International Journal of Economic Research

ISSN : 0972-9380

available at http: www.serialsjournals.com

Volume 14 • Number 15 (Part-II) • 2017

The Influence of Culture on Entrepreneurship Attitude: Evidence from a Sub-Saharan Africa Study

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INTRODUCTION

This chapter investigates the influence of culture on entrepreneurial attitude among the three major ethnic groups in Nigeria: Hausa, Igbo and Yoruba. 399 copies of a questionnaire were distributed to a sample in three randomly selected Nigerian states; one from each of the regions dominated by the three ethnic nationalities –Sokoto in the North west for the Hausa, Imo in the South east for the Igbo and Osun in the South west for the Yoruba sample. The study adopted four of Hofstede's dimensions of culture: Power Distance, Uncertainty Avoidance, Masculinity/Femininity and Individualism/Collectivism[1] as proxies of the independent variable (culture) and questions adopted from the Global Entrepreneurship Monitor (GEM) Questionnaire as proxies for entrepreneurship attitude. Using Logistic regression, three models were developed and each of the models confirms that culture has significant impact on entrepreneurship. This endorses several earlier studies conducted elsewhere that culture has influence on entrepreneurship attitude even in sub-Saharan Africa context. For instance, scholars have for long associated the differences in entrepreneurship levels between nations and communities with differences in cultures of the various communities in addition to other factors.

Scholarly interest in the impact of culture on various social phenomena became prominent especially after the second half of the twentieth century.[2] More specifically, the influence of culture on entrepreneurial behavior has been the subject of numerous studies in the world.[3] Researchers have long been interested in explaining the obvious differences among cultures with regards to entrepreneurship orientation. While conceptual opinions suggesting links between culture and entrepreneurship have existed for quite a while, empirical studies confirming this are mostly a few decades old. In spite of this such studies are rare from a sub-Saharan African perspective and even more so from the Nigerian perspective. Nigeria, a country of over 160 million, is the most populated country in Africa and the largest country inhabited by blacks.[4] The

three ethnic groups account for at least 50 percent of the population if not higher as Kohnert[5] claims controversially that the three ethnic groups may constitute up to 70 percent of the country's population.

Perspectives on National Culture and Entrepreneurship

Culture is multifaceted and means different things to different people. Culture covers the values, principles, interpretations, and patterns of behavior that characterize the society.[6] Hofstede[7] defines culture as "the collective programming of the mind which distinguishes members of a group or category of people from those of another." These programs propose the presence of four essential dimensions, along which countries can be categorised in areas of culture. These four dimensions are Power Distance (PD–how a society handles inequality; Uncertainty Avoidance (UA)–the need for a structure and a society's acceptance or otherwise of new/unknown things; Individualism /Collectivism (IndCol)–behavior towards the group and Masculinity/ Femininity (MF)–behavior according to gender. A fifth dimension was added after Hofstede and Bond realized that Asian cultures are driven by the desire of virtue rather than simply searching for "the truth" a phenomenon commonly associated with Western culture.[8]A significant gap in the research of Hofstede was the fact that the existence of different cultural groups within a country was ignored. In conceptualizing culture, Hofstede agrees with the position that cultural differences are evident at levels of organizations, ethnic, national or regional but assumes that cultural influences on organizations are much more easily identified at the national level thus suggesting that researchers use the word culture more appropriately when referring to national culture.[9] This is in contrast with a more logical view that cultural differences are the result of national, regional, ethnic, class, religious, sexual, and linguistic differences.[10] Similarly, Shapero's view is that in addition to national culture, different cultures may exist at regional, ethnic, religious, and gender levels.[11]

National culture stems as certain shared values and beliefs become deeply embedded in the people. Such values and beliefs manifest the social systems, political institutions, as well as other technical and cultural systems. It is among these entrenched values that certain societies are found to be considerably more entrepreneurial, as they share attitudes like the ability to take risks than others. Cultures that encourage such behavior stimulate a tendency to develop and introduce radical innovation, whereas cultures that reinforce conformity, group interests, and control over the future are not likely to show risk-taking and entrepreneurial behavior.[12]

