0.172	0.192
PEC6	0.073	0.169	0.857	0.013	0.231	0.244	0.203
PEC7	0.024	0.125	0.848	0.038	0.185	0.213	0.256
PEC9	0.053	0.098	0.847	0.006	0.104	0.183	0.222
PLC3	0.156	0.109	0.053	0.813	0.072	0.124	0.139
PLC4	0.235	0.133	0.056	0.817	0.068	0.107	0.163
PLC5	0.213	0.129	0.051	0.831	0.044	0.125	0.159
PLC6	0.223	0.123	0.033	0.739	0.038	0.092	0.147
PLC7	0.208	0.213	0.029	0.863	0.101	0.155	0.177
PLC8	0.222	0.152	0.119	0.717	0.032	0.064	0.232
PNA1	0.128	0.512	0.163	0.071	0.732	0.294	0.087
PNA2	0.085	0.592	0.177	0.105	0.773	0.373	0.097
PNA3	0.089	0.515	0.174	0.06	0.742	0.303	0.157
PNA4	0.015	0.573	0.178	0.019	0.804	0.417	0.157
PNA5	0.083	0.656	0.076	0.043	0.803	0.402	0.134
PNA6	0.076	0.644	0.113	0.061	0.784	0.464	0.093
PNA7	0.021	0.575	0.086	0.064	0.752	0.332	0.162
PRP1	0.112	0.441	0.198	0.124	0.403	0.771	0.175
PRP2	0.137	0.433	0.272	0.173	0.37	0.794	0.098
PRP3	0.123	0.455	0.221	0.072	0.386	0.799	0.14

PRP4	0.126	0.483	0.246	0.149	0.419	0.835	0.107
PRP5	0.025	0.392	0.154	0.079	0.369	0.759	0.144
PRP6	0.022	0.366	0.14	0.069	0.326	0.762	0.147
PSE3	0.102	0.101	0.216	0.191	0.127	0.141	0.886
PSE4	0.084	0.012	0.129	0.105	0.074	0.067	0.713
PSE5	0.062	0.056	0.214	0.112	0.088	0.168	0.812
PSE8	0.189	0.074	0.214	0.227	0.172	0.131	0.771

From Table 4 above, it can be concluded that each of the reflective latent variables of the present study has discriminant validity based on the cross-loading analysis as the indicators' loadings (i.e., shaded loadings) of each construct are greater than their corresponding loadings diagonally.

Finally, the heterotrait–monotrait (HTMT) ratio of correlation measure was used to assess the discriminant validity of the reflective constructs as it is considered more superior than the two

methods discussed above. Henseler *et al.*, (2015) argued that although, the Fornell-Larcker criterion and the examination of cross-loadings are the dominant approaches for evaluating discriminant validity, they do not reliably detect the lack of discriminant validity in common research situations. They therefore proposed the HTMT an alternative approach, based on the multitrait-multimethod matrix, to assess discriminant validity via the HTMT ratio of correlations.

**Table 5: Measurement Model: Discriminant Validity (Heterotrait-Monotrait Ratio (HTMT))**

Construct	EE	EI	PEC	PLC	PNA	PRP	PSE
EE							
EI	0.214						
PEC	0.061	0.146					
PLC	0.289	0.199	0.087				
PNA	0.107	0.834	0.185	0.087			
PRP	0.129	0.602	0.283	0.158	0.541		
PSE	0.163	0.095	0.272	0.224	0.168	0.184	

As can be seen from Table 5, the HTMT statistics is presented based on correlations among items of their reflective constructs. All the reflective latent constructs of this study have discriminant validity as the HTMT value is lower than the thresholds of 0.85 as proposed by (Kline, 2011).

Therefore, discriminant validity was confirmed using the Fornell–Larcker criterion, cross loadings and the HTMT criterion. Consequently, it is enough to say that all the reflective latent constructs of this study have discriminant validity using all the approaches.

#### 4.2 Assessment of the Structural Model

This section presents the structural equation model of the data analysis for the direct and moderating relationship using bootstrap analysis. Specifically, standard bootstrapping procedure was employed using a number of 5000 bootstrap samples for 484 cases to assess the significance of the path coefficients of direct and moderating relationships (Henseler *et al.*, 2015). Nevertheless, the objectives of this study are to empirically examine the direct relationships between independent variables (IVs) and the dependent

variable (DV), as well as the moderating effect of EE between the IVs and DV.

