

# The influence of culture on entrepreneurial intentions: a Nigerian university graduates' perspective

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## ABSTRACT

Culture influences entrepreneurship and it is becoming essential to determine its role in entrepreneurship development in different countries especially in those with cultural diversities like Nigeria where there are less studies. Nigeria included a compulsory variant of entrepreneurship education in the curriculum of universities to nurture entrepreneurial mind-sets. Despite the general recognition of the instrumentality and significance of entrepreneurship, there are no studies evaluating the programme or the role of culture in entrepreneurial intention development. This study applied an extended version of the theory of planned behaviour to examine the interaction between culture and entrepreneurship and how this impacts on the entrepreneurial intentions of graduates. This article analysed and reported results of the survey of 409 graduates from six universities using structural equation modelling—AMOS, analysis of moment structures. Findings indicate that culture has both direct and indirect effect on graduates' entrepreneurial intentions. The study has implications for policy and practice.

## INTRODUCTION

Over the years, there has been growing recognition of the need for deeper insight and understanding of economic behaviour in diverse cultural contexts. This has led to calls to expand research to the consideration of the role of culture in entrepreneurship. Culture plays a key role in determining the attitudes of people towards entrepreneurial activities and this is essential to all dimensions of entrepreneurship (Vernon-Wortzel & Wortzel, [1997](#)). Likewise, entrepreneurial activities differ across nations because of differing cultural values and beliefs (Al-Kadi, [2017](#)). This is even more so given the diversities in the cultural environments within which businesses are conducted and the tendencies for the differences in these environments to affect various aspects of entrepreneurship.

The contribution of entrepreneurship education (EE) to nations' growth and development has received growing attention over the years in view of research findings to the effect. Accordingly, there is increasing emphasis on the role that universities play in the growth of entrepreneurship through education (Jones, Jones, Skinner, & Packham, [2013](#)). This has led to expanding demand on universities by students and governments in the development and implementation of EE curricula. In response, the number of universities that offer courses in EE has seen tremendous increase across the world (European Commission, [2012](#); Gibb, Haskins, & Robertson, [2009](#); Hofer & Potter, [2010](#)).

Entrepreneurship education programmes often focus on developing entrepreneurial intentions in the participants. However, entrepreneurial intention is influenced by several factors such as education, age, gender, personal attitude, culture, etc. (Lee, Wong, Foo, & Leung, [2011](#); Yousaf, Shamim, Siddiqui, & Raina, [2015](#)). The influence of these factors differs from culture to culture (Mitchell, Morsem, Seawright, Peredo, & McKenzie, [2002](#)) thus, making the overall effect of culture unclear. Consequently, literature suggests that the investigation of how culture relates to the level of entrepreneurial activity is both of practical and theoretical importance (Hayton, George, & Zahra, [2002](#)).

Literature provides evidence that culture play significant role in the decision to create new ventures thus, making it critical to the development of entrepreneurial intentions (Liñán, Ghulam, & Krueger, [2013](#)). This portrays culture as a factor that can either promote or hinder entrepreneurship. Nevertheless, the on-going debate among entrepreneurship researchers is that

culture can nurture entrepreneurial mind-set (Fayolle, Basso, & Bouchard, [2010](#)) but despite the assertion of Fayolle et al. ([2010](#)), culture is not generally accepted as a determinant of entrepreneurship (Thurik & Dejardin, [2012](#)). Although there is an on-going discussion on the relationship between culture and entrepreneurship, most studies in the field are concentrated on organisational culture. Consequently, theoretical and experimental studies on the influence of cultural factors on entrepreneurial behaviours are rare (Fayolle et al., [2010](#)) and the few available studies are concentrated on the Western world (see Davidsson, [1995](#)). Hence, the need for the current study that provides a developing country perspective. The limited investigations on the subject in the developing world context, creates a gap in literature that this study attempts to fill. Thus, the present study investigates the direct and indirect effect of culture on graduates' entrepreneurial intentions.

This article is organised as follows. The next part provides the background and the research problem. Then, a synopsis of the research context. This is followed by the section reviews literature on culture and entrepreneurial intentions. The next section reviews personal attitude and entrepreneurial intentions, followed by subjective norm and entrepreneurial intentions. Next, is a presentation of the theoretical and conceptual framework. Then, follows Next is the methodology section. The next section presents the data analysis and results. This is followed by a discussion and conclusion section. The concluding section presents the limitation and the implication of the research.

Entrepreneurship education (EE) is relatively new in Nigeria. In 2002, the government directed the inclusion of entrepreneurship education in the curriculum of university education and made it compulsory for all undergraduates (National Universities Commission, [2011](#)) as a measure to address the incessant graduate unemployment (Adejumola & Tayo-Olajubutu, [2009](#)). This is with the primary objective of producing graduates that will opt for entrepreneurship as career paths (become job creators instead of job seekers). This step taken by government, followed several attempts by successive governments in the past four decades at reducing graduate unemployment without success. For example, governmental agencies such as the National Directorate of Employment (NDE) established in 1986 to provide vocational skills, graduate employment scheme, and financial support; small and medium enterprises agency of Nigeria (SMEDAN) (established in 2003 to promote micro, small and medium enterprises); National Poverty Eradication Programme (NAPEP); and Graduate internship scheme (GIS) established in 2012. These establishments were created by different administrations as intervention mechanisms aimed providing skills and building the capacities of trainees for new venture creation (Chukwu & Igwe, 2012; Salami, 2013). This is partly because literature indicate that there is relationship between EEPs and EI and consequently the possibility of EEPs serving as mechanism for unemployment reduction.

The study of the impact of culture on graduates' entrepreneurial intentions is important to Nigeria because the increasing level of unemployment has taken a worrisome dimension despite the addition of entrepreneurship programme to the university curriculum over a decade ago. A major characteristic of the Nigerian education that has constantly come under criticism is the curriculum of higher educational institutions which is adjudged not to be tailored towards the necessities and goals of the Nigerian society (Ibrahim & Olatunde, [2015](#)). Although minor amendments were made following the Phelps-Stokes Advisory Committee's Reports, the change was insignificant especially in Nigerian universities and subsequently it was labelled as not hands-on, excessively literary and not adapted to the predominantly agrarian nation. This seems to posit that there is a departure of education from the community and learners' needs. Given that the compulsory entrepreneurship course being investigated is a millennial addition, examining its effect in the light of the Nigerian and communal culture is of importance. This is essential to determine the next line of action whether it be practice, or policy related in view of the socio-economic impact that Nigeria has on the African continent.

Since the mid-1980s, graduate unemployment in Nigeria has been increasing at an alarming rate and this has been accompanied by social and economic problems (Adeyeye & Tugbobo, [2011](#)).

The ILO report of 2011 demonstrated that despite the various measures and the establishment of different agencies, policy makers find it increasingly difficult to successfully deal with the problem. The report blamed the high rate of graduate unemployment on inadequate provision for job creation in the country's development plans. However, for Nigeria to meet its vision 20:20:20, what it requires more perhaps are measures to increase entrepreneurship in the country as this has been found to boost the economic growth and development of nations. Hence, the need to make the entrepreneurship education programme effective and efficient. This further justifies the need for the current study.

