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Effect of Personality Traits and Contextual Factors on Entrepreneurial Intentions among Undergraduate Students of Nigerian Universities

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Abstract

This paper aims to explore the moderating effect of culture on the relationship between personality traits (self-efficacy, risk-taking propensity), contextual factors (university environment, government support) and entrepreneurial intentions among students of universities in North-eastern, Nigeria. The study used survey design, and questionnaire were used for data collection. However, a sample of 383 students was drawn from the population of 118,479 students. Data were analysed using SEM – AMOS. Findings indicate significant relationship and positive effect between risk-taking propensity, self-efficacy, government support programmes and students' entrepreneurial intentions, while no significant relationship and effect found between university environment and students' entrepreneurial intentions. Furthermore, culture has full moderation effect between risk-taking propensity, university environment, government support programmes and students' entrepreneurial intentions, while partial moderation between self-efficacy and students' entrepreneurial intentions. Finally, the study discusses practical implications and directions for future research.

Keywords: personality factors; contextual factors; entrepreneurial intention; university; undergraduate students; Nigeria.

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Introduction

Despite the growing attention on the role of entrepreneurship in economic growth, scholars are quietly challenged to clarify precisely why entrepreneurial activity and its effect vary among nations, some countries are more entrepreneurial while others are less entrepreneurial (Stenholm, Acs & Wuebker, 2013). While certain attention has been keen on understand the determinants of entrepreneurship. Thus they tend not to consider how culture might influence one's entrepreneurial intention. Little empirical research has been undertaken on the effect of culture and the relationship between entrepreneurship determinants and entrepreneurial intentions. Therefore, this study focus on moderating effect of culture on the relationship between self-efficacy, risk-taking propensity, university environment, government support programmes and entrepreneurial intentions among

graduate students of universities in North-eastern, Nigeria. The paper comprises of six parts; first part form the introduction section, the second part is the literature review, the third part is the methodology, the fourth part of the paper is the results, while the fifth is the discussion part and the sixth part of the paper form the conclusion.

Literature Review

Entrepreneurial Intention

In order to understand the concept entrepreneurial intention, first and foremost, it is pertinent to have a clear view of the term entrepreneurship. Various meaning of “entrepreneur or entrepreneurship” found in literature, leading to considerable definitions about the concept. Hence, these definitions are inconsistent due to individual perception and differences in the field of study. However, entrepreneur or entrepreneurship is been define differently depending on individuals or field of study, for instance, Schumpeter (1934) considered entrepreneur to be someone who brings about new things by means of creative destruction, while Leibenstein (1968) defined an entrepreneur as a person who fills vacuum that exists in the marketplace. Bygrave and Hofer (1992) as an individual who sees opportunity and establishes a new business and to take advantage. Furthermore, according to Low and MacMillan (1988) entrepreneurship has been defined as “creation of new enterprise”. Entrepreneurship involved change, vision, creation and the ability to see opportunity where others do not see (Kuratko, 2009).

Literature indicates that entrepreneurship begins by identifying opportunity, and the process is surely an intentional process (Wang, Lu, & Millington, 2011). The entrepreneurial intention is the conscious state of the mind that will be precursor action which influences the mind in the process of venture formation as a desire (Shane & Venkataraman, 2000). Entrepreneurial intention predicts students participation in entrepreneurial activities and the reason why they choose to go into business (Ariff, Husna, Bidin, Sharif, & Ahmad, 2010). Knowing the actual factors responsible for influencing student’s intention towards establishing a new business is critical in instituting the policies and programmes that target at encouraging entrepreneurial attitude (Haris, Yahya, Abdullah, Othman, & Rahman, 2016).

However, many research has been conducted on entrepreneurial intentions in European, American, and Asian nations such as (Athayde, 2012; Nasiru, Keat, & Bhatti, 2015; Solesvik, Westhead, & Matlay, 2014), hence, few studies were conducted in Africa, and Nigeria in particular for instance (Ekore & Okekeocha, 2012; Fatoki, 2014). Therefore, it was found that many personality traits and contextual factors which include; self-efficacy, risk-taking, the locus of control need for achievement, entrepreneurship education, capital, resource, legal framework and infrastructure, and socio-cultural factors could encourage or prevent entrepreneurial behaviour (Turker & Sonmez Selçuk, 2009). It is imperative to carry out research in Africa, especially Nigeria to understand the factors that affect entrepreneurial intentions so also why some regions are more entrepreneurial while others are less entrepreneurial.

