The IGBO Man Perspectives of Apprenticeship and Entrepreneurial Development in Southeast Nigeria: Implications to Economic Growth

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Abstract:-This study examined the Igbo man perspectives of apprenticeship and entrepreneurial development in southeast Nigeria: Implications to economic growth using the Principal Components Analysis (PCA) and the regression model of the Ordinary Least Square (OLS). A total sample of four hundred and eighty two (482) SMEs owners of Igbo extraction were the respondents of this study. From the result of the PCA, the principal components that serves as motivations apprenticeship by Igbo entrepreneurs is the cash infusion giving to apprentice as start-up capital. Secondly, the principal components form the Igbo man perspectives of factors influencing entrepreneurial development is tolerance for risk and thirdly, the principal components from the challenges in the Igbo man apprenticeship system is that apprentices sometimes steals from their masters and adds to their start-up capital. Regression results revealed that all the three coefficients (The motivations for apprenticeship by Igbo entrepreneurs; Igbo man perspective of factors influencing entrepreneurial development; and challenges in the Igbo man apprenticeship system) have significant effect on entrepreneurial development in southeast Nigeria. The study recommends that the government of Nigeria and African by extension should adopt the practice of the Igbo man apprenticeship system and entrepreneurial development in southeast Nigeria as a strategy for the development African entrepreneurship. This is because of its sustainability in SMEs development and poverty reduction among the Igbo ethnic group in Nigeria among others.

Key word: Nigeria, Apprenticeship, Entrepreneurial Development, Igbo Man

I. INTRODUCTION

Entrepreneurial development has helped in shaping the economy of most of the advanced and developed nations for over a century now. The phenomenal concept has been a topical issue in both developed and developing economies because of the significant and critical roles entrepreneurship has played in building most of the advanced and emerging economies. It has been asserted that entrepreneurship play critical role by contributing to economic growth, job creation, and national income and hence to national prosperity and competitiveness (Baig, 2007; Abdul & Idris, 2014). According to Diyoke (2014), entrepreneurship is the dynamic process of creating incremental wealth. The wealth is created by individuals who assume the major risks in terms of equity,

time and career commitment or provide value for some products, but value must somehow be infused by the entrepreneur by receiving and locating the necessary skills and resources.

Entrepreneurship is also the process of managing your own business enterprise. Whereas entrepreneurs are individuals or persons, entrepreneurship is a process. At times the terms "entrepreneur" and "owner manager" are used interchangeably as if they mean the same thing because entrepreneurship is inextricably linked to small business management. Entrepreneurs are often both owners and employees and a considerable number of them are small business owners or managers. Such people are risk takers, creative, innovative, independent, hardworking and posses other qualities that are driving force behind any entrepreneurial activities in the economy. entrepreneurial activities significantly affect the economy by building the economic base and providing jobs (Diyoke, 2014). Entrepreneurship is as old as man, but among scholars the process arguably started with the works of Schumpeter 1947. Schumpeter was probably the first scholar to theorize about entrepreneurship, and the field owed much to his contributions. His fundamental theories are often referred to as Mark I and Mark II. In Mark I, Schumpeter argued that the innovation and technological change of a nation come from the entrepreneurs, or wild spirits. He coined the word Unternehmergeist, German for "entrepreneur-spirit", and asserted that the doing of new things or the doing of things that are already being done in a new way stemmed directly from the efforts of entrepreneurs (Fontana, Nuvolari, Shimitzu & Vezzulli, 2012; Schumpeter, 1947).

Schumpeter developed Mark II while a professor at Harvard. Many social economists and popular authors of the day argued that large businesses had a negative effect on the standard of living of ordinary people. Contrary to this prevailing opinion, Schumpeter argued that the agents that drive innovation and the economy are large companies which have the capital to invest in research and development of new products and services and to deliver them to customers more cheaply, thus raising their standard of living (Fontana, Nuvolari, Shimitzu & Vezzulli, 2012; Schumpeter, 1942). The

theories and postulations of Schumpeter are stressed upon by Naude (2011) in Idam, (2014). Naude (2011) contends that development is entering a phase, entrepreneurship will increasingly play a more important role. He adduces three reasons for this development. The first is that the managed economy of the 1970s - 2000 in the West, characterized by reliance on big business and mass production has given way to a so-called entrepreneurial economy, where knowledge-driven goods and services are more flexibly provided by smaller creative class. Secondly, impressive growth in the emerging economies, notably Brazil, Russia, India and China, has been driven by innovative entrepreneurial revolution. Thirdly, in the least developed countries, where dependency is high, donor agencies have been shifting emphasis in development cooperation towards private sector development thus; entrepreneurship will contribute to growth and employment creation in advanced, emerging and least developed economies alike.