Studies have been undertaken in different nations and regions that suggest that differences in entrepreneurial attitudes exist between countries and regions (for example, McClelland[13]; Shane[14]; Bosma; and Levine[15]). These Scholars and several others, insist that there are significant differences between cultures and societies in their inclinations to entrepreneurship and new venture development.[16] An example can be made of a Europe-based study that finds the inhabitants of Southern Europe, the UK, and Ireland, showing comparatively higher self-employment inclination among European Union (EU) countries thus confirming that considerable disparity exists within the EU. Another example is in the difference between West and East Germany.[17] An OECD Report[18] confirms this difference, which continued a decade and a half after the unification. It was observed that West Germans had better business foundation posture than East Germans. The West Germans were more optimistic in considering their start-up environment. This was further confirmed by country report of the Global Entrepreneurship Monitor (GEM) on Germany. The implications of the foregoing is that entrepreneurship attitude of any society is shaped by the culture of that society in addition to other circumstantial factors.

Commonly studied dimensions of culture in the context of entrepreneurship are Individualism-Collectivism, Uncertainty Avoidance, Power-Distance, and Masculinity-Femininity. Numerous Scholars, among them, Abzari and Safari[19], Eroglu and Picak,[20] and Shane,[21] have hypothesised that entrepreneurship is facilitated by cultures that are high in Individualism and Masculinity as well as cultures that are low in Uncertainty Avoidance and Power-Distance. Significantly, though, these relationships are not always constant.[22] Hayton et al [23] analyzed 21 empirical studies on entrepreneurship culture and find that only a few have examined the association between dimensions of culture and entrepreneurship at the national or regional level. These studies investigated Hofstede's dimensions of Individualism and Power-Distance's association to national rates of Innovation and concluded that individualism is positively related and Power-Distance is negatively associated with national innovation rates regardless of the national wealth of the countries examined. Equally, limited empirical research has also explored the association between culture and new firm-formation rates[24] proposing that cultures that endorse higher need for autonomy, need for achievement, and self-efficacy will have higher firm-formation rates, because these values reward a strong work ethic and risk taking.[25] There are also many studies that have examined questions concerning the relationship between national culture and entrepreneurial characteristics and traits.[26] These studies focused on a diverse set of entrepreneurial motives, values, and beliefs as well as cognitions.[27] Majority of these studies take one of two distinctive approaches to the question of culture's consequences for entrepreneurship. While a group attempts to explain the relationship between national culture and different entrepreneurial characteristics[28], others[29] specifically sought to examine whether or not entrepreneurs are similar from their non-entrepreneurial counterparts across cultures. Baum *et al,* for example, compared the motivational needs of entrepreneurs and managers in the United States and Israel, noting that despite specific functions, Israelis reported higher need for affiliation, lesser need for achievement, greater need for both independence and dominance compared to the U.S. sample. In an attempt to empirically determine whether entrepreneurship cognitions are common across cultures, an exploratory study[30] of 990 respondents in eleven countries was carried out.[31] The study finds that entrepreneurs have cognitions separate from those of other business people thus suggesting that not all business persons can be classified as entrepreneurs, a view that is contrary to that held by most scholars.

The foregoing discussion is indicative of the existence of evidence linking broad cultural characteristics to national levels of entrepreneurship. In addition, a research program that ranks member countries' entrepreneurship attitudes was initiated in 1997. Appropriately termed the Global Entrepreneurship Monitor (GEM), it was founded jointly by London Business School in the UK and Babson College in the USA. GEM takes a comprehensive snapshot of entrepreneurs around the world, measuring the attitudes of a population and the activities and characteristics of individuals participating in various phases of entrepreneurship.[32] Also revealed are the aspirations these entrepreneurs hold for their businesses, along with other key features of their ventures. This effort is accomplished through the collaborative work of a consortium of national teams consisting of academic researchers from across the globe. Each GEM national team oversees an annual survey of at least 2,000 adults.

METHODOLOGY

Population and Sample Size

The population of interest to this study are ethnic Hausa, Igbo, and Yoruba living within Nigeria. Considering the fact that current official policy in the country is that ethnicity is not included in population data and

that there are no reliable alternative sources, getting this accurate data would require careful sampling design. This is further compounded by the fact that members of the ethnic groups are available virtually all over the country, as they are active migrants.[33] To overcome this constraint, I decided that each ethnic group should be surveyed within its original homeland. This is imperative to forestall extraneous environmental influences, which may impact on the findings if the surveys were to be done elsewhere. For this study, therefore, multi-stage sampling technique was used. Firstly, the purposive method was adopted to stratify the population into Yoruba, Hausa, and Igbo subgroups. The second step involved using random sampling method, the urn approach, to classify respective geo-political zones corresponding to the presence of the major ethnic nationalities into states. And, lastly, I used random sampling technique[34] to select sampling elements and determine the sample size. See figure 1 below.