## 2. Research context

Nigeria, the context of this study is in the West African sub-region. The current population of is about 183 million and over half of the population is below 30 years of age (National Population Commission, 2017). One in every two West African is a Nigerian, one in every five-persons of African descent is a Nigerian and a large part of West African economic activity is concentrated in Nigeria (OECD, 2012; Yusuf & Schindehutte, 2000). Thus, the country is the largest black nation on earth.

Although, the country is highly dependent on oil exports and struggles to meet with domestic energy demands, it possesses great industrial potential (OECD, 2012) waiting to be explored. The country has over 300 ethnic groups (Nnoli, 1980) with different languages and cultures making it rich and outstanding in ethnic diversity. The administrative structure comprises 36 states and a Federal Capital Territory (FCT). Within the states are 774 local governments. The country is divided into six geopolitical zones—a non-administrative structure into which the states are grouped, often for political expediency. The official language is English. It is used in all governmental interactions as well as being the language of instruction in all educational institutions and the mode of communication in formal business transactions (Okpara & Kabongo, 2011). The country has 140 universities, 40 are federal government—owned and the rest are state government and privately owned universities.

With the antecedent of the country, it is no wonder that the persistent youth and graduate unemployment became worrisome for successive Nigerian government considering the tendency of idle youths to engage in crimes and the potential of criminals' activities to precipitate into social crisis. In fact, literature agrees that youth unemployment is largely responsible for the incessant social and sectarian crises the country has been experiencing (Adejumola & Tayo-Olajubutu, 2009) including the Boko Haram menace. Many graduates roam the streets of Nigerian cities for years after their national youth service seeking for paid employment with little success. Getting a good proportion of graduates and the youths in general to engage in profitable economic activities and reduce unemployment has been a daunting task for the Nigerian governments at all levels. Given the position of Nigeria in sub-Saharan Africa, the impact of graduate unemployment has repercussions on the neighbouring countries. This is evident by the Boko Haram threat that quickly spread to Cameroon, Chad and Niger.

The Nigerian situation in relation to education and entrepreneurship is somewhat paradoxical. Before the launching of the universal primary education (UPE) programme in September 1976, the demand for education was low (Nwagwu, 1978). Consequently, majority of the population took to farming, trading and variety of vocations (Akpoy-Robaro, 2012). Following the UPE programme launch enrolment increased to 50%, representing an improvement over the 1966 figure of 30% and a further increase in enrolment to 70% by the mid-70s (Nwagwu, 1978). Despite the increase

in school enrolment, unemployment was not of concern in Nigeria during the period. In fact, the educated up to this time, did not have the need to consider entrepreneurship (business ownership) as a career option (Akpór-Robaro, 2012). However, the introduction of the structural adjustment programme in the mid-1980s resulted in a high and persistent unemployment (from a near zero unemployment to over 20% within the first 5 years) particularly among youths in general and graduates in particular (Zawalinska, 2004). Unemployment among Nigerian graduates have remained on the rise despite the establishment of governmental agencies to promote entrepreneurship skills and reduce graduate unemployment. Unfortunately, these apparently great programmes with their objectives have not yielded the desired or commensurate values expected that prompted the introduction of a compulsory variant of entrepreneurship education programme as a way of nurturing entrepreneurial mind-sets among the graduates and consequently new venture creation (Odia & Odia, 2013).

Since the inclusion of the compulsory entrepreneurship education programme, there has not been a rigorous systematic evaluation of the programme particularly from the pedagogical perspective and the role that culture plays in the development of entrepreneurial mind-sets among the programme graduates to determine its effect or indeed the attainment of its objectives. This study therefore, fills this gap by examining the programme in a PhD study and this article is a part of the research. Furthermore, literature indicates that studies in the western world where research are concentrated might not be applicable to developing countries because of differences in environment and culture. This study fills this gap and makes theoretical contribution in this regard.

As earlier stated, Nigeria is a major political and economic player in the Sub-Saharan Africa. Economically, Nigeria and South Africa account for three-quarters of the region's GDP indicating that any negative effect on these economies will impact the continent's economic growth with possible ripple effects that go beyond the shores of African (Olamosu & Wynne, 2015). It is accordingly, consequential to explore the programme considering that it is designed to solve the socio-economic problem that has bedevilled the nation since mid-1980s with the hope of finding how the it can be improved to enable it to achieve the much-desired outcome.

### 3. Culture and entrepreneurship: a literature review

Culture is a set of values and beliefs shared by a group of people that in turn regulates what the people regard as socially acceptable behaviours (Hofstede, 1980). Although cultural values have the probability to guide the extent to which community regard entrepreneurial behaviours like risk-taking as desirable (Hayton et al., 2002), evidence indicates that the role of culture in stimulating individuals to participate in activities may well not be apparent in some communities (George & Zahra, 2002). Nevertheless, scholars have found culture to influence the development of entrepreneurial intentions (Liñán et al., 2013). In this sense, cultural values and practices can exert inspiration on entrepreneurial path, which can either be positive or negative (Liñán et al., 2013).

Cultures that are favourable to entrepreneurship can result in higher entrepreneurial intentions among the populace thus, leading to more new ventures being created resulting in further acceptability and legitimacy of entrepreneurship (Etzioni, 1987; Liñán & Chen, 2009). Explaining the determinants of entrepreneurial intentions is therefore central to the discipline of entrepreneurship and the comparative constancy in the differences found in groups of countries

suggests that other factors besides economic factors like culture might provide other explanatory factors as to the causes of these differences (Freytag & Thurik, 2010). For example, in 2007 one out of eight persons among the working population in UK were self-employed while the number was one out of ten in the French working population (Thurik & Dejardin, 2011). Variations in self-employment or entrepreneurship are associated with either the level of technological or economic development but the differences occurring across countries seem rather to emanate from cultural or institutional contexts (Thurik & Dejardin, 2011). Entrepreneurship in many arenas are measured by the number of new ventures created and the magnitude of self-employment. So, the simple question of what drives people to engage in entrepreneurship have been and continues to be a subject of investigation.

For example, the analysis of Stephan (2008) showed that the more a culture legitimises entrepreneurship, the greater the members of the community will develop entrepreneurially. Similarly, Mark-Pruett, argued that national culture is directly connected to entrepreneurial intentions. This assertion submits that the more a culture supports entrepreneurship, the more entrepreneurial the people will be. This therefore, advocates that the development of entrepreneurial intentions does not depend on the education of the graduates alone but has much to do with the Nigerian culture. Hence, to further advance knowledge in this aspect, the following hypotheses were advanced:

H1a: The effect of culture on entrepreneurial intention is mediated by personal attitude

H1b: The effect of culture on entrepreneurial intention is mediated by subjective norm

H1c: Culture has direct positive effect on entrepreneurial intention

### 3.1. Personal attitude and entrepreneurial intentions

Personal attitude, one of the constructs of the theory of planned behaviour (TPB) refer to the extent to which a person holds a positive or negative perception about new venture creation (Ajzen, 1991). As Liñán (2004) has stated, the more favourable an individual's antecedents (personal attitude) to entrepreneurial activities, the more would be the individual's intention to engage in entrepreneurship. In terms of planned behaviour which includes engagement in entrepreneurial activities, intention precedes a target behaviour (Sequeira, Mueller, & McGee (2007). This logical assumption led to the development of the following hypothesis (H2) to reflect a relationship between attitude and intention.