In the African context and Southeast Nigeria in particular, it has been asserted that successful entrepreneurs attributed the success of their businesses that are mainly Small and Medium Enterprises (SMEs) to apprenticeship training they went through before venturing into the global trade. Although there are perspectives to apprenticeship training but the apprenticeship system explored in this study is peculiar to the Igbo ethnic group in southeast Nigeria, although they have been replicating their apprenticeship system in every part of the country where their businesses are domiciled. Extant literature is replete with studies on apprenticeship. According to Akande (n.d), apprenticeship may be considered as a system of learning whereby an individual learns a professional skill in a practical way through a structured program of onthe-job training. It usually involves acquiring knowledge, mechanical skills and the development of an attitude or discipline for a particular job. Apprenticeship is also described as a combination of on-the-job training and related technical instruction in which workers learn the practical and theoretical aspects of a skilled occupation, craft or trade.

Expatiated further apprenticeship may also take the form of helping new employees to relate their previous education to the requirement of their new job. Apprenticeship also incorporates a system of guidance and counselling as most apprentices are required to live with their masters so as to acquire through a process of acculturation the necessary altitude, diplomacy and decorum required for the job. It is the combination of these depositions that make graduates of apprenticeship training entrepreneurs instead of job seekers (Anyanwu, 1981; Craig and Bittel, 1967; Akande, n.d). The apprenticeship system practiced among the Igbo ethnic group is arranged in such a way that the apprentice lives and serves his master for a specified period of years after which the master settles the apprentice by setting him up in business; that is, paying his rent for two or three years and also giving him a cash infusion so that he can venture into business and start trading. This system of funding is called locally generated venture capital. Analysts have described the Igbo apprenticeship system that governs their entrepreneurship development as the largest business incubator platform in the world. It is therefore imperative to carry out the study of this magnitude to substantiate the assertion.

Statement of the Problem

This study was informed by the growing interest and emphasis on entrepreneurship and entrepreneurial development that stem from the high unemployment rate, high level of poverty and slow economic growth rate in Nigeria. It has been asserted in extant literature that entrepreneurship development is the key to poverty eradication, employment generation and rapid economic development (Idam. 2014: Salami, 2013; Oyelola, Ajiboshin, Raimi, Raheem & Igwe, 2013; Thaddeus, 2012; Abimbola & Agboola, 2011; Agboli & Ukaegbu, 2006; Ariyo, 2005; Adejumo, 2001). Consequently, successive governments in Nigeria over the past four decades have evolved policies and programmes, aimed at developing entrepreneurship through the establishment of various apprenticeship and skill acquisition programmes aimed at the development of small and medium scale enterprises (SMEs). In spite of all the efforts, poverty soars and remained one of the highest in the world behind India, unemployment rate is also high. Presently, over 100 million Nigerians live below poverty line on less than US\$1 a day and with the percentage of the population in abject poverty rising from 54.7% in 2004 to 79% in 2018 (NBS, 2018). Above all, Nigeria's human development index (HDI) remains abysmally low at 0.453, much below world weighted average of 0.7 (UNDP, 2018). However, Small and Medium Enterprises owned by entrepreneurs of southeastern Nigeria extraction seems to be relatively more successful when compared with similar businesses owned by people from other extractions in Nigeria, thus suggesting that there is behind the scene principles that propels their business success which therefore warrants an empirical study of this nature.

Objectives of the Study

The main objective of this study is to juxtapose apprenticeship and entrepreneurial development in Southeast Nigeria from the Igbo man perspective. From this objective, the following specific objectives are derived: to determine the motivations for apprenticeship by Igbo entrepreneurs; to identify the Igbo man perspective of factors influencing entrepreneurial development; and to find out if there are challenges in the Igbo man apprenticeship system and entrepreneurial development.

Hypotheses for the Study

Hypothesis One

Ho₁: The motivations for Apprenticeship by Igbo entrepreneurs have no significant effect on entrepreneurial development in southeast Nigeria.

Ha₁: The motivations for Apprenticeship by Igbo entrepreneurs have significant effect on entrepreneurial development in southeast Nigeria.

Hypothesis Two

Ho₂: Igbo man perspectives of factors influencing entrepreneurial development have no significant effect on entrepreneurial development in southeast Nigeria.

Ha₂: Igbo man perspectives of factors influencing entrepreneurial development have significant effect on entrepreneurial development in southeast Nigeria.

Hypothesis Three

Ho₃: Challenges in the Igbo man apprenticeship system have no significant effect on entrepreneurial development in southeast Nigeria.

Ha₃: Challenges in the Igbo man apprenticeship system have significant effect on entrepreneurial development in southeast Nigeria.

Justification for the study

This study is significant in a number of ways. First, knowledge from apprenticeship and entrepreneurial development in Southeast Nigeria will help to reinforce the performance and sustainability SMEs in Nigeria. The success of the Igbo man perspective of apprenticeship and entrepreneurial development will help to foster the emergence for new ones. Arguably, these would impact on the development of SMEs entrepreneurship and the economy at large. Second, this study will not only swell literature of apprenticeship and entrepreneurial development, but also, it will add fresh voice to the literature in the underreported zone like other African region.