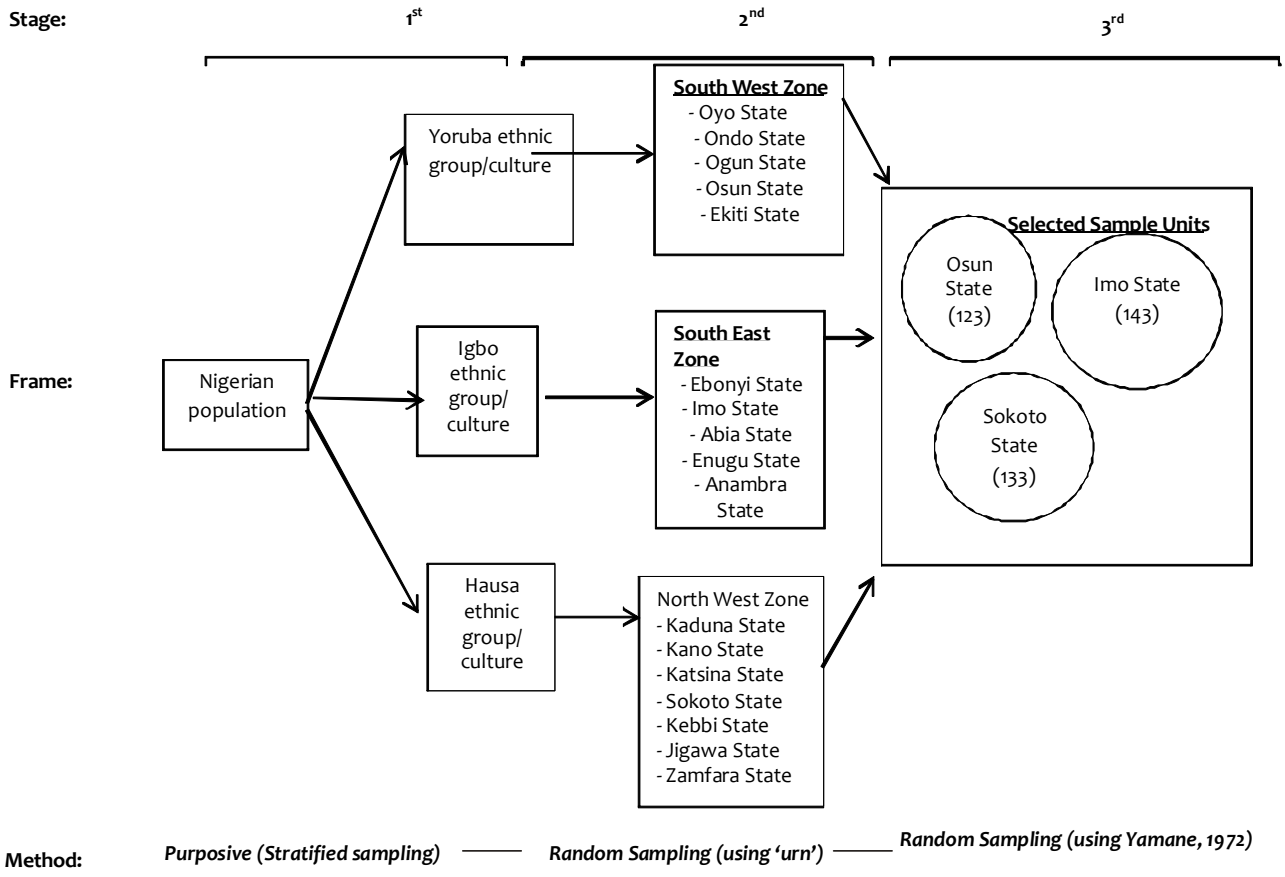

Figure 1: Sampling Technique

he "homeland" of the Hausa is in Nigeria's North West, the Igbo is in the South East while that of the Yoruba is in the South Western part of the country. Accordingly, the population was, therefore, divided into three strata namely, North West (where the Hausa are dominant), South East (Largely populated by the Igbo), and South West (Where Yoruba are dominant). In each of these strata, one state was randomly selected using 'urn' system. The selected states were, Sokoto, Imo, and Osun for the Hausa, Igbo, and Yoruba samples, respectively. In addition, an urban and a rural setting were purposely earmarked to get a broader view.