H2: Personal Attitude has significant, positive relationship with entrepreneurial intention

### 3.2. Subjective norm and entrepreneurial intentions

Following the seminal work of Ajzen (1991) that 'subjective norm should have direct positive effect on Entrepreneurial intentions', the third hypothesis was developed. In studies in the field of entrepreneurship this hypothesis has had diverse impacts (negative, positive, no impacts) on EI to the extent that some studies have excluded it from analysis. Indeed, the seminal work of Ajzen

(1991) earlier referred to, found subjective norm not to have impact on intention. Nevertheless, some other studies have reported SN to be significant in predicting entrepreneurial intentions in certain contexts. (see e.g. Kolvereid & Isaksen, 2006; Tkachev & Kolvereid, 1999). In contrast, Autio, Keeley, Klofsten, Parker, & Hay (2001) and Krueger, Reilly and Carsrud (2000) found SN to be insignificant. Despite the contrasting findings of prior studies, there is still evidence to support some form of relationship between SN and EI. Recent evidence however, suggests that social norm may be highly context dependent (Brownson, 2014). Therefore, investigation in different contexts is necessary to determine its impact.

To redress this situation, Liñán and Chen (2009) proposed the investigation of the indirect effect option of SN on EI through PA. The authors further wrote that reasons could abound as to why PA and PBC could mediate SN to EI. SN refers to the perceived pressure from the significant others in people's lives to either engage or not to engage in entrepreneurial activities. This suggests that the influence of culture is feasibly stronger on motivational antecedent (Begley & Tan, 2001; Kristiansen & Indarti, 2004). This leads to the development of hypothesis 3a and 3b:

H3a: The effect of social norm on entrepreneurial intention is mediated by personal attitude.

H3b: Subjective norm has significant direct positive relationship with entrepreneurial intention

#### 4. Theoretical and conceptual framework

Different theories have been suggested for explaining the creation of new ventures (see Krueger & Brazeal, 1994; Robinson, Stimpson, Huefner, & Hunt, 1991). However, Guerrero, Rialp, and Urbano (2008) identified the most used models for testing entrepreneurial intention as Ajzen (1991) TPB; Shapero and Sokol (1982) entrepreneurial event (SEE) and Robinson et al. (1991) entrepreneurial orientation. Others are Davidsson model (Davidsson, 1995), entrepreneurial potential model (Krueger & Brazeal, 1994) and the intention basic model (Krueger, 1993). However, Ajzen (1991) TPB remains the most tested and validated of all the models. The TPB has been used in various fields of study for investigating intention towards different behaviours. For example, it has been used to: test entrepreneurial intentions (van Gelderen et al., 2008), determine Muslim consumers' intentions towards the purchase of halal meat (Elseidi, 2010); measure Canadian parents' vaccine acceptance (Dubé et al., 2017); determinant of intention to use mortgage to finance homeownership in Nigeria (Usman & Lizam, 2016), measure adoption and repeated use of mobile applications (Malik, Suresh, & Sharma, 2017); predict intention to play augmented reality mobile games while walking (Koh, Oh, & Mackert, 2017). Indeed, the TPB is the leading theory in health-related behaviour studies and well-acknowledged among practitioners, students, researchers and policy makers (Sniehotta, Presseau, & Araújo-Soares, 2014). Nevertheless, it is criticised for focussing exclusively on rational reasoning (Sheeran, Gollwitzer, & Bargh, 2013) and for its static explanatory nature that does not support the understanding of evidenced effects of behaviour on perceptions and future behaviour (McEachan, Conner, Taylor, & Lawton, 2011). Notwithstanding, it remains a key theory used in predicting and explaining new venture creation (Benchrifa, Asli, & Jaouad, 2017). Consequently, it is applied in this study

The TPB as Ajzen (1991) postulates, holds that human actions are guided by three types of considerations:

Attitude towards a behaviour (PA) and in this study the behaviour is entrepreneurship. PA denotes the extent to which an individual holds a positive or negative personal appraisal of self-employment. This construct of the TPB encapsulates both the affective (likeness) and evaluative considerations (benefits derivable) that the individual associates with being an entrepreneur (Liñán & Chen, 2009).

Perceived behavioural control (PBC) signifies the perception of an individual of the ease or difficulty of engaging in self-employment. This construct (the PBC) includes the perception of ability and control that a person has of entrepreneurship. This concept is similar though not the same as Shapero and Sokol (1982) perceived feasibility.

Subjective Norm (SN) denotes the perception of an individual of the pressure from the 'significant others' in people's lives to engage or not engage in entrepreneurship or to become entrepreneurs.

All three concepts relate to the sense that people make of their abilities in relation of new venture creation (Liñán & Chen, 2009). Several studies support the application of the TPB to entrepreneurship study although there have been conflicting outcomes in findings (Liñán & Chen, 2009) some of which are attributed to the differences in the measures used (Chandler & Lyon, 2001).

The TPB postulates that the more favourable the PA and SN, with respect to behaviour is, the higher the PBC should be and in turn the stronger the individual's intention to perform the behaviour of consideration (Ajzen, 1991).

Of the six main theories identified by Guerrero et al. (2008), the TPB stands out, being the most commonly applied in the field of entrepreneurship in general and in entrepreneurial intention studies specifically. This theory is preferred because of its ability and efficacy in predicting EI which has been demonstrated in several studies (Karimi, Biemans, Lans, Chizari, & Mulder, 2014; Kolvereid & Isasken, 2006; Krueger et al., 2000; Liñán & Chen, 2009). Furthermore, it is a key theory used in predicting and explaining new venture creation (Benchrifra et al., 2017). Moreover, it has been applied in diverse fields for testing intentions.

The choice of engaging in self-employment is considered as conscious and voluntary (Krueger et al., 2000). Therefore, analysing how the decision to become an entrepreneur is taken, becomes a subject of importance (Liñán & Chen, 2009). Some have argued that the intention to engage in entrepreneurial activities are perhaps affected by factors that include beliefs, needs and values (Bird, 1988; Lee & Wong, 2004). Culture is consequently accepted as a determinant of entrepreneurship and indeed, there is an on-going debate that it is instrumental to the development of entrepreneurial intention (Thurik & Dejardin, 2012). For example, cultures that support and value entrepreneurial activities might enable radical innovation and more risk-taking, whereas cultures that emphasise and strengthen conformity (public service) and control over the future will be less likely to support entrepreneurial activities (Hayton et al., 2002). This is evident bearing in mind that while some countries, for instance US, encourage risk-taking attitudes, some

other countries do not (Henry, Hill, & Leitch, 2003; Stephan, 2008). Hence, a culture of entrepreneurship might be used to explain the differences in economic development across nations. In this regard, governments have roles to play in terms of stirring national cultures towards innovation and risk-taking (Chakraborty, Yehoue, & Thompson, 2015) to promote entrepreneurship and safeguard economic development.