III. EMPIRICAL LITERATURE

Orugun, Johnson and Akeem (2014) carried an exploratory study of Igbo entrepreneurial activity and business success in Nigeria as the panacea for economic growth and development using a descriptive statistical tool. The study revealed that the Igbo entrepreneurial activities are the panacea for the Nigerian economic growth and development, and that Igbo Trading Apprenticeship System is a business success factor. Abdul-kemi (2014) examined entrepreneurship and economic development in Nigeria: evidence from small and medium scale enterprises financing. The study used correlational research design using secondary data for a period of 22 years (1992-2013). Autoregressive Integrated Moving Average (ARIMA) model was applied in the analysis, the study found that aggregate commercial banks financing of SMEs has significant positive impact on the economic growth and development of Nigeria.

The study also found that Microfinance banks' financing in the area of transportation and commerce, manufacturing and food processing and other activities have significantly impacted on economic growth and development of Nigeria during the period. Udu (2015) examined apprenticeship orientation and performance of microbusinesses in Ebonyi State, Nigeria. The study adopted Pearson's product moment correlation, and p-value. The result shows positive values for Apprentice Activities and Level of

Service Quality (LSQ) (r=38.2%), Apprentice Activities and Level of Firm Sustainability (LFS) (r=88%), LFS (r=48%), Apprentice activities and Educational Qualification of Apprentice (EQA) (r=10.1%) and a negative value for Apprentice Activities and Age of Apprentice (AoA) (r= -55%). The study found that micro-businesses engagement of youthful apprentices enhance their positive performance and should be explored by more micro-businesses. Ayegba and Omale (2016) examined the glaring factors rocking entrepreneurial development in Nigeria, the paper relied on incisive primary and secondary investigation, analysis and interpretation of data using chi-square statistical techniques. This study revealed that much is yet to be done towards boosting entrepreneurial development in Nigeria. The results also indicate that factors such as low power supply, infrastructural decay, corruption, inadequate skills, inadequate credit facilities, government policy and security must be addressed quickly in order to create enabling environment for SMEs and other business corporations. Fajobi, Olatujoye, Amusa and Adedoyin (2017) examined the challenges of apprenticeship development and youths' unemployment in Nigeria using descriptive and content analysis. Findings from the study revealed that Nigerian economy cannot develop until apprenticeship is encouraged among the youths.

Olusegun and Olanrewaju (2017) examined traditional apprenticeship, normative expectations and sustainability of masonry vocation in Ibadan, Nigeria using data derived from interviews and focused discussions among 30 masons and 16 apprentices. The results show that normative relations between masons and apprentices increase apprentices' anxiety. There are indications that apprentices find challenging some of the conventions that dictate the process of training. Whereas master masons feel less concern about traditional expectations on apprentices, many apprentices believe that some aspects of informal apprenticeship training process emphasize disturbing social and economic interaction with attendant disinterestedness among apprentices. Onyima, Nzewi and Chiekezie (2017) investigated the effects of apprenticeship and social capital on new business creation process of Igbo 'Immigrant' entrepreneurs in Wukari Taraba State using descriptive statistics.

The study revealed that while apprenticeship had significant effects on pre-founding activities—when the business was taking off, social capital became important when the business had been established. Apprenticeship had significant effects on business idea generation, idea modification, business location and financing while social capital served as source of insurance services and access to information. Inyang and Agwadu (2017) carried out a study on empowering the rural poor through vocational skills acquisition: Nasarawa state in focus using descriptive statistics in the analysis of data. The research asserts that among the common vocational skills spread across Nasarawa State are carpentry/wood work and tailoring services. The study indicates that the respondents (80%) were satisfied with

their training programs, whereas 83.32% of participants affirmed that vocational skills acquisition would greatly improve the quality of life of the rural poor. About 66.6% of the trainees were however of the opinion that the cost of their training was high. Olulu and Udeorah (2018) examined contract of apprenticeship and employment generation in Nigeria. The study relied on extensive literature in examining the two apprenticeship contracts viz; the customary apprenticeship scheme as practiced in the Ibo land and other tribes in Nigeria and the apprenticeship practice. Findings revealed that the state is a party to apprenticeship contract, and the education and Training Authority (SETA) play major role in the entire apprenticeship scheme.