To get the sample size, the empirical populations of each of the selected states (NCP, 2006) was taken and a standard statistical formula suggested by Yamane[35] adopted to get a sample size of 399. The Yemane formula is given below.

$$n = \frac{N}{[3 + (N)e^2]}$$

Where:

n = the desired sample size

N = the working population size

e = level of significance.

Table 1 below present a picture of the population and sample size.

Table 1
Summary of the Distribution of Sample element for the Study

State	*Total Polulation [By 2006 Population Census]*	*Working Population [3/36= 0.083]*	*Sample Size [Using Yamane (1972)*]*	*Decomposition of Sample Size [Using Random Number Table]*	
	No.	*No.*	*No.*	*Location [Urban/Rural]*	*No.*
IMO	3,974,899	329,917	143	Owerri Municipal	73
				Okigwe	70
SOKOTO	3,696,999	306,857	133	Sokoto South	70
				Wurno	63
OSUN	3,423,535	284,153	123	Ife Central	63
				Iwo	60
Total	11,095,433	920,927	399		399

Source: Field Survey 2011

Sources of Data

The type of data used in this study is primary in nature. In particular, cross-section data were collected through questionnaire administration. Copies of the Questionnaire were administered on a heterogeneous sample across the selected states. The questionnaire used in the study consisted of two sub-scales designed to measure culture and entrepreneurship attitude-orientation and entrepreneurship persuasion of respondents. The first sub-scale, designed to examine the differences in cultural backgrounds of the respondents, used questionnaire items based on an adaptation of the Hofstede's cultural dimensions of Power-Distance (PD), Uncertainty Avoidance (UAV or UA), Masculinity versus Femininity (MF), and Individualism/collectivism (Indcol) dimensions. This sub-scale consisted of twelve items that required the respondents to indicate the degree of agreement that they attach to each comparative statement. Possible responses were based on 5 part Likert Scale ranging from 5 (Strongly Agree) to 1 (Strongly Disagree). The second sub-scale measures entrepreneurial inclination of the respondents. This sub-scale consisted of five

items that required the respondents to indicate the degree of agreement that they attached to each comparative statement. The items were adopted from the Global Entrepreneurship Monitor (GEM) Questionnaire. Possible responses were, 'Yes' (5), 'I wish so' (4), I am undecided (3), 'No' (2) and 'I won't say' (1).

Method of Data Analysis

Regression Analysis (Logistic Regression) was used to test for the relationship of the proxies of culture (the independent variable) and entrepreneurship in all the 3 regression models developed. This is because logistic regression is amenable to primary data and can be used for non-metric data as well as data—both metric and non-metric. Logistic regression models are employed to test the null hypothesis that culture has no significant influence on entrepreneurial attitude in Nigeria. The regression equation is given as:

H_o: BUSTAR = BUSFIN = BUSOWN = 0

H_1: BUSTAR = BUSFIN = BUSOWN e" 0.5

The decision rule is:

- ✓ If R^2 is greater than 0.5, reject H_0 otherwise do not reject H_0
- ✓ If p-value is less or equal to 0.05 reject H_0; otherwise do not reject H_0

Three Logistic Regression Models are employed to test the influence of culture on each of the proxies of entrepreneurship Attitude (Bustar, Busown and Busfin). The models summary statistics and the regression results are presented in tables 2, 3 and 4 below. The data for this study is nonparametric. Logistic regression is thus appropriate. Logistic regression is also appropriate when the dependent variable is not categorical or when the dependent variable has a yes or no answer. Also, the logit is commonly used in researches involving a probability determination of an event therefore, it is used to determine the probability that a respondent would prefer self-employment to paid employment or to determine if any of the ethnic nationalities would motivate its followers more than others to pursue entrepreneurship careers than go into paid employment. Since logistic regression does not require restrictive assumptions like say Discriminant Analysis, it is preferred for a research of this nature. Also, the choice of regression analysis is due to its having the advantage to simultaneously explain the cause-effect relationship between individual variables used either collectively or singly of groups of arguments (explanatory variables) and the dependent variable. Regression analysis also has the advantage of comparing the relative strength of each group of variables against the variables of the other group in determining the dependent variable in a one-fell-swoop exercise. In other words, the strength of variables used to capture the influence of culture on entrepreneurship can be compared with those that capture the effect of individual/personal attributes on the tendency to be more entrepreneurial.