Variables of the Study

Self-efficacy

Self-efficacy is a concept came from social learning theory profounded by Bandura. According to Bandura (1977) self-efficacy refers to a person’s belief in his cap(ability) to succeed in a given task. The term self-efficacy is linked with entrepreneurial intention and referred as ‘entrepreneurial self-efficacy’(ESE). Cromie (2000) expressed that self-efficacy affected individual’s beliefs and intentions over time period from their accomplishment in realising individual’s objectives. Studies indicate that self-efficacy is a significant variable in choice for an entrepreneurial career. Furthermore, Carr and Sequeira (2007) showed that high self-efficacy results in high entrepreneurial

intentions. Previous studies indicate significant relationship exists between self-efficacy and student's entrepreneurial intention (Ojewumi, Oyeleke, Agberotimi, & Adedayo, 2018; Rameseder, 2017; Raza & Irfan, 2017). In contrast (Apriliana & Djatmika, 2017; Rasul, Bekun, & Saint Akadiri, 2017). This inconsistency may be due to cultural variations. Thus the following hypothesis formulated:

H1: There is a significant relationship between self-efficacy and university student's entrepreneurial intentions.

Risk Taking Propensity

According to Sánchez (2011) risk-taking is a concept that has linked with entrepreneurial activities. Entrepreneurship activity by default involves some sort of risk-taking (Sánchez, 2011). Risk-taking is a necessary variable of entrepreneurship and refers to the ability of a person to show risk-taking or risk averse when faced with conditions that might contain some sort of risk (Gürol & Atsan, 2006). Furthermore, Brockhaus (1980) 'the propensity for risk-taking is defined as the perceived probability of receiving the rewards associated with success of a proposed situation, which is required by an individual before he will subject himself to the consequences associated with failure, the alternative situation providing less reward as well as less severe consequences than the proposed situation.' Studies indicated that risk-taking propensity is statistically significant in determining students entrepreneurial intention (Chipeta & Surujlal, 2017; Suffian, Rosman, Norlaila, Norizan, & Hasnan, 2018). Contrary (Park, 2017). Thus the following hypothesis formulated:

H2: There is a significant relationship between risk-taking propensity and university student's entrepreneurial intentions.

University Environment

Studies indicate that there is a link between university environment and entrepreneurial intention (Bae, Qian, Miao, & Fiet, 2014). The inculcated values and norms with the university environment can influence entrepreneurial intentions. Today universities play a great importance in entrepreneurial development such as offering entrepreneurship education to improve entrepreneurship intentions among students (Klofsten, 2000), provision of incubating equipment (Nielsen & Lassen, 2012), provision of mentoring and networking services (Rothaermel, Agung, & Jiang, 2007). University environment consists of organisational culture, governance, and leadership, and infrastructure and its manner in the privatisation of research and technology and various types of entrepreneurship resources (Sotirakou, 2004). Other objectives of the universities include promotion of entrepreneurial spirits, encourage the establishment of optimistic beliefs about a career in entrepreneurship among students and promoting the attitude that is necessary for entrepreneurial intention development and achievement. Furthermore, full implementation of activities that geared towards promotion of entrepreneurship in the university brings about conducive environment in terms of entrepreneurial intentions predictors that are linked to subjective norms which can also bring about conducive atmosphere for the transformation of intention to action, as students were encouraged by the people in the university environment to continue with business formation (Shirokova, Osiyevskyy, & Bogatyreva, 2016)

Franke and Lühje (2004) in their study discovered that students who evaluate the university environment as conducive to promote entrepreneurial activities will have a high propensity for

entrepreneurial intentions, but for those students that view the university environment as un conducive for entrepreneurial activities will have a low propensity for entrepreneurial intentions, they compared the effects of personal variables and the university environment and found that university environment was the most influential on entrepreneurial intention. Furthermore, university environment was found to be a significant factor in students choice for entrepreneurial intention (Kolade, 2018; Suffian et al., 2018). Contrary (Belás, Dvorský, Tyll, & Zvaríková, 2017; Ndofirepi & Rambe, 2017). Thus the following hypothesis formulated:

H3: There is a significant relationship between university environment and university student's entrepreneurial intentions.