#### 4.1 Hofstede's cultural dimensions and entrepreneurship in Nigeria

Different definitions of culture have been put forward. However, Hofstede's definition is the most widely used. Hofstede defines culture as 'the collective programming of the mind which distinguishes the members of one group or category of people from another'. In this sense, culture denotes the set of beliefs and values of an organisation or a nation (George & Zahra, 2002) and specifies the extent to which the individuals in a society consider entrepreneurship worthwhile (Hayton et al., 2002). Given that culture can stimulate participation in entrepreneurial activities, this study examines Hofstede and Bond (1984) work-related cultural dimensions and the potential effect of each dimension in Nigeria in relation to entrepreneurial activities, given the cultures in Nigeria. This is important because differences in culture, influence the entrepreneurial behaviours and orientation of a group of people (Radziszewska, 2014) notwithstanding that role of culture in motivating engagement in entrepreneurial activities is not obvious in some societies (George & Zahra, 2002).

Hofstede examined differences in culture across several modern countries and developed a model of five cultural dimensions to describe basic value differences across nations. To determine whether a country was high or low on any dimension, Hofstede used a measurement scale of 0–100. These dimensions are: power distance, that refers to how the basic human inequality problems are addressed with different solutions. Hofstede, Hofstede and Minkov (2004) found that there are variations in countries' acceptance of unequal distribution of power. In most African, Asian and Latin America countries and several countries around the Mediterranean, there is evidence of high power distance. The people accept power as a fundamental part of their society. Thus, the author argues that the acceptance of power distance as an integral part of the culture perhaps accentuates that the reaction of these group of people in relation to entrepreneurship might not impact entrepreneurship negatively. Incidentally, most countries that are high in power distance are also collectivistic societies with few exceptions like France (Gill, 2017). Grounded on Hofstede's measurement, Nigeria scored 80 in power distance. Meaning that Nigerians accept a hierarchical order where each person has his/her place without the need for justification. Therefore, the power distance in Nigeria can be said to be somewhat identical to organisational hierarchy.

The second dimension is uncertainty avoidance, which relates to the extent that a society will avoid uncertainty and the level of people's tolerance of ambiguity. It also refers to the degree to which individuals in a society are open to risk-taking such as entrepreneurship. Countries that are low in uncertainty avoidance like UK, China and Jamaica, consider uncertainty and ambiguity as necessary and indeed natural. Members therefore freely take risks like entrepreneurship, and value individual choices and creativity. Nigeria recorded an intermediate 55, thus there seems to be no clear preference on this dimension and Nigerians can consequently not be clearly linked to uncertainty avoidance.



Individualism–Collectivism is the third dimension and it relates to how people value themselves. For example, individuals in individualistic communities tend to value career progress and self-actualisation. Hence, they primarily care for themselves and their nuclear families whereas, those in collectivist cultures perceive themselves as part of their communities and tend to care for one another. Further, collectivist societies are low on individualistic values and lean more towards organisational benefits than personal interest (Wu, 2006).

Hofstede classified Nigeria as a collectivist country where people value close and long-term commitment to family, extended families and relationships having scored a mere 30 on this dimension. The culture emphasises conformity and fitting in and care about their relationships (Gill, 2017). Even subconsciously, the people practice loyalty to family, age group, and immediate community because as the author would argue, this culture is deep-rooted in the 'Nigerian DNA'. In the same vein, respect to elders and superiors take priority over most societal rules and regulations and this makes it differ significantly from the Western cultures (Okpara & Kabongo, 2011). The collectivist nature of the country in relation to entrepreneurship, the author would argue has worked for the country given the state of the not too satisfactory state of the financial policy.

The fourth dimension is masculinity (MAS). It refers to the role of gender in organisations or nations. Whereas masculinity cultures are characterised by aggression, acquisition of material wealth, femininity cultures have high value for social relevance with great concern for the welfare of others. Here, Nigeria scored 60 ; hence, unlike the Western world, Nigeria has femininity culture. There is good interpersonal relationships with extended families, colleagues at work and neighbours in their dwelling places in the country. For example, it is common knowledge in Nigeria that if a colleague dies, members of the organisation contribute money to assist the deceased's family and send delegates to the funeral. Caring for one another, is a fundamental feature of the Nigerian culture, so much so that it is exhibited instinctively. The gap between men and women's value is still quite high, therefore, gender plays a huge role in the country. In this dimension according to Hofstede, only few women get better-paying jobs and higher-level jobs in high MAS organisations. This result cannot be said to have considerable effect on entrepreneurship because there is virtually unhindered access to microfinance loans by women for their micro and small businesses. In a study of the contribution of microfinance loans to poverty reduction in the federal capital territory of Nigeria, Chukwuma-Nwuba (2011) found that more women accessed the micro finance loans than men.

The fifth dimension: long-term orientation relates to the extent to which societies preserve links with its past as it deals with present and future challenges. Nigeria received a low 13, revealing that its culture is normative and not pragmatic (Hofstede, 2017). The result further indicates that though the people exhibit profound respect for tradition, they are more focussed on quick results with relatively low propensity to save for the future. This result has implications on entrepreneurship and entrepreneurial sustainability in Nigeria and perhaps has relationship with the result of the current study.

National culture described as the set of political, social and economic values that exist in a nation and characterise the way the people live and work (George & Jones, 1996) does not seem to be directly applicable to Nigeria, because, the country is a multi-cultural society and made up of over three hundred ethnic groups (Nnoli, 1980), with three major cultural groups. Consequently, in terms of what obtains in the Western world, Nigeria does not have a national culture (Aluko, 2003).

Nevertheless, the country as discussed in Section 2 has made various national attempts at increasing the rate of entrepreneurship. Therefore, the study examined national culture from the perspective of entrepreneurship practice in Nigeria.

In sum, there is disparity in Western and African values and these are evident in several aspects of managerial work. For example, emphasis is on morals rather than material incentives in Africa (Grezda & Assogbavi, 1999). Similarly, wages and salaries are for families and not the individual worker. The effects of the dimensions do not seem to be the same across different contexts.