Variable Specifications

The variables for this study are culture, the independent variable, and entrepreneurship attitude, the dependent variable. The proxies of culture used in this study are derived from Hofstede's (1980) seminal studies. These are Power-Distance (PD), Masculinity versus Femininity (MF), Individualism versus Collectivism (Indcol), and Uncertainty Avoidance (UAV). In addition, other cultural factors used with respect to specific

hypothesis include Religion: Religion of Christianity (Rel_Christ); Religion of Islam (Rel_Islam); and Traditional Religion (Rel_Trad). Three proxies were developed for the dependent variable–Entrepreneurship Attitude based on responses of the respondents to three direct entrepreneurship questions adopted from the GEM Questionnaire. These are: Bustar—whether or not they plan to go into some form of business within the next three years; Busown—to represent whether or not they are already engaged in some income-generating undertaking; and Busfin–if they have provided some finance within the last three years for businesses managed by someone else.

Model Specification

The literature on subject emphasizes the role of culture (C) on entrepreneurship attitude. The literature equally shows that in empirical studies, the concept of entrepreneurship and the factors that influence it are hardly measured directly. This is because apart from being qualitative in nature, their meanings can only be interpreted to make sense within the specific time and space of the study area. In the literature, it often argued that as far as entrepreneurship is concerned, C in turn is in the main influenced by a well-defined set of variables such as Power-Distance (*PD*), Uncertainty Avoidance (UAV), Masculinity versus Femininity (MF), Individualism versus Collectivism (IndCol), ethnicity (*ET*), religion (*RL*), and inequality (IN); PA such as Innovative Behavior (IB) and Self-esteem (SE).

Because entrepreneurship (*E*) is not only a generic term but can hardly be measured directly, most studies of this nature utilize models of qualitative choice. Now if the dependent variable, E, can be assumed to be determined empirically as a LOGIT model, which is based on the cumulative logistic probability function and specified as

$$P_i = F(E_i) = F(\alpha + \beta X_{ij}) = \frac{1}{1+e^{-z_i}} = \frac{1}{1+e^{-(\alpha+\beta X_{ij})}} \tag{1}$$

where $$X_{ij} = \sum_{ij}(C_i + PA_i)$$ XXX.

In this notation, e represents the base of natural logarithms, which is approximately equal to 2.718. P_i is the probability that entrepreneurship is significantly influenced either by culture and personal attributes either equally or differentially within the study period, given a set of variables, X_{ij}.

If the model specified in equation (1) to be estimated, we first multiply both sides of the equation by $1+e^{-z}$ to get

$$e^{-z} = \frac{1}{P_i} - 1 = \frac{1-P_i}{P_i} \tag{2}$$

By definition however, $e^{-z_i} = 1/e^{z_i}$ so that

$$e^{z_i} = \frac{P_i}{1-P_i}$$

Now by taking the natural logarithm of both sides,

$$E_i = \log \frac{P_i}{1 - P_i}$$

or from equation (1)

$$\log \frac{P_i}{1 - P_i} = Z_i = \alpha + \beta X_{ij} \tag{3}$$

or

$$\log \frac{P_i}{1 - P_i} = E_i = \alpha + \beta_1 PD_{ij} + \beta_2 ET_{ij} + \beta_3 IN_{ij} + \beta_4 UAV_{ij} + \beta_5 IND_{ij} \quad \text{then} \tag{4}$$

The dependent variable in (3) and (4) is the logarithm of the odds that entrepreneurship is significantly influenced by culture and personal/individual attributes. If P_i happens to be either equal to 0 or 1, the odds, $P_i/1\text{-}P_i$, will be undefined. Thus the application of ordinary least squares (*OLS*) estimation of (4) is clearly inappropriate. Thus, it seems reasonable to estimate the LOGIT model by using an estimate of the probability of a given output for each group by identical individuals (ethnic affiliation).