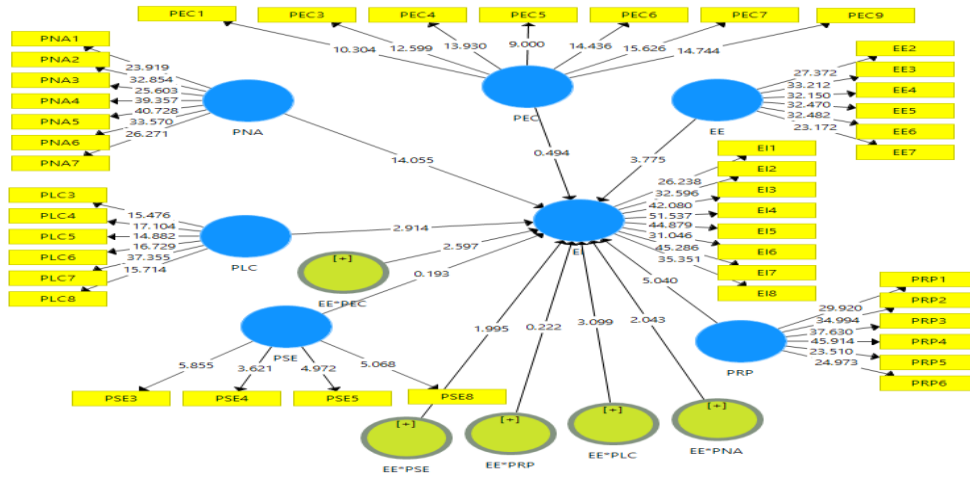


Fig. 2 Bootstrapping

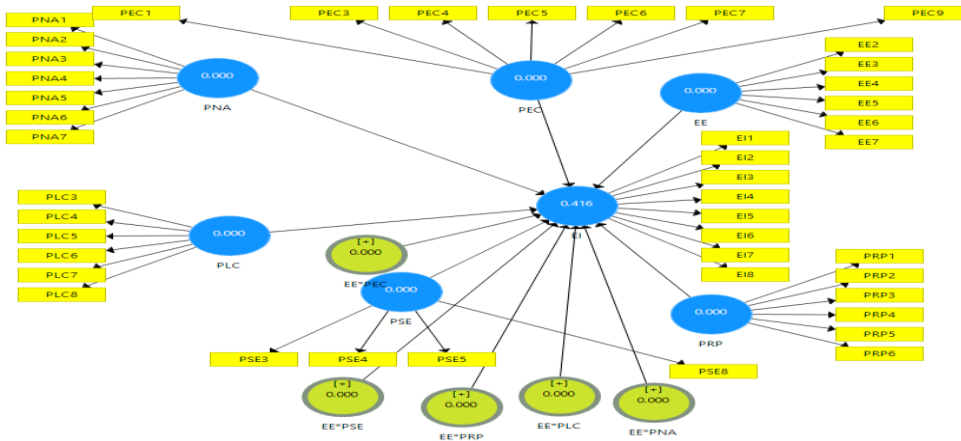


Figure 3: Predictive Relevance

Figure 3 above presented the diagrammatic presentation of the blindfolding result indicating the predictive relevance of the moderating variables.

Table 6: Hypotheses test for direct and moderating relationship

Relationship	Beta Values	Std. Dev.	T Statistics	P values	2.50%	97.50%	Decision
PEC -> EI	-0.01	0.02	0.49	0.62	-0.066	0.047	Fail to reject
PLC -> EI	0.08	0.03	2.91	0.00	0.037	0.152	Reject
PNA -> EI	0.61	0.04	14.05	0.00	0.523	0.689	Reject
PRP -> EI	0.21	0.04	5.04	0.00	0.132	0.295	Reject
PSE -> EI	0.01	0.03	0.19	0.84	-0.053	0.075	Fail to reject
EE -> EI	0.10	0.02	3.77	0.00	0.056	0.159	Reject
EE *PEC -> EI	0.07	0.02	2.59	0.00	0.022	0.129	Reject
EE*PLC -> EI	0.06	0.02	3.09	0.00	0.025	0.111	Reject

EE*PRP ->							Fail	to
EI	-0.00	0.03	0.24	0.82	-0.087	0.058	reject	
<u>EE*PSE -&gt;</u>								
<u>EI</u>	<u>0.05</u>	0.02	1.99	0.04	0.104	0.013	Reject	

As presented in Table 6, the result showed that perceived entrepreneurial creativity has no direct relationship with entrepreneurial intention as the two have negative and insignificant relationship ( $\beta = -0.01$ ,  $p > 0.05$ ), perceived locus of control has a positive and significant relationship with entrepreneurial intention ( $\beta = 0.08$ ,  $p < 0.05$ ). Similarly, perceived need for achievement has a positive and significant relationship with entrepreneurial intention ( $\beta = 0.06$ ,  $p < 0.05$ ). Also, perceived risk propensity has a positive and significant relationship with entrepreneurial intention ( $\beta = 0.02$ ,  $p < 0.05$ ). While perceived self-efficacy has a positive but insignificant relationship with entrepreneurial intention ( $\beta = 0.01$ ,  $p > 0.05$ ). This implies that the more students are made to understand locus of control, need for achievement and risk taking propensity, the higher their willingness to go into entrepreneurship. The result also shows that entrepreneurial creativity and self-efficacy do not significantly increase the students' willingness to go into entrepreneurship.