Literature gap

On the strength of the preceding review, it is evident studies on apprenticeship and entrepreneurial development are rife with varying literally perspectives. However, looking at the challenges facing Nigeria in terms of high unemployment rate, high level of poverty and slow economic growth rate, none of the studies has sought to know which of the apprenticeship system can best address the poverty and unemployment problem in the country. Yet it has been asserted in extant literature that entrepreneurship development is the key to poverty eradication, employment generation and rapid economic development (Idam, 2014; Salami, 2013; Oyelola, Ajiboshin, Raimi, Raheem & Igwe, 2013; Thaddeus, 2012; Abimbola & Agboola, 2011; Agboli & Ukaegbu, 2006; Ariyo, 2005; Adejumo, 2001). Perceptibly, the southeast Nigeria has been asserted to have the lowest poverty rate in the country and also operate viable proportion of SMEs. Analysts have also described the Igbo apprenticeship system that governs their entrepreneurship development as the largest business incubator platform in the world. Consequently, the above literature gap and assertions warrants an empirical probing to examine the apprenticeship system and entrepreneurial development in Southeast Nigeria from the Igbo man perspective with the obvious aim of finding a better approach to address Nigeria's ' high unemployment rate, high level of poverty and slow economic growth rate that arguably is less prevalent in southeast Nigeria.

III. METHODOLOGY

Research Design

This work is descriptive. It is concerned with the collection of data for the purpose of describing apprenticeship and entrepreneurial development in Southeast Nigeria from the Igbo man perspective. It involved sampling by using structured questionnaire to generate data that were analyzed so as to gain insight into the topic under study.

Population and Sample Size for the Study

The population of the study consists of all the registered SMEs in southeast Nigeria. Multi-staged sampling technique was used to determine the sample size of the study.

This was carried out in three stages. According to Chukwuemeka (2002), multi-stage sampling is somewhat the combination of the other sampling techniques. At least, it combines two methods. The first stage was the division of the country into economic hubs that are in the five states in southeast Nigeria using purposive or judgmental sampling. Judgmental sampling is a non-probability sampling that makes use of typical cases among the population to be studied which the researcher believes will provide him or her with the necessary data needed (Micheal et al, 2012). The second stage was a sub-sampling also called a two-stage sampling. This involved a random selection of one hundred successful SMEs from each of the economic hubs of the five states in southeast Nigeria. In the third stage otherwise called the three-stage sampling, the simple random sampling technique was also used to select SMEs that is owned by an Igbo man from each economic hub of the five states in southeast Nigeria. In the final analysis, a total of four hundred and eighty two (482) SMEs were selected. The table below shows the population of registered SMEs in the selected states in the six geopolitical zones and the sample size.

Table 1: Distribution of firms by Population and Sample

Selected SMEs owned by Igbo men in southeast Nigeria	Population of registered SMEs	Sample
Anambra State	100	97
Abia State	100	99
Imo State	100	96
Enugu State	100	94
Ebonyi State	100	96
Total	500	482

Source: Field survey, 2018

Area of Study

The study was executed in southeast Nigeria. The region houses two of largest markets in West Africa – Ariaria Market Aba, Abia State and Onitsha Main Market, Anambra State. There is also Ogbaete Main market in Enugu State, Abakaliki Main Market in Ebonyi State and Owerri Main Market in Imo State. These states play leading roles as centers for the economic activities in the region. People from across Nigeria and West Africa come to goods from these markets.

Questionnaire Design, testing, and distribution

The questionnaire for this study was designed based on a literature review of previous studies (for example (Orugun, Johnson & Akeem, 2014; Abdul-kemi, 2014; Udu, 2015; Ayegba & Omale, 2016; Fajobi, Olatujoye, Amusa & Adedoyin, 2017; Olusegun & Olanrewaju, 2017; Onyima, Nzewi & Chiekezie; 2017; Inyang & Agwadu, 2017; Olulu & Udeorah, 2018). The questionnaire had two sections. The first section of the questionnaire contained general information about the respondents. It included ten background questions. The second section was a scaled items designed to collect

information relating to objectives of the study. The responses to scale items measuring all the responses were measured using a four-point likert-type scale anchored by strongly agree (4), Agree (3), Disagree (2), and Strongly Disagree (1) respectively. Five trained research assistants were used in the administration of the questionnaire. They assisted the respondents to complete the questionnaire through an interactive process; thus making sure the questionnaire was completed on the spot. However, before the final questionnaire was administered to the respondents, it was pretested on twenty SMEs owners. Using their responses, the instrument was subjected to reliability test using the Cronbach's Alpha. The Cronbach's Alpha reliability statistics is 0.957 or 96%, which is considered sufficiently high and above the cutoff point of 0.6 suggested by Hair, Bush, and Ortinua (2006).

Data Analysis Technique

The Principal Component Analysis (PCA) and regression analysis of the Ordinary Least Square (OLS) were used to conduct the various analysis of this study. Principal Component Analysis (PCA), with varimax rotation, was used to process responses to the responses of the SMEs owners of Igbo extraction; while t-statistic using the regression technique Ordinary Least Square (OLS) was used to test the hypotheses of the study. The PCA was initially used to process the data because the researcher sought to reduce large amount of data to uncover the underlying principal factors that explains motivations for Apprenticeship by entrepreneurs; Igbo man perspective of factors influencing entrepreneurial development; and challenges in the Igbo man apprenticeship system and Entrepreneurial Development in southeast Nigeria. All the analyses were done using SPSS version 23.

