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Application of Logit Regression Model to Youth Employment Rate in Abeokuta

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ABSTRACT

The purpose of this study was to use logit regression model to statistically analyze the impact of entrepreneurial development determinants on youth employment rate in Abeokuta, Nigeria. Through direct interactions with the youth at Computer Village, Ibara, Abeokuta, Ogun State, the study uses a strong primary data collection methodology. Secondary data was widely used in conjunction with primary data collected to give the study a historical and cultural backdrop. The data indicate that the youth employment rate in Abeokuta is positively impacted by all of the entrepreneurial development parameters. However, the only two factors that significantly affect the youth employment rate in Abeokuta are technical and vocational education (p = 0.018) and youth training (p = 0.000). Furthermore, we would be 52.2% of the time right if we assumed that a young person would be employed without knowing anything about the factors that contribute to the development of entrepreneurship. Knowing the elements that contribute to entrepreneurship growth allows us to predict with 60% accuracy that a young person will find employment. Young people are 0.749 times more likely to be employed than unemployed when youth training is involved, 0.832 times more likely to be employed than unemployed when youth training is involved, and 0.649 times more likely to be employed than unemployed.

Keywords: Employment, Logit, Youth

INTRODUCTION

Entrepreneurs handle the establishment and expansion of a business. The process by which a person or group of people finds a business opportunity, gathers, and uses the resources needed to take advantage of it is known as entrepreneurship. Entrepreneurship is when someone acts on an idea they have, usually to provide a new product or service that disrupts the market. Although entrepreneurship typically begins as a tiny firm, the long-term goal is far bigger: to find a fresh and creative way to gain market share and make large profits. An entrepreneur is a person who owns, plans, and runs a business; in doing so, they take on the risk of either being profitable or losing their investment. Many people view entrepreneurship as the engine and steward of local and national economies. It is regarded as the most advantageous path to boost GDP and new job creation (Parker, 2004). According to Bello (2022), "as more countries move towards fostering entrepreneurship, the evidence is mounting that they

represent an effective response for countries wanting to strengthen their economy's ability to create jobs when implemented comprehensively." According to Eze (2011) and Ade (2021), entrepreneurship has a favorable effect on economic development, and the notion that entrepreneurship and economic growth are favorably correlated has certainly existed since writings. Schumpeter's early According to Schumpeter (2016), entrepreneurship is about innovation since novel combinations of inputs of production, such as hired labor, are introduced by entrepreneurs, and as the number of entrepreneurs rises, economic growth also rises. Their abilities and capacity for innovation are the reason for this favorable outcome. For example, according to Balthelt (2019), entrepreneurs are able to effectively increase productivity by discovering new ways to combine current assets, market demands, and niches. Additionally, entrepreneurship, according to Acs and Audretsch (2019), promotes economic growth and diversity, fosters cooperation, creates new networks, facilitates more fluid information flow, and introduces

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significant innovations by breaking into markets with novel goods or production techniques. Scholars have recognized a variety of entrepreneurship features in the literature. According to [Kirzner, 2019; Schumpeter, 2016; Thompson et al, 2021], an entrepreneur is a planner, risk-taker, organizer, leader, and, as a result, an economic builder or developer, innovator, arbitrator, and problem-solving nature. His or her entrepreneurial activities are said to increase productivity and competitiveness, innovate and imitate, and prevent rent seeking, monopoly exploitation, and economic stagnation. Due to the belief that entrepreneurs must handle the most difficult business duties, entrepreneurship has historically been linked to the actions of private sector workers. The entrepreneur is ultimately in charge of ensuring that the work is completed, even though others may work for the company's manager and owner. However, with the majority of governments worldwide becoming more market-oriented, there is mounting evidence that the idea and practice of entrepreneurship have a place in public sector 2022). enterprises (Adams, In conclusion, entrepreneurship development is a transformational strategy that extends beyond creating a network of support for entrepreneurs. In order for people to benefit from entrepreneurship, it also involves transforming them and establishing entrepreneurial networks. In order to have a beneficial effect on the growth of the economy, it also entails supporting governmental policies that invest in the development of entrepreneurship (Markley, 2022). Because of its influence on economic growth and productivity, technical, vocational, and entrepreneurial education has been a crucial component of national development plans in many nations (Wenny, 2022). It is focused on gaining the information and abilities necessary for work and long-term financial stability. Vocational and technical education departments in secondary schools in developed countries help students get ready for the workforce: this was one of the reasons the theneducation minister introduced the 6.3.3.4 educational system in 1983 (Fafunwa, 2022). Organizations in development-conscious countries invest billions of dollars annually on programs focused at skill upgrading and employee retention because trained personnel play a significant role in organizational growth and development. In order to create jobs in the "knowledge-driven" modern, global economy,