Government Support Programmes

The recent entrepreneurship development taking place globally as a tool for a job opportunity, economic growth and development were due to many factors among could be government support programmes that were put in place. Provision of the favourable environment which include, infrastructure, legal and institutions, ease of doing business, good government policies and programmes, delivery of training rises entrepreneurial intentions and activities (Martin & Maabten, 1990). Furthermore, provision of funds, research and training institutions are considered as necessary in promoting quantity of nascent entrepreneurs (Pennings & Curran, 1982). Previous studies indicate government support programmes have a significant relationship with the entrepreneurial intention (Deshpande, 2018; Suffian et al., 2018). In contrary (Belás et al., 2017).

However, the inconsistency of literature of factors that determine the entrepreneurial intentions and the weak relationship between some predictors and the dependent variable indicates the need for moderating variable as suggested by Baron and Kenny (1986). Thus the following hypothesis formulated:

H4: There is a significant relationship between government support programmes and university student's entrepreneurial intentions.

Moderating Variable

Culture

Culture is considered among the external factors that have an influence on individual's entrepreneurial intention, it is often debated that culture played a greater part in influencing entrepreneurial intentions among people (Baughn & Neupert, 2003). The concept has proved difficult to explain (Ralston, Holt, Terpstra, & Kai-Cheng, 1997). According to Hofstede, Bond, and Luk (1993), the concept culture is seen as a collection of computing mind that differentiate one class or group of persons from another. Hofstede proposed five cultural dimensions that separate people in a particular country or region (Choe, 2004). Thus: power distance, individualism vs collectivism, uncertainty avoidance, masculinity vs femininity, Confucian dynamism (long term vs short term orientation). *Power distance* this dimension is related to inequality among people. Hofstede (2001) described power distance as the degree that found between those that in a higher class and those that in lower class together with the level of agreement of that inequality between the culture. In other words, it is the beliefs individuals have regarding the suitability of varied levels of power and right in society. *Individualism vs collectivism* refers to the degree to which individual's belief about the comparative effect of the person and class to which that individual comes from. *Uncertainty avoidance* refers to the feeling individuals possess pertaining unknown and ambiguous circumstances. It indicates the position of structure that community thinks and feel relaxed with routine activities. *Masculinity vs femininity* this refers to the differences among gender in terms of

goals and aspirations and the separation of feelings. While *long-term vs short-term orientation* refers to the situation in which individuals are oriented and motivated to work towards future goals and aspirations.

The study adopted Hofstede's cultural dimension because they represent the general attributes of a given culture and also, it is acknowledged by many scholars (Schaubroeck, Lam, & Xie, 2000), to measure predicting variables and entrepreneurial intentions among graduate students of universities in North-Eastern, Nigeria. Thus, the following hypotheses were formulated:

H5: There is a moderation effect of culture (power distance, individualism versus collectivism, uncertainty avoidance, masculinity versus femininity, long-term versus short-term orientation) between self-efficacy and university student's entrepreneurial intentions.

H6: There is a moderation effect of culture (power distance, individualism versus collectivism, uncertainty avoidance, masculinity versus femininity, long-term versus short-term orientation) between risk-taking propensity and university student's entrepreneurial intentions.

H7: There is a moderation effect of culture (power distance, individualism versus collectivism, uncertainty avoidance, masculinity versus femininity, long-term versus short-term orientation) between university environment and university student's entrepreneurial intentions.

H8: There is a moderation effect of culture (power distance, individualism versus collectivism, uncertainty avoidance, masculinity versus femininity, long-term versus short-term orientation) between government support programmes and university student's entrepreneurial intentions.

Model of the study

The theoretical model of the study was based on the Theory of Planned Behaviour (TPB) as one of the best-established theories to predict intentions, including career intentions. There is a growing body of literature arguing that intentions play a very relevant role in the decision to start a new firm. Arbuthnott (2009) exiles the great influence of intention on behaviour as 'the more personal and specific our intention is, the more likely they are to influence our behaviour'. Therefore, it can be deduced that entrepreneurial intention can be decided based on the degree of eagerness and capacity of the person(s) to establish a venture in future. In the model, entrepreneurial intention stands to be the dependent variable and is connected to the independent variables (self-efficacy, risk-taking propensity, university environment and government support programmes) with culture as moderating variables.