Specially, I approximate P_i as

$$\hat{P}_i = \frac{r_i}{n_i}$$

I can estimate the LOGIT probability model of (4) by

$$\log \frac{\hat{P}_i}{1 - \hat{P}_i} = \log \frac{r_i / n_i}{1 - (r_i / n_i)} = \log \frac{r_i}{n_i - r_i} = \alpha^* + \beta_1^* PD_{ij} + \beta_2^* ET_{ij} + \beta_3^* IN_{ij} + \beta_4^* UAV_{ij} + \beta_5^* IND_{ij} + \varepsilon_{ij} \tag{5}$$

Equation (5) is linear in the parameters, X_{ij}, and can be estimated using *OLS* for small samples. The parameters may be biased, but as the number of observations associated with each of the level of X increases, the results improve. In fact, the estimated parameters are consistent when the number of observations in each group gets arbitrarily large. This grouping procedure will then be used first with individual observations or by dividing the independent variables arbitrarily and then broken down into groups and the frequencies calculated within each group.

Methods and Procedure for Data Analysis

Data collected were fit with equation (5) and the values of the coefficients were evaluated and compared with each other to determine their relative statistical significance of each set of factors (culture and individual attributes in influencing entrepreneurship among the target ethnic groups in the study area. For computational convenience, scores on all the questions on each variable were summed and multiplied by a scalar to get

100; and averaged to get the mean value. In converting the data on dependent variable (*E*) to their *LOGIT* form, the values were transformed to fractions, the quantity $[P_i/(1-P_i)]$ was determine for each record. Before running the regression, all the data on each variable from the three samples were grouped as one population, sorted along 'Hausa-Igbo-Yoruba' order. The SPSS Statistical Package (version 17) was then used to estimate equation (5).

Results, Interpretation, and Analysis

(i) Starting a business

Respondents were asked whether they alone or with others, are currently trying to start a new business, including any type of self-employment (BUSTAR). The regression result of their responses is presented in Table 2.

Table 2
Logistic Regression Results for BUS_STAR

Variable	*Coefficient*	*Std Error*	*t-Statistic*	R^2	*Log likelihood*	*Durbin – Watson Statistic*
PD	0.008164	0.003535	2.309659	0.747666	390.1845	1.797112
MF	0.009902	0.003488	2.838777			
INDCOL	0.001939	0.003543	0.547275			
UAV	0.004145	0.004024	1.030060			
REL_CHRIST	0.034306	0.016638	2.061895			
REL_ISLAM	0.031717	0.016889	1.878042			
REL_TRAD	-0.011806	0.068735	-0.171764			

Source: Computed by the Researcher, using SPSS v. 17

Table 2 compares the dependent variable (culture) with a proxy of the independent variable (Bus_Star). The Estimated model is Log BUS_STAR = 0.008164PD + 0.009902MF+0.001939INDCOL + 0.007388UAV + 0.034306REL_CHRIST +0.031717REL_ISLAM – 0.011806REL_TRAD

R^2 shows the coefficient of determination. It expresses the percentage variation in the dependent variable, which is explained by the independent variable. In essence, this value measures the goodness of fit of the regression line. With R^2 at 0.747666 the model is a good fit. It shows that 74.77% of the relationship between cultural factors and entrepreneurship attitude is explained by the variables (PD, MF, INDCOL, UAV, SELFEST, REL_CHRIST, REL_ISLAM, and REL_TRAD); while the error term takes care of the remaining 25.23%. Since this is greater than 0.5, H_0 is therefore rejected and H_1 accepted.

The t-statistics indicate that the model is useful in determining if the independent variables have any statistically significant influence with regards to the various cultural factors. With regard to MF, for example, the computed t-statistic at 2.838777 (P=0.0049) gives a 99% confidence level that MF explains BUSTAR. The model also shows that at 5% level of significance (95% confidence level), PD at 2.309659 (P=0.0216) and REL_CHRIST at 2.061893 (P=0.0401) have significant influence on entrepreneurship attitudes.

SELFEST with a t-value of 1.744 (P=0.0822) and REL_ISLAM at 1.8780 (P=0.0614) are significant at 10% level of significance. Other cultural attributes (INDCOL, UAV, and REL_TRAD) are not statistically significant in explaining business start up for the respondents. In addition to the individual factor-contribution, the log likelihood gives an overall picture of the model. The log likelihood values of 390.1845 indicate that the model is well-fitted to the data and that it is good enough to explain the relationship between cultural attributes and entrepreneurship attitude. Also, the independent variables all have the expected signs (except Rel-Trad) thus enabling a conclusion to be drawn that the coefficients of explanatory variables have influence on the dependent variables (entrepreneurship attitude). A positive coefficient for Power-Distance is however, contrary to the a priori expectation particularly claims by Shane[36], Eroglu, and Picak[37] as well as Abzari and Safari[38], that Power-Distance is negatively correlated with entrepreneurship. Considering all of the above, therefore, H_0 is rejected and H_1 accepted. That means that culture has significant influence on business ownership and thus entrepreneurship attitude among Nigeria's major ethnic groups.