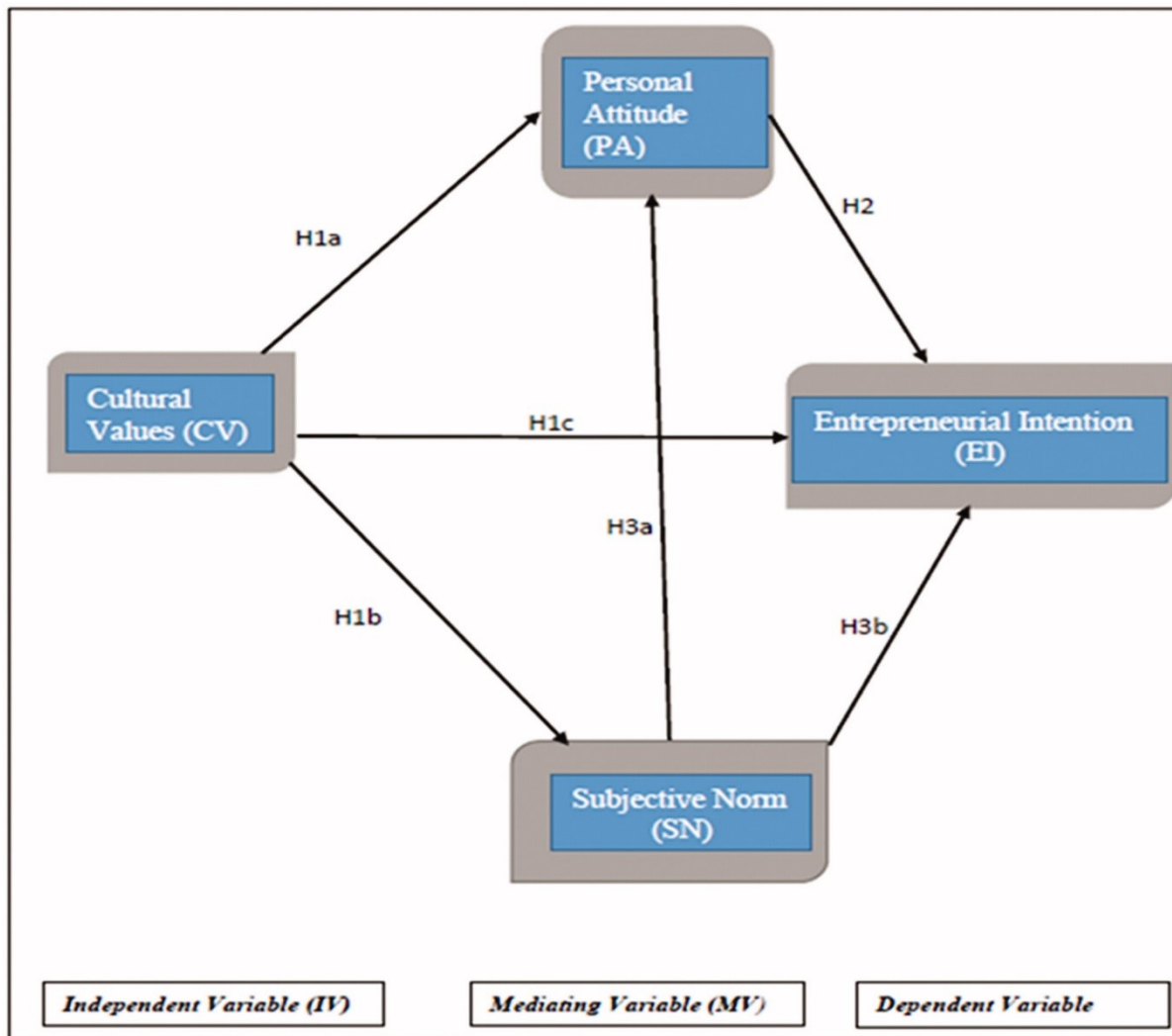
## 5. Data collection and methodology

Data for this study were collected through a survey of a sample of university graduates from one of the zones in Nigeria. The six universities have the same ownership and infrastructural facilities are provided to the universities using the same parameters. The universities have similar conditions for student enrolment and staff engagement, similar scheme of work, organisational structure, etc.

### 5.1. Hypothesised relationships

This study began with a proposed conceptual model that includes the key elements of the TPB excluding the PBC. The PBC was excluded because some of its elements are found in EI. The proposed conceptual model incorporates the antecedent variables of culture (Liñán et al., 2013). The hypotheses of the study are represented diagrammatically in Figure 1. A sample of 409 fresh Nigerian university graduates were surveyed to determine the extent to which culture and subjective norm affect the development of entrepreneurial intentions.

Figure 1. Conceptual framework and hypothesised model.



## 5.2. Sample

The sample in this study are fresh graduates from six Nigerian universities, who had participated in the compulsory entrepreneurship module (GST Entrepreneurship). The GST Entrepreneurship is a compulsory one semester module that the graduates had offered during the second year of their undergraduate study. The sample selection followed the stratified random sampling strategy. The sampling method provided equal chance for all consenting participants and the possibility of generalising findings to the population. Given the diverse cultural nature of the country, it was important to obtain samples that cut across the six regions of the country and this was only possible in purposively selected region because of the admission policy in the country that is based on quota system and catchment areas. The samples are considered best suited because the programme is directed at them. Similarly, the graduates are at the point of making career decisions therefore, results will indicate if the programme has motivated the graduates towards entrepreneurial career choices.

Questionnaires were administered to the participants during the national orientation programme when graduates are prepared for national service which is a compulsory programme in Nigeria used to involve graduates in the development of the country and to encourage common ties among the youths and for the promotion of national unity. The slight differences in the samples only relate to the ages of the universities. In particular, universities 005 and 006 are younger than the remaining four.

Participation was voluntary, and the response rate was 85.2% of a total of 501 questionnaires administered. Due to missing data, 409 out of the 501 questionnaires administered were useable and consequently retained for analysis. Out of the 409 respondents, 240 (58.7%) were females and 169 (41.3%) were males. The cohort can be described as youths given that 277 (67.7%) were  $\leq 25$  years.

### 5.3. Procedure

The study used the responses of the graduates to the questionnaire to assess the influence of culture on their entrepreneurial intentions. Participants were briefed and told that the questionnaires were for research purposes only. All items that measured culture, personal attitude, subjective norm and entrepreneurial intentions were adapted from established instruments (Liñán & Chen, 2009) with high levels of item validity and reliability. However, because the items were used in a different setting, the reliability of the instrument was still tested for consistency.

The questionnaire yielded a highly reliable instrument of 0.921 Cronbach's alpha. The questionnaire items were designed in English, and administered in English, given that English is the language of instruction in the Nigerian educational system. The negatively worded questions were changed to positive format because it was discovered after the pilot study that respondents did not take cognisance of the differences in the questioning format. The questionnaire was structured using a seven-point Likert scale questions to enable rigorous analysis. The Likert scales were analysed using the two-step structural equation modelling: analysis of moment structures (AMOS). The first step in the two-step process is the confirmatory factor analysis (CFA) that assesses the extent to which the data fits the CFA model. The second step that is the structural model and it was used for hypotheses testing.

### 5.4. Dependent, independent and mediating variables

The independent variable in this study is culture and the dependent variable is entrepreneurial intention. Personal attitude and subjective norm were proposed as mediators. Following (Liñán et al., 2013), the study adopted a set of six items to measure entrepreneurial intentions, five items scale to measure personal attitude, three items to measure subjective norm and four items to measure cultural values (Appendix 1). A principal component factor analysis was conducted to determine if the multiple observed variables of each construct have similar patterns of responses. The factor analysis showed that all items loaded separately on their respective constructs, confirming that all the observed variables are associated with their respective latent variables.