Figure 1 Theoretical Model of the study

Research Methodology

Participants

The research design adopted in this study was survey research design. The method of data collection was questionnaire. The population of the study are 118,479 undergraduate students, sample of 383 undergraduate students drawn from three selected faculties, of the three selected universities which comprised of 130 from University of Maiduguri, 119 from Abubakar Tafawa Balewa University Bauchi, and 134 from Modibbo Adama University of Technology Yola, North-Eastern, Nigeria. The sample was selected using systematic sampling procedure. All the 383 questionnaires were filled and returned.

Measures

The data for the study were solicited through a structured questionnaire, using Likert Scale from 1 Strongly Disagree to 5 Strongly Agree. The source of the instruments were self-efficacy variable having six items adopted from (Shneor, Metin Camgöz, & Bayhan Karapinar, 2013; Shook & Bratianu, 2010), risk taking propensity six items adopted from (Mwiya, 2014), university environment ten items adopted from (Saleh & Salhie, 2014), government support programmes ten items adopted from (Saleh & Salhie, 2014), and moderating variable culture twenty five items comprised of five items on each of five dimensions of power distance (Dunning & Kim, 2007; Hui, Au, & Fock, 2004; Jaw, Ling, Yu-Ping Wang, & Chang, 2007), individualism (Singelis, Triandis, Bhawuk, & Gelfand, 1995), uncertainty avoidance (Jung & Kellaris, 2004; Yoon, 2009), masculinity adopted from (Jaw et al., 2007; Yoo, Donthu, & Lenartowicz, 2011), and long-term orientation adapted from (Yoo et al., 2011), while the dependent variable entrepreneurial intention (EI) with eleven items questionnaire adopted from (Karimi, Biemans, Lans, Mulder, & Chizari, 2012; Linan, 2008; Mueller Susan, 2011). Prior to that students were given a consent form to indicate their willingness and they were also briefed about the purpose of the study. The administration of the instrument was done by the researcher with the help of three research assistants. Respondents were requested to answer each question by ticking in the appropriate box based on five-point Likert Scale with 1 'strongly disagree, 2 'disagree, 3 'undecided, 4 'agree and 5 'strongly agree. The instrument was tested for reliability using Cronbach Alpha and the reliability obtained was (above .9) which is excellent and acceptable for research instrument.

Procedure

The study was based on survey design. Therefore, after an extensive literature review, research hypotheses were formulated, the researcher was able to come up with variables that seem to influenced entrepreneurial intention among university undergraduate students, after then questionnaire was drafted. However, a pilot test was conducted using the drafted questionnaire to confirm if there is any aspect of the instrument that needs to be addressed also to determine the reliability of the instrument. After the pilot test, a final questionnaire was drafted based on the observations from pilot test. The next step in the process is the data collection, the data was collected by the researcher and with the help of three assistants for each university. Data collected were analysed descriptively using SPSS software version 23 and SEM-AMOS. Finally, findings and discussion of the results.

Results and Analysis

Demographics Factors of the Respondents

SPSS software version 23 was used to analysed the demographic factors of the respondents, (such as age, marital status, university, parents involved in business, siblings involved in business) and categorised into groups for understanding, gender was categorised into male and female, while faculty (1 Agriculture, 2 Engineering, 3 Management science, 4 Others). Table 4.1 indicates 72% male and 27.4% female, and 45.4% respondents within the age bracket below 25 years old, 44.4% between age group 20-30 years old, 10.2% of the respondents were in age bracket above 30 years old. Furthermore, 68.9% of respondents were not married, and 24.5% married while 26.5% of the respondent either divorced or widowed. Also the analysis shows that 33.9% respondents from University of Maiduguri, 31.1% from ATBU and 35% respondents from MAUTECH, from the Table 14.6% of the respondents drawn from faculty of Agriculture, 28.2% from engineering, while 57.2% of the faculty of management science, the results shows no responses from other faculties.