Model Specification

The active learning model was modified by Akinruwa, Awolusi and Ibojo (2016) to examine the determinants of small and medium enterprises (SMEs) performance in Nigeria. The research employed funds, managerial skills, government policy, education and facilities as the determinants of SMEs. The study empirically stated its model as follows:

$$SME = f(FND, MAS, GOP, EDN, FAC)....(1)$$

SME= Small and medium enterprises proxied by industrial growth rate

FND = Funds

MAS = Managerial skills proxied by expenditure on skill acquisition

GOP = Government policy

EDN = Education

FAC = Facilities proxied by government expenditure on power

Using the knowledge gained from the above theoretical model, this study examined the effect of effect of apprenticeship on entrepreneurial development in Southeast Nigeria from the Igbo man perspectives by adopting Akinruwa, Awolusi and Ibojo's type of model and modifying it to incorporate the weighted mean of the motivations for Apprenticeship by Igbo entrepreneurs; Igbo man perspective of factors influencing entrepreneurial development; and challenges in the Igbo man apprenticeship system and entrepreneurial development in southeast Nigeria as explanatory variables while years of business experience as was the dependent variable. Thus, the model for the study is stated as follows:

Model: effect of apprenticeship on entrepreneurial development in Southeast Nigeria from the Igbo man perspective

The structural form of the model

$$EDEV = f (MOA, IMP, CHA)....(2)$$

The mathematical form of the model

EDEV =
$$\beta_0 + \beta_1 \text{ MOA} + \beta_2 \text{ IMP} + \beta_3 \text{ CHA}$$
....(3)

The econometric form of the model

EDEV =
$$\beta_0 + \beta_1 \text{ MOA} + \beta_2 \text{ IMP} + \beta_3 \text{ CHA} + \mu_i \dots (4)$$

Where;

EDEV = Entrepreneurial Development

MOA = Motivations for Apprenticeship

IMP = Igbo Man Perspective

CHA = Challenges in the Igbo Man Apprenticeship System

f = Functional relationship

 β_0 = the intercept or the constant

 $\beta_1 - \beta_3$ = the co-efficient of the explanatory variables

 μ_t = Stochastic error term.

IV. ANALYSIS OF SURVEY RESULT

SMEs owners of Igbo extraction were the respondents of this study. The templates of the questionnaire items were put together based on a literature review of previous studies and a pilot interview survey of 20 SMEs owners of Igbo extraction. This enabled us to come up with a comprehensive closed ended questionnaire instrument that were developed and distributed to the final respondents. Thus, 482 copies of the questionnaire were produced and administered.

Demographic Profile

Table 2: Distribution of Respondents According to Gender

Variable	Frequency	Percent (%)	Cumulative (%)
Male	479	99.4	99.4
Female	3	0.6	100
Total	482	100	

Source: Field Survey, 2018

Table 2 shows that four hundred and ninety-six of the respondents representing 99.4% of the respondents are males while three of the respondents representing 0.6% of the respondents are females.

Table 3: Distribution of Respondents According to Age

Variable	Frequency	Percent (%)	Cumulative (%)
18-32	23	4.8	4.8
31-40	48	10.0	14.8
41-50	238	49.4	64.2
51-60	93	19.2	83.4
61-70	80	16.6	100.0
Total	482	100.0	

Source: Field Survey, 2018

As shown in table 3, twenty three respondents, representing 4.8% of the respondents are between the ages of 18-32. Forty-eight respondents, representing 10.0% of the respondents, are between the ages of 31-40. Two hundred and thirty-eight respondents, representing 49.4% of the respondents, are between the ages of 41-50. Ninety-three respondents, which account for 19.2% of the respondents are between the ages of 51-60, while eighty respondents that account for 16.6% of the respondents, are between the ages of 61-70.

Table 4: Distribution of Respondents According to Educational Qualification

Variable	Frequency	Percent (%)	Cumulative (%)
Primary	15	3.1	3.1
Secondary	439	91.1	94.2
Tertiary	28	5.8	100.0
Total	482	100.0	

Source: Field Survey, 2018

From table 4, all the respondents had formal education. Fifteen respondents representing 3.1% of the respondents had primary education. Four hundred and thirty-nine respondents representing 91.1% had secondary education while twenty-eight respondents representing 5.8% had tertiary education.