(ii) Business Ownership

Respondents were asked whether they alone or with others, are currently the owners of business they help manage (BUSOWN). The regression result of their responses is presented in Table 3.

Table 3
Logistic Regression Results for BUSOWN (Preference for Business Ownership)

Variable	*Coefficient*	*Std Error*	*t-Statistic*	R^2	*Log likelihood*
PD	0.014887	0.003868	3.848399	0.849057	363.5680
MF	0.002879	0.003818	0.754267		
INDCOL	-0.004523	0.003877	-1.166522		
UAV	0.002130	0.004404	0.483613		
REL_CHRIST	0.047650	0.018209	2.616849		
REL_ISLAM	0.059473	0.018483	3.217680		
REL_TRAD	-0.003110	0.075225	-0.041343		

Source: Computed by the Researcher, using SPSS v. 17

Table 3 compares the dependent variable (culture) with a proxy of the independent variable (Busown). The Estimated model is LogBUSOWN = 0.014887PD + 0.002879MF−0.004523INDCOL + 0.002130UAV + 0.047650REL_CHRIST + 0.059473REL_ISLAM –0.003110REL_TRAD

The result above shows that the model is good, as it has an R^2 of 0.849057, which means that 84.91% in the dependent variable (entrepreneurship attitude) is explained by the variables (PD, MF, INDCOL, UAV, SELFEST, REL_CHRIST, REL_ISLAM, and REL_TRAD); while the error term takes care of the remaining 15.09%. And since R^2 is greater than 0.5, H_0 is therefore rejected and H_1 accepted.

In examining the individual contributions of cultural factors to the dependent variable, the t-statistics indicate that the model is useful in determining if the independent variables have any statistically significant influence with regards to some of the cultural factors. PD, for example, has a computed t-statistic of 3.848399 (P=0.0001) signifying that it is significant at 1% level of significance. Other factors that have significant influence on BUSOWN at 1% level of significance are REL_CHRIST with t-value of 2.616849

(P=0.0093), and REL_ISLAM at 3.217680 (P=0.0014). Other cultural factors (MF, INDCOL, UAV, and REL_TRAD) have no significant influence on business ownership according to this model.

In addition to the individual factor-contribution, the log likelihood gives an overall picture of the model. The log likelihood values of 363.5680 indicate that the model is well-fitted to the data and that it is good enough to explain the relationship between cultural attributes and entrepreneurship attitudes. Also, most of the independent variables have the expected signs (except INDCOL and Rel-Trad) thus enabling a conclusion to be drawn that the coefficients of explanatory variables have influence on the dependent variables (entrepreneurship attitudes). A positive coefficient for Power-Distance is however, contrary to the a priori expectation particularly claims by Shane (1993), Eroglu and Picak (2011), as well as Abzari and Safari (2010), that Power-Distance is negatively correlated with entrepreneurship attitudes.

Considering all of the above therefore, H_0 is rejected and H_1 accepted. That means that culture has significant influence on business ownership and thus entrepreneurship attitude among Nigeria's major ethnic groups.

(iii) Financing a Business

Respondents were asked if they have personally provided funds for a new business started by someone else in the past three years. The regression result of their responses is presented in Table 4.

Table 4
Financing Business

Variable	*Coefficient*	*Std Error*	*t-Statistic*	R^2	*Log likelihood*
PD	0.003777	0.003175	1.189454	0.626065	421.7898
MF	0.001683	0.003134	0.537174		
INDCOL	0.006160	0.003183	1.935367		
UAV	-0.009369	0.003615	-2.591703		
REL_CHRIST	0.051577	0.014948	3.450542		
REL_ISLAM	0.053059	0.015173	3.496995		
REL_TRAD	-0.007875	0.061752	-0.127531		

Source: Computed by the Researcher, using SPSS v. 17

Table 4 presents the regression results of the model comparing the independent variable (culture) with a proxy of the independent variable (Busfin). The Estimated model is