Table 4.1 Showed Demographic Factors of the Respondents

Variable	Frequency (n = 383)	Percentage
Male	278	72.6
Female	105	27.4
Age (in years):		
Below 25 years	174	45.4
Between 25 – 30 years	170	44.4
Above 30 years	39	10.2
Marital status:		
Single	264	68.9
Married	94	24.5
others	25	6.5
University		
Maiduguri	130	33.9
ATBU, Bauchi	119	31.1
MAUTECH, Yola	134	35.0
Faculty:		
Agriculture	54	14.1
Engineering	108	28.2
Management Science	219	57.2
Others	00	00.0
Parents involved in business:		
Yes, both of them	58	15.1
Yes, one of them	110	28.7
No, none of them	215	56.1
Siblings involved in business:		
Yes, my brother(s)	70	18.3
Yes, my sister(s)	106	27.7
No, none of them	207	54.0

From the Table above, it shows that 15.1% of respondents both parents involved in business and 28% show one of the parents engaged in business, while 56.1% shows none of the parents involved in business, finally, 18.3% of respondents revealed his/her brother(s) involved in business, and 27.7% revealed his/her sister(s) involved in business, while 54.0% of the respondents indicate none of the siblings were involved in business.

Relationship between the Predictor Variables and Dependent Variable

Determine the relationship between self-efficacy, risk-taking propensity, university environment, government support programmes and entrepreneurial intention among graduate students four (4) hypotheses were formulated and tested. However, using SEM the output of the structural model was used to ascertain the relationship and effect of the independent variables against the dependent variable. The goodness-of-fit indices are summarised as shown in Table 4.2

Table 4.2 Goodness-of-fit Indices of the Output Structural Model

Model	CMIN	DF	P	CMIN/DF	IFI	CFI	TLI	GFI	RAMSEA
Default Model	932.856	584	.000	1.597	.982	.982	.980	.891	.036
Saturated Model	.000	0			1.000	1.000		1.000	
Independence Model	14785.285	630	.000	23.469	.000	.000	.000	.067	.243

Note: CMIN= minimum discrepancy (or X²); DF= degrees of freedom; RAMSEA= root of mean square error of approximation; GFI= goodness-of-fit index; NFI = normed fit index; TLI = Tucker-Lewis index

Thus, the presentation of the results and discussion of objectives 1 and 2 was based on the final output of the structural model as shown in Figure 4.1

Figure 4.1 Structural Model Output.

Note: SE= Self-efficacy, RTP = Risk Taking Propensity, UE = University Environment, GSP = Government Support Programmes, EI = Entrepreneurial Intention.

In this section, four (4) hypotheses that were formulated and tested based on objectives one (1) to show the relationship between independent variables (self-efficacy, risk-taking propensity, university environment, government support programmes) and the dependent variable (entrepreneurial intention). Summary of 'r' coefficients and of the β coefficient estimates are depicted in Table 4.3 and 4.4.

Table 4.3 'r' Coefficients between Exogenous Variables and Endogenous Variable

Construct	Path	Construct	Estimate	S.E.	C.R	P
Entrepreneurial intention <--- Risk taking propensity			.539	.066	8.205	.000
Entrepreneurial intention <--- Self-efficacy			.348	.069	5.075	.000
Entrepreneurial intention <--- University environment			-.081	.060	-1.353	.176
Entrepreneurial intention <--- Government support Programmes			.106	.045	2.353	.019

The result indicates significant relationship exist between risk taking, self-efficacy and government support programmes and entrepreneurial intention the hypothesis was supported ($r = .539, p = .000$; $r = .348, p = .000$ and $r = .106, p = .019$), while university environment the findings indicates not significant with entrepreneurial intention.

Effect of Predictors on the Dependent variable

Determine the effect of self-efficacy, risk-taking propensity, university environment, government support programmes on entrepreneurial intention.

Table 4.4 Unstandardized, Standardized Regression Path Coefficients and its Significance based on $p\text{-value} < 0.05$ from the output of the Structural Model

Construct	Path	Construct	B	β	S.E.	C.R	P
Entrepreneurial intention <--- Risk taking propensity			.539	.498	.066	8.205	.000
Entrepreneurial intention <--- Self-efficacy			.348	.308	.069	5.075	.000
Entrepreneurial intention <--- University environment			-.081	-.047	.060	-1.353	.176
Entrepreneurial intention <--- Gov't. support programmes			.106	.083	.045	2.353	.019

Table 4.4 above indicate there is a significant and positive effect between risk-taking at $p = .00$, self-efficacy $p = .000$ and government support programmes at .019, while university environment shows no effect on entrepreneurial intention. Furthermore, the overall effect of a predictor variable on the outcome variable shows all the predictors account for a total of 61 percent variance of the variance in entrepreneurial intentions.