Table 5: Distribution of Respondents According to Years of Business Experience

Variable	Frequency	Percent (%)	Cumulative (%)
1-5	15	3.1	3.1
6-10	85	17.7	20.8
11-15	97	20.1	40.9
15-30	285	59.1	100.0
Total	482	100.0	

Source: Field Survey, 2018

With respect to business experience in private label, table 5 reveals that fifteen respondents representing 3.1% of the respondents had 1-5 years business experience. Eighty-five respondents representing 17.7% of the respondents had 6-10 years business experience. Ninety-seven respondents representing 20.1% of the respondents had 11-15 years business experience, while two hundred and eighty-five respondents representing 59.1% of the respondents had 15-30 years business experience.

Table 6: Distribution of Respondents According to Marital Status

Variable	Frequency	Percent (%)	Cumulative (%)
Married	396	82.2	82.2
Single	68	14.1	96.3
Widow/Widower	18	3.7	100.0
Total	482	100.0	

Source: Field Survey, 2018

From table 6, three hundred and ninety-six respondents representing 82.2% of the respondents are married. Sixty-eight respondents representing 14.1% of the respondents are single, while eighteen respondents representing 3.7% of the respondents are widow/widower.

Factor Analysis

The motivations for Apprenticeship by Igbo entrepreneurs; Igbo man perspective of factors influencing entrepreneurial development; and challenges in the Igbo man apprenticeship system and Entrepreneurial Development in southeast Nigeria were separately subjected to PCA using SPSS version 23. Prior to performing PCA, the suitability of the data for factor analysis was assessed using Kaiser-Meyer-Oklin measure of sampling adequacy and the rotation method is the varimax with Kaiser Normalization. For motivations for Apprenticeship by Igbo entrepreneurs items, the KMO value was 0.811; for Igbo man perspective of factors influencing entrepreneurial development items the KMO is 0.871; and for challenges in the Igbo man apprenticeship system and Entrepreneurial Development in southeast Nigeria item the KMO is 0.866; thus, all exceeding the recommended value of 0.6 minimum value suggested for a good factor analysis (Pallant, 2010 citing Kaiser 1970, 1974) and Barlett's Test of Spericity (Pallant, 2010 citing Barlett, 1954) reached

statistical significance, supporting the factorability of the correlation matrix. Evidence from the analysis is shown in the table below:

Table 7: Factor analysis results with varimax rotation of motivations for Apprenticeship by Igbo entrepreneurs

Principal Component: The cash infusion giving to apprentice as startup capital			
Motivation 3	The cash infusion giving to apprentice as startup capital	0.972	
Motivation 2	Apprentices have the opportunity to learn a trade of their choice and dream	0.956	
Motivation 1	Apprentices have the opportunity to own their own business after apprentice	0.955	
Motivation 7	Apprenticeship as viable option instead of attending the university	0.941	
Motivation 8	Practical, relevant training and experience gotten from apprenticeship	0.933	
Motivation 6	Excellent startup to profession career/ business in the global trade	0.912	
Motivation 4	The level support available to the apprentice	0.818	
Motivation 5	Overall success and satisfaction of apprenticeship	0.661	
Cum % variance		83.166	

Source: Field Survey, 2018

Note that items eigen values of less than 0.4 were excluded.

Table 7 above shows the eigen values with respect to items regarding the motivations for Apprenticeship by Igbo entrepreneurs. One principal component emerged; the output shows that the appropriate label for the item is the cash infusion giving to apprentice as startup capital.

Table 8: Factor analysis results with varimax rotation of Igbo man perspective of factors influencing entrepreneurial development

Principal Component: Tolerance for risk			
Factor 2	Tolerance for risk	0.971	
Factor 3	Perseverance	0.966	
Factor 6	Responsiveness to opportunity	0.942	
Factor 5	Self-discipline	0.932	
Factor 4	Passion for the trade	0.911	
Factor 7	Self-confidence	0.877	
Factor 7	Family background	0.876	
Factor 10	Competitiveness	0.711	
Factor 9	Need for achievement/recognition	0.676	
Factor 8	Cultural values	0.611	
Cum % variance		77.659	

Source: Field Survey, 2018.

Note that items eigen values of less than 0.4 were excluded.

As shown in Table 8 above, all items on the Igbo man perspective of factors influencing entrepreneurial development have high eigen values. However, the principal component extracted is tolerance for risk followed by perseverance, responsiveness to opportunity, self-discipline and passion for the trade. These components or factor have high eigen values above 0.9.