### 5.5. Control variables

In analysing the data, the study controlled for gender, age group, parent entrepreneur and geopolitical zone. In the entrepreneurship literature age, gender and having at least one parent being an entrepreneur are regarded as confounding factors that can influence decisions towards entrepreneurship. Given therefore that EI precedes the engagement in entrepreneurial activity, (Almeida-Couto & Borges-Tiago, 2009; Langowitz & Minniti, 2007) these factors were treated as likely confounders and controlled in this study. Although Tanveer, Akbar, Gill, & Ahmed (2013) claim that the chances of people engaging in entrepreneurship reduces as age increases (Tanveer et al., 2013), results show age group, gender, and zone to be insignificant at p values of .222, .75,

and .127 respectively, while having at least one parent entrepreneur is significant with  $p = .025$ . The control for gender results from the argument that there might be a relationship between gender and entrepreneurial behaviour even though studies have found contradictory outcomes. For example, the study of Schwartz et al. (2009) suggests that women have lower motivation and less positive attitude towards entrepreneurship but an earlier, found gender not to have statistically significant effect in EI (Lado, Dant, & Tekelab, 2008; Sequeira et al., 2007).

Regarding age, literature highlights that the most engagement in entrepreneurship takes place after the age of 25 years (Levesque & Minniti, 2006). For parent entrepreneur, values, skills, attitudes and information are learned during the formative years from close ties and this can develop a tendency towards entrepreneurship (Light & Bonacich, 1988). In consideration of Light & Bonacich (1988), parent entrepreneur was included as a confounder. Similarly, in Nigeria, literature displays that the south east geo-political zone is more entrepreneurial than the other zones (Siyabola et al., 2009), therefore zone was included as a confounder. These identified variables were consequently analysed as confounders and regressed on the outcome variable following Chirico and Salvato (2016).

## 6. Data analysis and results

Data analysis utilised structural equation modelling (SEM-AMOS) version 22 for hypotheses testing. The technique combined a two-step approach of the measurement model (CFA) and the structural model into simultaneous statistical test (Anderson & Gerbing, 1988; Byrne, 2010). The CFA stage examined the validity of the measurement model in relation to the data collected. It also involved the specification of the latent variables that are measured in terms of observed variables. The structural model stage involved the specification of proposed relationships among the latent variables and the testing of hypotheses (Anderson & Gerbing, 1988; Byrne, 2010; Shook, Ketchen, & Hult, 2004). During the measurement stage, the convergent and discriminant validity were evaluated and in the structural model the validity of the hypotheses developed and tested.

### 6.1. CFA results

The measurement model was initially tested for model fit in terms of unidimensionality. In doing this, three criteria were used to assess the fit of the model (Byrne, 2010; Lado et al., 2008; Mash, Hau, & Wen, 2004): (i) [Tucker–Lewis index (TLI) and comparative fit index (CFI)]  $> 0.90$ ; (ii) the normed  $\chi^2$ , that is, the ratio between  $\chi^2$  and the degree of freedom to be  $< 3$ ; (iii) root mean square error of approximation  $< 0.80$  (Bagozzi & Yi, 1988). In the same vein, items of loadings with  $< 0.5$  were removed from further analysis because they provide only little explanatory power to the model (Byrne, 2010). As a result, all items with factor loadings  $< 0.5$  were dropped to further ensure item reliability.

The initial CFA showed a CMIN/DF of 2.238, TLI 0.906 and CFI 0.921 and RMSEA 0.055. All criteria were within acceptable levels, however, some measurement items were lower than the acceptable factor loadings of 0.4 or 0.5 thus necessitating model re-specification (Shook et al., 2004). Because of this, each model re-specified were tested and the fit indices discussed above were examined to determine when they reach the acceptable thresholds that will produce a model that fits the data. Table 1 is the results of the respondents' demographic characteristics. The practice is to keep re-specifying the model when a priori model does not fit the study data appropriately (Chirico & Salvato, 2016) and this was observed. This is necessary in CFA and

forms part of the process to derive the best indicators of latent variables before the testing of a structural model. The estimation is achieved through observing the factor loadings in the standardised regression table, dropping those with  $<0.5$  and the observation of the modification indices to identify the items that require the addition covariances between paths (Table 2). The final CFA had 13 items after the five items with loadings less 0.5 were removed. All 13 items resulted in factor loadings  $>0.5$  as indicated in Table 2 showing the standardised regression weights.

Table 1. Demographic characteristics.

CSVDisplay Table

Table 2. Standardised regression weights.

CSVDisplay Table

Modification indices showed the need for additional path (covariance) between  $e_{12}$  and  $e_{13}$  after which all fit indices of CMIN, RMSEA, TLI and CFI showed acceptable threshold of model fit as depicted in Table 3, signifying a good fit.

Table 3. Final CFA fit indices.

CSVDisplay Table

Following the first stage of model fit (Table 2), convergent validity was examined by computing the indices of the average variance extracted (AVE). This is the level of variance in the variable that is not due to measurement error. An average variance of 0.50 was achieved and this indicates convergent validity (Anderson & Gerbing, 1988). The third step is the discriminant validity where the squared correlation between two variables were compared with their respective AVE. The results showed the existence of discriminant validity as the AVE of the variable exceeded the squared multiple correlations.

## 6.2. Step 2: Structural models: results

The structural model was tested both for the direct effect of culture and SN on EI. The mediation effect of PA was also tested. Although the initial model derived from the CFA produced a fitting model, it indicated modifications (Appendix 2). For the first model achieved CMIN/DF = 2.076; GFI = 0.936; CFI = 0.935; TLI = 0.921 and RMSEA = 0.05. The re-specification of the model was only in terms of the insertion of covariances between the paths indicated (Appendix 3). The model subsequently produced a better fitting model as Table 4 indicates.

Table 4. Fit indices: competing SEM model.

CSVDisplay Table

To test the mediation effect of personal attitude and subjective norm on entrepreneurial intentions, that is, the indirect effect of the independent variable on the dependent variable, the 95% bias-corrected confidence intervals (CI) based on 2000 bootstrap samples for both full and partial mediation models were assessed and examined. Table 5 depicts the results of the examination of the full and partial mediation tests.

Table 5. Mediation tests.

#### CSVDisplay Table

The results of the bootstrap bias-corrected confidence interval in AMOS version 22 shows that culture explains 13% variance in direct effect on EI and 26% variance in indirect effect on EI. However, personal attitude and subjective explains 68 and 25% in variance of EI, respectively. The results of the direct and indirect levels of variance explained of culture shows that culture affect EI more indirectly than directly and without the mediating variable of personal attitude, this effect could have been lost thus providing insufficient evidence of the effect of culture on the entrepreneurial intentions of the graduates in the context of this study. Both paths make positive contributions to the outcome variable. However, the fact that the mediators make much more significant contributions by adding a great deal to the total variance that culture and subjective norm explains in the participants' entrepreneurial intentions, has implication for practice and policy. Perhaps this result is a consequence of the implementation pedagogies. There might be the need to examine the pedagogical approach to determine its effect and ability to nurture positive entrepreneurial attitude. In the same vein, policies that will showcase entrepreneurship as worthwhile through programmes such as 'the apprentice' or business plans competitions in schools might be motivational factors for positive attitudinal change.