Moderation Effect of Culture on the Relationship between the Independent Variables and Dependent Variable

Moderating effect of power distance in the relationships between self-efficacy, university environment and government support programmes and entrepreneurial intention. Four hypothesis was formulated and tested to determine the presence of the moderation effect on the overall model, which provide the basis for a subsequent test or otherwise. To test for this hypothesis, the structural modelling output of two models (high and low power distance) was used in the comparison, using multi-group analysis and the summarise structural output results of the moderation effect of power distance on the overall model shown in Table 4.5

Table 4.5 moderation test of power distance on the relationships between self-efficacy, risk-taking propensity, university environment, government support programmes and entrepreneurial intention among graduate students.

Model	CMIN (χ^2)	DF	P
Unconstrained	1554.657	1168	.000
Measurement Residuals	2184.141	1250	.000
Change	629.484	82	.000

From the comparison output between unconstrained χ^2 (CMIN) and measurement residuals as depicted in Table 4.5, based on the $\Delta\chi^2$ (CMIN) = 629.484; $\Delta df = 82$; $P = .000$, it shows there is a form of moderation effect of power distance. Therefore, further analysis to determine specific path moderation effect is necessary (Hair, Black, Babin, Anderson, & Tatham, 2010). The presence of moderation in the overall model provides the additional basis for formulating four (4) specific path hypotheses and tested as depicted in Table 4.5. Moreover, figure 4.2 shows the multi-group structural relationships of power distance models used in testing the moderation.

Table 4.6 individual path moderation test for power distance on the relationships between self-efficacy, risk-taking propensity, university environment, government support programmes and entrepreneurial intentions.

The structural output shows power distance shows partial moderation effect between self-efficacy, while no moderation effect between risk-taking, university environment, and government support programmes.

Model	CMIN (χ^2)	DF	P
Unconstrained	1578.282	1168	.000
Measurement Residuals	2176.855	1250	.000
Change	598.573	82	.000

Figure 4.3 Multi Group Structural Moderation Output of Individualism versus Collectivism

Table 4.8 individual path moderation test for individualism versus collectivism on the relationships between self-efficacy, risk-taking propensity, university environment, government support programmes and entrepreneurial intentions.

Construct	Path	Construct	β	P
Collectivism Standardised Coefficients				
Entrepreneurial intention	<---	Risk-taking Propensity	.182	.072
Entrepreneurial intention	<---	University environment	-.031	.665
Entrepreneurial intention	<---	Gov't. support programmes	.139	.067
Entrepreneurial intention	<---	Self-efficacy	.360	.000
Individualism Standardised Coefficients				
Entrepreneurial intention	<---	Risk-taking Propensity	.131	.141
Entrepreneurial intention	<---	University environment	-.059	.385
Entrepreneurial intention	<---	Gov't. support programmes	.124	.064
Entrepreneurial intention	<---	Self-efficacy	.245	.005

The structural output shows individualism versus collectivism show partial moderation in the relationship self-efficacy and entrepreneurial intention and did not moderate between risk-taking, university environment, and government support programmes.

Table 4.9 moderation test of uncertainty avoidance on the relationships between self-efficacy, risk-taking propensity, university environment, government support programmes and entrepreneurial intention among graduate students.

Model	CMIN (χ^2)	DF	P
Unconstrained	1608.038	1168	.000
Measurement Residuals	2179.593	1250	.000
Change	571.555	82	.000

From the comparison output between unconstrained χ^2 (CMIN) and measurement residuals as depicted in Table 4.9, based on the $\Delta\chi^2$ (CMIN) = 571.555; Δdf = 82; P = .000, it shows there is a form of moderation effect of uncertainty avoidance, further analysis to determine specific path moderation effect is necessary.

Figure 4.4 Multi Group Structural Moderation Output of Uncertainty Avoidance

Table 4.10 individual path moderation test for uncertainty avoidance on the relationships between self-efficacy, risk-taking propensity, university environment, government support programmes and entrepreneurial intentions.

Construct	Path	Construct	β	P
Low uncertainty avoidance Standardised Coefficients				
Entrepreneurial intention	<---	Risk-taking Propensity	.039	.670
Entrepreneurial intention	<---	University environment	.097	.197
Entrepreneurial intention	<---	Gov't. support programmes	.040	.570
Entrepreneurial intention	<---	Self-efficacy	.187	.037
High uncertainty avoidance Standardised Coefficients				
Entrepreneurial intention	<---	Risk-taking Propensity	.239	.015
Entrepreneurial intention	<---	University environment	-.077	.245
Entrepreneurial intention	<---	Gov't. support programmes	.149	.034
Entrepreneurial intention	<---	Self-efficacy	.364	.000

The structural output indicates a full moderation effect on risk-taking, government support and a partial moderation effect on self-efficacy and entrepreneurial intention.