As for the introduction of the moderator variable (EE), the bootstrapping result in the table shows that there exists a significant moderating relationship on EI when IVs and Moderator interact and have the following values; PEC and EE ( $t = 2.59$ ,  $p < 0.05$ ), PLC and EE ( $t = 3.09$ ,  $p < 0.05$ ), and PSE and EE ( $t = 1.99$ ,  $p < 0.05$ ). However, an insignificant moderating relationship was found when PRP and EE interact in order to predict EI ( $t = 0.24$ ,  $p > 0.05$ ) at 5% level of significance.

## 5. Discussion, Conclusion and Recommendation

The research work provides empirical proof supporting the association between personality traits and entrepreneurial intention among students of ABU, BUK and UDUS this will in no doubt assist policy makers to put into consideration personality of an entrepreneur during curriculum formulation and ease its implementation in our tertiary institution in Nigeria. Table six showed that three personality traits namely perceived need for achievement, perceived locus of control and perceived risk taking propensity have significant influence on entrepreneurial intention. However, perceived self-efficacy has a positive but insignificant relation with entrepreneurial intention, while perceived creativity has negative and insignificant relationship with entrepreneurial intention.

The positive relationship between perceived need for achievement, perceived locus of control and entrepreneurial intention implies that, if an individual or students are made to understand the influence on their need for achievement, locus of control to becoming an entrepreneur that can significantly increase their intention. This finding is supported by the need for achievement and locus of control theory. The findings of this study coincide with that of (Putura, Tridayanti & Sukoco, 2018). The findings also showed a positive and significant relationship between perceived risk taking propensity and entrepreneurial intention. This means that if students are properly guided on the basic requirements of risk taking that will reduce their fear and increase their intention in venturing into

businesses. Number of studies found a significant relationship between risk taking and entrepreneurial intention (Putura, Tridayanti&Sukoco, 2018; Eryanto&Swaramarinda, 2018). Therefore, this study recommends that entrepreneurship curriculum should include rich content that enlighten students on the importance of need for achievement, locus of control and risk taking propensity.

Meanwhile, negative and insignificant relationship exists between perceived entrepreneurial creativity and entrepreneurial intention of the undergraduate students of North-western region of Nigeria. Similar results were found in the studies of (Sharaf, El-Gharbawy, Ragheb, 2018; Uduji, 2021). This implies that regardless of the students proper mentoring on the importance of entrepreneurial creativity it does not increase their entrepreneurial intention. This is not surprising, probably because of our educational setting that does not mostly encourage students to be creative. Rather, it motive students to study, pass exam and got employment either in the public or private sector.

The results also revealed that entrepreneurial self-efficacy has a positive but insignificant effect on entrepreneurial intention of students. This simply means students' perception on their self-confidence does not increase their intention to venture into business before or after graduation. This is not surprising, probably because most of the businesses in Nigeria failed because of lack of enabling environment as their survival are determine by family support rather than individual effort and self confidence.

The study empirically proved that, EE moderate the relationship between perceived locus of control, perceived creativity, perceived self-efficacy and entrepreneurial intention. Thus, EE does not moderate the relationship between perceived risk taking and entrepreneurial

intention. To our surprise the result showed a significant interaction between PNA and EE while negative relationship exists between the two which we have no explanation to offer. Thus, the variable was removed from the result presented.

Contrarily to previous result, the two variables PRP and EI have a direct relationship while a moderator variable (EE) was introduced the relationship turn to negative and insignificant. This implies that the moderating variable decrease the relationship instead of increasing it. It is not surprising to have such kind of result, though entrepreneurship education equips students with the knowledge and abilities they need to start a new business or enterprise (Nowinski, et al., 2019). Yet some academics believe that formal education reduces an individual's entrepreneurial risk taking drive (Shapero, 1982). A study highlighted that those with a higher education level may have more external opportunities and, as a result, a lower desire to start their own business (Chia & Liang, 2016).

Perhaps, the sample of this research is fairly large, but the research only considered undergraduates in the three federal universities in the Northern Nigeria. Thus, this finding might give constricted views for joining entrepreneurship among university and other tertiary institutions' graduates in Nigeria. Therefore, we recommend this study to be extended in to other five regions in the country (Nigeria) and incorporate college of educations and polytechnics. In conclusion, policy makers should accord priority to review of entrepreneurship curriculum and integrate study of personality traits as one of the key areas for encouraging students' entrepreneurial intention.

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