The results confirm hypothesis H3a and H3b. Culture has both direct and indirect effect on the participants' entrepreneurial intention. The direct path is significant at  $\beta = 0.215$ ;  $p = .001$  and the indirect path through subjective norm is  $\beta = 0.219$ ;  $p = .001$ . This result indicates a partial mediation. All the indirect paths—culture to EI mediated by PA, SN to EI mediated by PA and culture to PA mediated by SN—are significant at 0.001. Table 5 clearly shows that both culture and subjective norm have positive significant relationships with entrepreneurial intention. In terms of the indirect relationships between culture/SN and EI, the standardised regression weights were used to examine the mediating effect of personal attitude. The indirect effect of the exogenous variable (culture) to EI through PA is significant (standardised regression weight = 0.256,  $p = .001$ ) thus confirming hypothesis 1a. Similarly, the indirect effect of culture to EI through SN is significant given that results show standardised regression weight to be 0.083 and  $p = .001$ . Thus, confirming hypothesis 1b. The direct effect of culture on EI is significant with standardised regression weight = 0.126 and  $p = .036$ . Therefore, hypothesis 1c is confirmed.

Table 6 shows the results of the tests for the direct relationships between the exogenous and endogenous variables. Like the indirect paths, all the direct paths in this study are also significant at varying levels of significance and standardised regression weights as displayed in table and provide support for all the related hypotheses. The finding that both culture and subjective norm are directly related to entrepreneurial intentions is in consonance with Mark-Pruett et al. (2009). The table of the standardised direct effects two-tailed significance is attached as Appendix 4. The next section presents the discussion and conclusion of this article.

Table 6. Test of direct relationships.

CSVDisplay Table

## 7. Discussion and conclusion

Findings from previous studies on the effect of culture on EI have been conflicting, which makes investigation into the subject interesting. The findings of the current study support Kolvereid and Isasken (2006). However, the findings contrast Autio et al. (2001) and Krueger et al. (2000). The result also confirms prior study that suggests that the effect of subject norm could be context specific (Brownson, 2014). These findings are significant for entrepreneurship research because it presents developing context perspective and reflects that the way of a people has relationship with the effect that subjective norm can have on entrepreneurship. In consideration of Hofstede's cultural dimension, it appears that the effect of subjective norm in collectivists societies will likely result in positive relationships as found in Nigeria.

A growing number of entrepreneurship researchers excluded SN in their analysis (Liñán & Chen, 2009). Apparently, following previous findings, they have assumed that SN is not important in explaining EI. The findings in this study however demonstrate that the assumption will not always hold particularly if the context of study is a collectivist society. The implication of the result of this study is that as the effect of culture vary from culture to culture so also is the effect of subjective norm on entrepreneurial intentions contextually different.

Although the mediation tests are only partially supported, culture exerts a considerable influence that explains entrepreneurial intention through personal attitude and subjective norm. The existence of a direct relationship between the demographic variables (external variables) that can confound the results were also tested and only the variable, 'having a parent entrepreneur', was significant. Thus, the general results are regarded as satisfactory since all the hypotheses are supported.

Seed capital—initial capital outlay—from banks in Nigeria is almost non-existent. Similarly, the bureaucracy involved in obtaining expansion loans, including the over the top collaterals needed for loans and the high interest rates in excess of 20%, make bank loans scarcely worthwhile. Consequently, potential and present entrepreneurs in most instances rely on family and friends to provide the required funding for entrepreneurial purposes. The inadequate infrastructural facilities in the country perhaps makes the 'reference others' crucial to the development of entrepreneurial intentions and depicts a difference between the western countries and Nigeria. Thus, if the individuals perceive that these 'reference others' would not support an entrepreneurial aspiration, it becomes difficult if not impossible for intentions to be developed let alone actualised given that they serve as the main sources of business finance. This thus gives the collectivist nature of the country a positive outlook on entrepreneurship, rather than a negative impact. Nevertheless, policy to improve the perspective of the society on entrepreneurship could be beneficial.

The model suggests that if the Nigerian culture supports risk-taking, it will be favourable towards entrepreneurship and this will enhance the intention of graduates towards entrepreneurial



activities. However, if the culture is associated with uncertainty avoidance (which entrepreneurship is), entrepreneurial intentions will be highly reduced. Entrepreneurship involves risk-taking and culture has a role to play in determining the extent to which the people in a given society are willing to take risks, which Hofstede termed uncertainty avoidance. Unfortunately, the borderline result (55) that Nigeria achieved on the uncertainty avoidance dimension does not provide a very clear indication of where the country stands in the dimension nor does it provide a clear cut preference for the country. Accordingly, taking together the result of this study that indicates both direct and indirect relationships between culture and entrepreneurial intentions through attitude and subjective norm (reference others) and the score of the country on this dimension, the author would argue has implication for both policy and practice. This study extends the TPB and support literature that the way a culture perceives entrepreneurship will have major influence on the intentions of EE graduates. The study also shows that a poor result on some aspects of Hofstede's cultural dimension does not necessarily signify negative effect on entrepreneurship across countries. Additionally, as this study shows, the effect of the dimensions on entrepreneurship are contextual.

The finding that subjective norm has both direct and indirect roles in determining entrepreneurial intention is consistent with Kolvereid and Isasken (2006). This result suggests that when individuals perceive that their 'significant others' would approve of their decision to become entrepreneurs, they would be more attracted to self-employment and feel able to engage in entrepreneurial activities more satisfactorily. The finding that this element has both direct and indirect relationship with entrepreneurial intention, is not surprising given that Nigeria is a collectivist country where people value close and long-term commitment to family, extended families and even work-related relationships (Hofstede, Hofstede, & Minkov, 2004 in Okpara & Kabongo, 2011).

The high score that Nigeria attained in collectivism, the author would argue is a positive in the context of Nigeria, particularly because the provision of funds to small businesses are at very high cost as they regarded as risky borrowers. The collective nature of the country makes family and friends serve as the primary sources of funds for new venture creation. However, to prevent the negative impact that this dimension can have on entrepreneurship in case the reference others do not support entrepreneurship and consequently might not provide the funds needed, the establishment of incubators in universities to enable students start businesses before graduation could encourage more references others to support and provide the needed financial requirements for venture creation. Similarly, the finding that having one parent entrepreneur is significant, further support the impact that families have in entrepreneurial decision processes considering that parent entrepreneurs are not likely to discourage their children from engaging in entrepreneurship. In fact, if children of entrepreneurs show interests in entrepreneurship, the tendency is that they will be supported even if it is for succession purposes.