Table 4.11 Moderation test of masculinity versus femininity on the relationships between self-efficacy, risk-taking propensity, university environment, government support programmes and entrepreneurial intention among graduate students.

Model	CMIN (χ^2)	DF	P
Unconstrained	1585.401	1168	.000
Measurement Residuals	2092.718	1250	.000
Change	503.317	82	.000

From the comparison output between unconstrained χ^2 (CMIN) and measurement residuals as depicted in Table 4.11, based on the $\Delta\chi^2$ (CMIN) = 503.317; Δdf = 82; P = .000, indicates a form of moderation of masculinity versus femininity in the relationships.

Figure 4.5 Multi Group Structural Moderation Output of Masculinity versus Femininity

Table 4.12 Individual path moderation test for masculinity versus femininity on the relationships between self-efficacy, risk-taking propensity, university environment, government support programmes and entrepreneurial intentions.

Construct	Path	Construct	β	P
Femininity Standardised Coefficients				
Entrepreneurial intention	<---	Risk-taking Propensity	.111	.287
Entrepreneurial intention	<---	University environment	-.015	.855
Entrepreneurial intention	<---	Gov't support programmes	.139	.088
Entrepreneurial intention	<---	Self-efficacy	.402	.000
Masculinity Standardised Coefficients				
Entrepreneurial intention	<---	Risk-taking Propensity	.194	.026
Entrepreneurial intention	<---	University environment	-.038	.554
Entrepreneurial intention	<---	Gov't support programmes	.041	.522
Entrepreneurial intention	<---	Self-efficacy	.215	.012

The structural output indicates a full moderation of masculinity versus femininity between risk-taking and entrepreneurial intention and a partial moderation between self-efficacy and entrepreneurial intentions.

Table 4.13 Moderation test of long-term versus short-term orientation on the relationships between self-efficacy, risk-taking propensity, university environment, government support programmes and entrepreneurial intention among graduate students.

Model	CMIN (χ^2)	DF	P
Unconstrained	1591.058	1168	.000
Measurement Residuals	2057.495	1250	.000
Change	465.942	82	.000

From the comparison output between unconstrained χ^2 (CMIN) and measurement residuals as depicted in Table 4.13, based on the $\Delta\chi^2$ (CMIN) = 465.942; $\Delta df = 82$; $P = .000$, it shows there is a form of moderation effect of long-term orientation versus short-term orientation in the relationships.

Figure 4.6 Multi Group Structural Moderation Output of Long-term versus Short-term Orientation

Table 4.14 Individual path moderation test for long-term versus short-term orientation on the relationships between self-efficacy, risk-taking propensity, university environment, government support programmes and entrepreneurial intentions.

Construct	Path	Construct	β	P
Short-term orientation Standardised Coefficients				
Entrepreneurial intention	<---	Risk-taking Propensity	-.063	.522
Entrepreneurial intention	<---	University environment	-.211	.009
Entrepreneurial intention	<---	Gov't support programmes	.150	.074
Entrepreneurial intention	<---	Self-efficacy	.401	.000
Long-term orientation Standardised Coefficients				
Entrepreneurial intention	<---	Risk-taking Propensity	.269	.003
Entrepreneurial intention	<---	University environment	.012	.848
Entrepreneurial intention	<---	Gov't support programmes	.085	.163
Entrepreneurial intention	<---	Self-efficacy	.202	.021

The structural output indicates a full moderation effect of long-term versus short-term orientation between risk-taking, university environment and a partial moderation effect between self-efficacy and entrepreneurial intention.