Table 9: Factor analysis results with varimax rotation of challenges in the Igbo man apprenticeship system and Entrepreneurial Development in southeast Nigeria

Principal Component: Apprentices sometimes steal from their masters and add to their startup capital			
Challenge 1	Apprentices sometimes steal from their masters and add to their startup capital	0.981	
Challenge 2	Apprentices sometimes dupe their masters and runaway with the money	0.976	
Challenge 6	Some masters find reasons not to setting up their apprentice in business when due	0.935	
Challenge 8	Apprentices sometimes lack patience to be mentored/Get-rich-quick syndrome	0.912	
Challenge 1	Apprentices sometimes steal from their masters and add to their startup capital	0.981	
Challenge 2	Apprentices sometimes dupe their masters and runaway with the money	0.976	
Challenge 6	Some masters find reasons not to setting up their apprentice in business when due	0.935	
Challenge 8	Apprentices sometimes lack patience to be mentored/Get-rich-quick syndrome	0.912	
Challenge 7	Apprentices sometimes do not have drive for the particular trade	0.933	
Challenge 4	Poor cash infusion as a startup capital	0.857	
Challenge 3	Business mortality as a result of government policies	0.890	
Challenge 5	Mismanagement of business by the master (taking chieftaincy titles etc)	0.607	
Challenge 9	Apprentices sometimes contend with generational curse and manmade affliction	0.666	
Cum % variance		75.471	

Source: Field Survey, 2018

Table 9 above shows the challenges in the Igbo man apprenticeship system and entrepreneurial development in southeast Nigeria. The principal component revealed that apprentices sometimes steal from their masters and add to the cash infusion given to them as startup capital. This is followed by other major challenges like: apprentices sometimes dupe their masters and runaway with the money, some masters find reasons not to setting up their apprentice in business when due, apprentices sometimes lack patience to be mentored/Getrich-quick syndrome and apprentices sometimes do not have drive for the particular trade.

Regression Analysis Result

Table 10: Regression Result on apprenticeship and entrepreneurial development in southeast Nigeria: The Igbo man perspective

Model	В	Std. error	T	Sig.
Constant(C)	0.175	0.020	8.579	0.004
Motivations for Apprenticeship	0.689	0.062	11.143	0.000
Igbo Man Perspective	0.744	0.103	7.254	0.001
Challenges	-0.155	0.026	-5.931	0.002
R	0.911			
\mathbb{R}^2	0.888			
Adj. R ²	0.861			
F-statistic	221.501			0.000

Source: Field Survey 2018

Dependent Variable: Years of Business Experience

To ascertain the effect of apprenticeship on entrepreneurial development in Southeast Nigeria from the Igbo man perspective, the weighted mean of the three independent variables included in the model were regressed on the dependent variable to enable us determine the nature of relationship between the dependent and independent variables, effect of the three independent variables on the dependent variable, the overall fitness of the model using the F-statistics and probability value and the level of significance of the independent variables in influencing the dependent variables using the t-test and probability value. The table above shows the regression result. It also shows the precision of the model which was analyzed using economic a priori criteria and statistical criteria.

Discussion of Findings

Discussion based on economic a priori criteria

Discussion using this criterion enables us to determine the nature of relationship between the dependent and independent variables. In this case, the sign and magnitude of each variable coefficient are evaluated against theoretical or economic a priori criteria/expectations. As showed in the table 10, it is observed that the regression line has a positive intercept as presented by the constant (c) = 0.175. This means that if all the variables are held constant or fixed (zero), the entrepreneurial development in southeast Nigeria proxied by Years of Business Experience increases by 17.5%. The result also conforms to the a priori expectation. This states that the intercept could be positive or negative, so it conforms to the theoretical expectation (Gujarati, 2008). The motivations for apprenticeship by Igbo entrepreneurs have a positive relationship with entrepreneurial development in southeast Nigeria. This implies that the motivations for Apprenticeship by Igbo entrepreneurs and entrepreneurial development in southeast Nigeria increase in the same direction. In other words, a 1% increase in motivations for apprenticeship by Igbo entrepreneurs will bring about 68.9% growths in the entrepreneurial development in southeast Nigeria.

Igbo man perspective of factors influencing entrepreneurial development has a direct and positive relationship with entrepreneurial development in southeast Nigeria. In other words, a 1% increase in Igbo man perspective of factors influencing entrepreneurial development will bring about 74.4% growths in entrepreneurial development in southeast Nigeria.

On the other hand, challenges in the Igbo man apprenticeship system and Entrepreneurial Development in southeast Nigeria have inverse relationship. This implies that challenges in the Igbo man apprenticeship system and Entrepreneurial Development in southeast Nigeria move in opposite direction with entrepreneurial development in southeast Nigeria. The challenges have a negative influence on entrepreneurial development in southeast Nigeria. As the challenges increases, entrepreneurial development in southeast Nigeria decrease by 15.5%.

Discussion based on statistical criteria

In order to evaluate the effect of apprenticeship on entrepreneurial development in Southeast Nigeria from the Igbo man perspective, the analysis was also done based on statistical criteria by applying the coefficient of determination (R²) and the F-test. In general, the joint effect of the explanatory variables-independent variables-in the model account for 0.888 or 88.8% of the variations in the entrepreneurial development in southeast Nigeria. This implies that 88.8% of the variations in the entrepreneurial development in southeast Nigeria are being accounted for or explained by the motivations for Apprenticeship by Igbo entrepreneurs; Igbo man perspective of factors influencing entrepreneurial development; and challenges in the Igbo man apprenticeship system and Entrepreneurial Development in southeast Nigeria. While other independent variables not captured in the model explain just 11.2% of the variations in entrepreneurial development in southeast Nigeria.