Power distance, is a well-accepted norm and can be viewed from the perspective of the culture of respect for elders because every member operates at their level of power and the availability of funds. Nevertheless, there is need for activities and contents to encourage visits to educational institutions by entrepreneurs of different financial standing to boost graduates attitudes entrepreneurship. With regards to the femininity nature of Nigeria, like in collectivity, the financial policy in Nigeria is largely not in favour of micro, small and medium enterprises. Accordingly, friends, colleagues and family are always the ones who come to the rescue, when seed capital and funds for expansion are needed.

The study accentuates that dimensions that could result in negative impact on entrepreneurship in the western world might not necessarily have the same impact in developing countries due to differences in culture, environment and indeed infrastructure. This has implication for theory.

The research also has practical implications. Measures to develop EI in youths should incorporate the handling of cultural attitudes. The study also has implications for research. It extends research on the effect of culture and subjective norm by empirically demonstrating the paths through which these effects can unfold. The study provides some directions for future studies. It delivers a better-specified model by adopting the suggestion of Liñán and Chen (2009) and used subjective norm as a mediator to offer a better explanation of its relationship with intention and this was confirmed in this study.

This study contributes to the growing literature on entrepreneurship by empirically highlighting the effect of culture and subjective norm on entrepreneurial intention in a developing country context and specifically Nigeria, where access to business funds is mostly from families and friends. Ajzen's (1991) TPB provided the foundation on which the links between culture, subjective norm and entrepreneurial intention were explored. The study being based on a developing country context provides a fresh insight to the debates about the effect of culture on entrepreneurial intentions and in particular, the role that subjective norm plays in the context.

## 8. Limitations and implications

This study has limitations that are consistent with the limitations of prior empirical studies in the field of entrepreneurship. The cross-sectional nature of the design does not permit making definitive causal statements. A longitudinal study would permit the study of a pre–post-test study that might produce more results. Secondly, the results are based on data collected from six universities in one of six geopolitical zones in the country. The spreading of data collection across the entire country might affect the result. However, the effect is not expected to be substantial given that the federal universities in the zone surveyed have student intake from across all the six zones and the study sample included graduates from all the zones in the country.

The research has implication for the implementation of the compulsory entrepreneurship education programme in Nigerian universities. It is significant to educators and education administrators because in implementing the programme, they need to take into consideration, the cultural diversity of the country. It is also significant to policy makers because it can serve as a guide for the reforms to the programme.

The research provides a deep and valuable insight into the role of culture in entrepreneurship in a developing country context. It contributes to the evidence base on the effect of culture on entrepreneurial intentions. Additionally, the study provides useful and candid perception of where Nigeria sits in Hofstede's cultural dimension in relation to entrepreneurship and the areas of differences with the western world. Thus, making valuable theoretical contribution to knowledge.

Future research should consider a longitudinal study. The study should be extended to other universities to cover the six geopolitical zones of the country. Future research can also focus specifically on the effect of having an entrepreneur parent on participants' entrepreneurial intentions.

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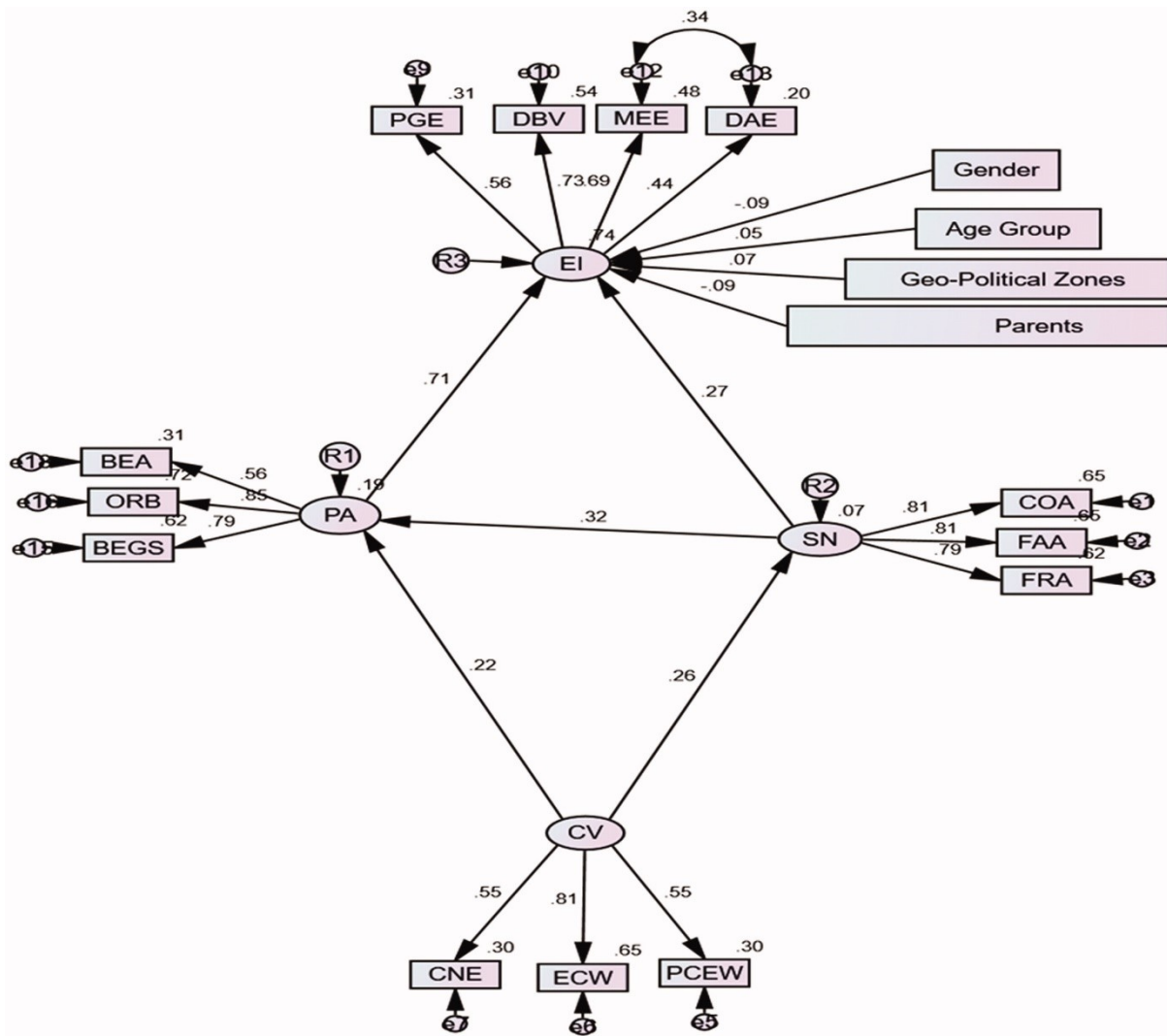
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## APPENDIX ONE



## APPENDIX TWO

Final structural model tested for mediation.