educational programs must impart not just academic knowledge and job skills but also problem-solving abilities, critical and creative thinking, and socially conscious individuals (Ayo, 2022). Achieving full employment is one of every economy's main objectives. In emerging nations, especially those in Africa where there is extreme poverty and rising unemployment rates, achieving this macroeconomic goal has continued to be a topic of discussion. Numerous strategies, programs, and measures, including the National Economic Empowerment and Development Strategy (NEEDS), National Directorate of Employment (NDE), Structural Adjustment Programme (SAP), Seven-Points Agenda, Transformation Agenda, SURE-P, and Economic Recovery and Growth Plan (ERGP), have by previous been proposed and current administrations in an effort to address unemployment and increase job creation in Nigeria (Oni, 2023). Low or no income and, thus, low or bad living standards are the results of unemployment. For the individual, his home, and society as a whole, this has significant economic, social, and political ramifications (Peter, 2022). Adebayo (2019) investigated the effects of unemployment on postsecondary graduates in a range of fields, including the length of time they spent looking for work across states and regions and the suitability of the position held by those who had found their first job. Essentially, Nigeria's unemployment issue seems to be complex, which makes it historically distinct and open to a range of economic analysis. Along with the consequences for the labor market, this study will look at the uniqueness and multidimensional nature. According to Todaro and Smith (2018), the high rate of urban unemployment is caused by the ongoing migration of young people and economic activity from rural to urban areas. In Nigeria, as in the rest of Africa, unemployment is one of the most urgent social issues, both because it is presently significant and because it could get worse in the future. However, the majority of this unemployment occurs in metropolitan areas, and young people-especially those with some education-and young women bear а disproportionate amount of the burden. This is explained by a number of things. Demographics comes first. The overall population is growing quickly, but so is a situation that is uncommon in other parts of the world (African Employment Report,

2018). A second aspect is the massive growth in school enrollment, which has led to a rise in the number of school dropouts looking for employment. Due to their inexperience, recent school dropouts are the first to suffer during difficult employment circumstances. The degree to which policies influence the pattern of any development and its ability to create jobs is one of the other policy-related aspects. Because they either help or hinder the creation of jobs, policies pertaining to land ownership, taxes, salaries, education, technology, and a variety of other topics are crucial. High rates of population growth, slow economic growth, the failure of any growth to create a proportionate number of jobs, and the absence of fundamental economic transformation are all contributing factors to the greater unemployment issue. Any plan for resolving the unemployment issues must therefore take into consideration the forces that are at play on both the supply and demand sides of the labor market. This includes, at the very least, methods to quicken the pace of economic expansion. But it is now widely known that while growth is important, it is insufficient to increase employment. Stated differently, it must be a laborintensive expansion. It is also necessary to implement policies that are expressly intended to support employment of women and youth, as well as the nonfarm rural sector and the informal sector. Additionally, a thorough evaluation of the educational system is necessary, particularly in regards to curricula. Unemployment usually occurs when there is a greater supply of labor than there is demand for it at the going rate of pay. Thus, it is possible to examine the causes of unemployment from both the supply and demand sides of the labor market. On the supply side, Nigeria's urban labor force is expanding quickly due to rural-to-urban migration. According to Adebayo (2019), push-pull factors, such as the pressure caused by the man-to-land ratio in rural areas and the occurrence of severe underemployment due to seasonal climate fluctuations, are typically used to explain rural-urban migration. In Nigeria, the factors are exacerbated by the dearth of infrastructure, which deters people from choosing to live in rural areas. The pull factors include a large wealth gap between rural and urban areas that favors urban residents and a higher likelihood of finding profitable work in the metropolis. The concentration of social amenities in metropolitan areas is an additional factor. This