Discussion

The results of this study indicate that most of the respondents were male with 72.6% as against female counterpart with 27.4% this is consistent with (Gwija, Chuks, & Chux, 2014), also, respondents age below 25 years are the majority 45.4%, then respondents age 26-30 years 44.4% and age above 30 years 10.2% similar to studies (Keat & Ahmad, 2012) furthermore, the study indicate 68.9% not married (single), and 24.5% were married, while divorced or widowed constituted 6.5% indicating majority are not married, this agreed with (Juračak & Tica, 2016), also, the findings indicate most are from faculty of management science 57.2% then engineering 28.2%, and Agriculture 14.1%. However, the study's findings also, indicates respondents none of the parents involved in business form majority 56.1%, then one parent involved in business 28.8%, and those with both parents involved in business 15.1%, indicating majority of the respondents none of parents involved in business, this collaborates (Gwija et al., 2014; Marques, Ferreira, Gomes, & Gouveia Rodrigues, 2012), while respondents none of their siblings involved in business 54%, were majority, then those sisters involved in business 27.7%, and those brother involved in business 18.3% this line with (Marques et al., 2012).

Furthermore, the findings show a significant relationship and positive effect between risk-taking propensity ($p = .000$), self-efficacy ($p = .000$) and government support programmes ($p = .019$), while no significant relationship and negative effect between university environment ($p = .176$) and students entrepreneurial intention.

However, overall findings showed there is a form of moderation effect of culture in the relationship between the independent variables and the dependent variable, but specifically, a full moderation of uncertainty avoidance exist between risk-taking propensity (low $p = .670$; $p = \text{high } .015$), government support programmes (low $p = .570$; $p = \text{high } .034$) and students entrepreneurial intentions, a full moderation of masculinity versus femininity exist between risk-taking propensity (femininity $p = .287$; masculinity $p = .026$) and students entrepreneurial intentions, contrary to the findings (Mueller, Thomas, & Jaeger, 2002). Also, full moderation exist of long-term versus short-term orientation between university environment (short-term orientation $p = .009$; long-term orientation $p = .848$) this is consistent with the studies (Ali, Yilmaz, & Ahmed, 2011), and risk-taking propensity (short-term orientation $p = .522$; long-term orientation $p = .003$). In addition, partial moderation of all the cultural dimensions exist between self-efficacy and student's entrepreneurial intention.

Conclusion

Entrepreneurship is now dominant and tool in reducing unemployment, poverty reduction, wealth creation and promoting economic growth and development in all facet of economies. This concern attributed as a result of high unemployment, higher inflation, and recession suffered by many countries of the world. Therefore, this situation raises the importance attached to entrepreneurs (Garavan & O' Cinneide, 1994) as could be a possible remedy to the problems encountered by most nations because the increase rate of entrepreneurship could lead to employment opportunities thereby decreasing joblessness in the society (Hyder, Azhar, Javaid, & Rehman, 2011). Using data from University of Maiduguri, ATBU, and MAUTECH, SEM-AMOS was used for the analysis, it was revealed that self-efficacy, risk-taking propensity, and government support programmes are significant predictors of entrepreneurial intentions. Overall the results indicate the model fits the data well, which has significant implications for policymakers and other stakeholders that desired to promote entrepreneurial spirit among university graduate students in Nigeria. Personality traits such as self-efficacy, risk-taking propensity and contextual factor such as government support programmes should be given more attention since they have direct positive and significant effect on the entrepreneurial intention of the respondents. Also, cultural dimensions such as uncertainty avoidance, masculinity versus femininity and long-term versus short-term orientation should receive attention as they have a moderating effect on the relationship between all the variables and entrepreneurial intentions of the respondents, though the moderating effect for self-efficacy was partial, but found in all the dimensions. The paper recommends that studies need to be conducted in another region of Nigeria in order to test the results' robustness (Gelderen et al., 2008). Also, cross-sectional studies between universities and other tertiary institutions would similarly depict the actual outcome of behavioural intention towards entrepreneurship among Nigerian graduates.

Research Limitation and Future Direction

Though, the study covers fourteen universities in North-Eastern Nigeria, the data collection was limited to three universities, which can be justified by the number of undergraduate enrolment and number of graduates during the academic session under review. Hence, with the data covering only three universities, and three faculties, the findings of this study may be limited to North-Eastern Nigeria alone. Thus, it may not be generalised or apply to other parts or nations (Fayolle & Liñán, 2014; Hoskisson, Covin, Volberda, & Johnson, 2011). The second limitation is that the current research is cross-sectional which shows that the findings may be for only a particular time period, and may therefore, not be applicable over a generalised time period. The third limitation of this study is with regard to the subjects of the study. The data used for the study was obtained from undergraduate students of universities and, therefore, the findings may not be representative of non-student's populations. The study will add to available knowledge if future researchers investigate different universities with different categories of respondents.

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