All the three coefficients (The motivations for Apprenticeship by Igbo entrepreneurs; Igbo man perspective of factors influencing entrepreneurial development; and challenges in the Igbo man apprenticeship system and Entrepreneurial Development in southeast Nigeria) have significant effect on Entrepreneurial Development in southeast Nigeria.

Test of Hypotheses

The t-test is used to know the statistical significance of the individual parameters at 5% significance level. The result is showed on table 11 below.

Table 11: Summary of t-statistic

Variables	t-cal (t _{cal})	Sig.	Conclusion
Constant(C)	8.579	0.004	Statistically Significance
Motivations for Apprenticeship	11.143	0.000	Statistically Significance
Igbo Man Perspective	7.254	0.001	Statistically Significance
Challenges	-5.931	0.002	Statistically Significance
F-statistic	221.501	0.000	Statistically Significance

Source: Researchers computation

We begin by bringing our working hypothesis to focus in considering the individual hypothesis. From table 11, the t-test result is interpreted below:

Hypothesis One

Ho₁: The motivations for Apprenticeship by Igbo entrepreneurs have no significant effect on entrepreneurial development in southeast Nigeria.

Ha₁: The motivations for Apprenticeship by Igbo entrepreneurs have significant effect on entrepreneurial development in southeast Nigeria.

From table 11, the t-test value of Motivations for Apprenticeship, is significant. We, therefore, reject the null hypothesis and conclude that the motivations for Apprenticeship by Igbo entrepreneurs have significant effect on entrepreneurial development in southeast Nigeria.

Hypothesis Two

Ho₂: Igbo man perspectives of factors influencing entrepreneurial development have no significant effect on entrepreneurial development in southeast Nigeria.

Ha₂: Igbo man perspectives of factors influencing entrepreneurial development have significant effect on entrepreneurial development in southeast Nigeria.

From table 11, the t-test value of Igbo man perspectives of factors influencing entrepreneurial development is significant at 0.000 level of significant. We, therefore, reject the null hypothesis and accept the alternate by concluding that Igbo man perspectives of factors influencing entrepreneurial development have significant effect on entrepreneurial development in southeast Nigeria.

Hypothesis Three

Ho₃: Challenges in the Igbo man apprenticeship system have no significant effect on entrepreneurial development in southeast Nigeria.

Ha₃: Challenges in the Igbo man apprenticeship system have significant effect on entrepreneurial development in southeast Nigeria.

From table 11, the t-test value of Challenges in the Igbo man apprenticeship system, is significant at 0.002 level

of significant. We, therefore, reject the null hypothesis and accept the alternate by concluding that challenges in the Igbo man apprenticeship system have significant effect on entrepreneurial development in southeast Nigeria.

V. CONCLUSION AND RECOMMENDATIONS

In the final analysis, this study has examined apprenticeship and entrepreneurial development in southeast Nigeria: The Igbo man perspective. The study has specifically ascertained the effect of motivations for Apprenticeship by Igbo entrepreneurs, Igbo man perspectives of factors influencing entrepreneurial development and challenges in the Igbo man apprenticeship system on entrepreneurial development in southeast Nigeria.

From the result of the PCA, the principal components that serves as motivations for Apprenticeship by Igbo entrepreneurs is the cash infusion giving to apprentice as startup capital. Secondly, the principal components form the Igbo man perspectives of factors influencing entrepreneurial development is tolerance for risk and thirdly, the principal components from the challenges in the Igbo man apprenticeship system and entrepreneurial development in southeast Nigeria is that apprentices sometimes steals from their masters and adds to their start-up capital. Regression results revealed that all the three coefficients (The motivations for Apprenticeship by Igbo entrepreneurs; Igbo man perspective of factors influencing entrepreneurial development; and challenges in the Igbo man apprenticeship system and Entrepreneurial Development in southeast Nigeria) have significant effect on Entrepreneurial Development in southeast Nigeria.

Based on the findings of this study, the following recommendations are made: The government of Nigeria and African by extension should adopt the practice of the Igbo man apprenticeship system and entrepreneurial development in southeast as a strategy for the development African entrepreneurship. This is because of its sustainability in SMEs development and poverty reduction among the Igbo ethnic group in Nigeria. The government should also setup a regulatory agency at the state and local government levels that will be charged with the responsibility of regulating the master and apprentice relationship and mentoring. This is to ensure that the apprentices are properly mentored on the basic principles that propel Igbo man apprenticeship system. SMEs owners should develop internal control system and carryout regular audit of their business to eliminate or reduce theft by apprentice.

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