Log BUSFIN = 0.003777PD + 0.001683MF + 0.006160INDCOL +0.011294SELFEST – 0.009369UAV + 0.051577REL_CHRIST + 0.053059REL_ISLAM – 0.007875REL_ TRAD

The results above show that the model is a good fit as it has an R^2 of 0.626065, which means that 62.61% in the dependent variable (entrepreneurship attitude) is explained by the cultural variables (PD, MF, INDCOL, UAV, SELFEST, REL_CHRIST, REL_ISLAM, and REL_TRAD); while the error term takes care of the remaining 37.39%. Since this is greater than 0.5, H_0 is therefore rejected and H_1 accepted.

The t-statistics indicate that the model is useful in determining if the independent variables have any statistically significant influence with regards to the various cultural factors. It shows at 1% level of significance

(99% confidence level), 3 cultural factors were significant. SELFEST at 2.967410 (P=0.0033); UAV at -2.59170 (P= 0.0100); REL_CHRIST at 3.450542 (P= 0.006), and REL_ISLAM at 3.496995 (P=0.0005) are very significant in explaining the dependent variable. In addition, INDCOL at 1.896253 (P+0.0589) is significant at 10% level of significance. However, PD, MF and REL_TRAD have no significant impact on business finance according to the model. In addition to the individual factor-contribution, the log likelihood gives an overall picture of the model. The log likelihood values of 421.7898 suggest that the model is fairly-fitted to the data and that it is good enough to explain the relationship between cultural attributes and entrepreneurship attitudes. Also, the independent variables all have the expected signs (except Rel-Trad) thus enabling a conclusion to be made that the coefficients of explanatory variables have influence on the dependent variables (entrepreneurship attitudes). It needs be noted however that the negative coefficient for UA is in line with a priori expectation since entrepreneurship attitude is associated with low UAV.

Considering all of the above therefore, H_0 is rejected and H_1 accepted. That is to say, culture has significant influence on business finance and therefore entrepreneurship attitude among Nigeria's three major ethnic nationalities.

FINDINGS AND CONCLUSIONS

Below are a few of the major findings and conclusions of this study.

(a) It confirms that culture has significant influence on entrepreneurship in the context of Nigeria, a sub-Saharan African country, thus confirming several earlier studies that culture has influence on entrepreneurship.

(b) However, contrary to Shane (1992), Erogblu and Picak (2011), and Abzari and Safari (2010) and most other studies in this area, this study finds Power-Distance to be positively correlated with entrepreneurship attitudes and Uncertainty Avoidance and individualism are negatively correlated with entrepreneurship since they show negative signs. It therefore means that unlike what obtains in several earlier studies including the ones mentioned above, cultures with high levels of individualism may not be more entrepreneurial in the context of the three major ethnic groups in Nigeria. Also, cultures with higher PD (and not those with lower PD as is the case with the studies earlier mentioned) are more likely to encourage entrepreneurial careers.

(c) Religious factors have significant influence on entrepreneurship attitudes of Nigerians as observed from the three ethnic nationalities. This goes to confirm several such assertions by many scholars from Weber (1904) onwards.

Recommendations

In view of the foregoing, the following recommendations are made:

(a) The National Orientation Agency (NOA) should publicise positive cultural attributes of Nigerians particularly those that encourage entrepreneurial drive. This will assist greatly as Nigerians will need to understand their positive traits and will thus reduce/limit ethnic tensions, which negatively impact on the psyche of the citizens of the country.

(b) As studies by Mitchel *et al.* (2002), Bosma *et al.* (2009) and the various GEM annual country reports among several other studies show, entrepreneurship cognitions between countries, regions or ethnic nationalities within countries differ. However, comparative studies on the entrepreneurship attitudes of the Nigerian ethnic groups are rare, if available. The Federal Ministry of Commerce and the Small and Medium Enterprises Development Agency (SMEDAN) should consciously sponsor studies that would investigate the entrepreneurship attitudes of Nigeria's many ethnic groups. This way, it would be possible to understand which ethnic cultures encourage entrepreneurship more as well as the cultures that retard entrepreneurship, if any. The factors responsible for either stance can then be publicized for the benefit of all Nigerians. Since ethnic conflicts sometimes manifest in competition between ethnic groups, publicizing the outcome may encourage others to improve their entrepreneurship attitudes.

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