suggests that rural areas are frequently overlooked when it comes to the distribution of social and economic possibilities. The economic slowdown in the 1990s and 2000s was the cause of the high and growing jobless rates during that time. In addition to discouraging new investment, the economic downturn compelled the government to enact stabilizing measures, such as import restrictions. Since the majority of manufacturing businesses rely heavily on imports, this import limitation forced many of them to run below installed capacity, which led to the closure of most of them or the layoff of a sizable section of their workforce. For example, according to the Manufactures Association of Nigeria (MAN) survey of manufacturing companies, 61.0 percent of the companies were short-staffed for varying durations of at least three months, and between 63.0 and 63.9 percent of the disengaged over 100 workers (CBN, 2003). Due to this development, it was quite difficult for recent school dropouts to find employment. According to Raheem (2007) and Ohiorhenuan (2018), government statistics exclusively publish reported open unemployment. Most persons who were dissatisfied with their job search or employment declined to register, which results in a glaring underestimation of the number of unemployed people. Additionally, Okigbo (2019) notes that a significant contributing cause to the underestimating of unemployment in Nigeria is the definition of labor force used in the Nigerian labor force statistical survey, which excluded those under the age of 15 and those over 55 who were still employed. As previously said, Nigeria's current focus on university education limits economic options for people who are more focused on the workforce than academia, which raises young unemployment. The public typically believes that students who enroll in vocational and technical schools are incapable of pursuing formal academic studies at higher education institutions. However, not everyone requires a college degree. Regretfully, a person's ability to develop in their career and gain social respect in Nigeria is heavily influenced by the number of degrees they have earned. Young people in society are not excited about technical and vocational schools due to negative public conceptions of bluecollar jobs. These institutions also lack trained lecturers, operational workshops, and hands-on application equipment. Because they lack the skills that companies and self-employed people need, youth



unemployment in Nigeria has been on the rise. According to the Daily Trust (November 26, 2008), the federal government recently admitted that 80 percent of Nigeria's youth are unemployed and 10 percent are underemployed. Others have encouraged the kids to turn away from "social vices" and become "entrepreneurs" (Thisday, March 17, 2009). The low caliber of graduates from the country's educational institutions has occasionally been a source of concern for Dr. Sam Egwu, the previous minister of education. Without putting sensible policies into place to build a brighter future, the political leaders are adept at listing fixes for Nigeria's issues and forecasting the future. But according to business guru Peter Drucker, "if you want to predict the future, create it" (quoted in Wilson and Blumenthal, 2018:1). Without giving them the necessary tools and resources, it is sufficient to urge young people to avoid "social vices" and become productive citizens and "entrepreneurs." The creation of job possibilities for citizens is a key component of growth. Therefore, the presence of suitable and sufficient employment serves as an indicator of the health of an economy. But in Nigeria, unemployment is a recurring and expanding issue. In the past, protracted economic crises made matters more difficult. We use a variety of secondary data sources, including the Nigerian statistical fact sheet on economic and social development and the National Bureau of Statistics 2008, to analyze the current state of unemployment in Nigeria.

AIM OF THE STUDY

Analyzing the effect of entrepreneurial development on the youth employment rate in Abeokuta, Ogun State, Nigeria, is the aim of this study.

Specifically, this study aimed to do the following:

i. To determine how the youth empowerment program affects the rate of youth employment.

ii. To ascertain how youth training affects the rate of youth employment.

iii. To examine how technical and vocational education affects the rate of young employment.

iv. To look at the connection between the rate of innovation and the rate of young employment.

v. To evaluate the combined impact on the youth employment rate of youth empowerment programs,

youth training, technical and vocational education, and innovation rate.

RESEARCH QUESTIONS

i. How does the youth empowerment program affect the rate of youth employment?

ii. Does the rate of youth employment increase with youth training?

iii. What was the relationship between the young employment rate and technical and vocational education?

iv. How does the rate of innovation affect the rate of young employment?

HYPOTHESES

 H_{01} : The rate of youth employment in Abeokuta is unrelated to youth empowerment programs.

 H_{02} : Abeokuta's young employment rate is not influenced by youth training.

 H_{03} : The rate of youth employment in Abeokuta is uncorrelated with technical & vocational education.

 H_{04} : The rate of innovation and the rate of youth employment are unrelated.

SCOPE OF THE STUDY

The youth population of Computer Village, Ibara, Abeokuta, served as the study's main source of information. They actively participated in the collection of primary data through questionnaires, interviews, and observations. Through direct interactions with the young people at the Computer Village, the study uses a strong primary data gathering methodology. In order to obtain firsthand knowledge about their experiences, difficulties, and viewpoints regarding employment and the growth of entrepreneurship, systematic interviews and surveys must be conducted. Furthermore, casual conversations and observations were used to enhance the qualitative components of the main data. Secondary data was widely used in conjunction with primary data collecting to give the study a historical and cultural backdrop. From 1980 to 2024, the study examined professional insights, scholarly assessments, and entrepreneurial viewpoints on youth

employment and the growth of entrepreneurship in Nigeria.

LITERATURE REVIEW

Since Cantillon initially developed and proposed the concept of entrepreneurship in the middle of the 18th century, several authors have offered varying meanings of the term, according to Daur (2011). According to Ote (2009), the majority of these categories are predicated on how entrepreneurship is conceptualized across a range of academic fields, including economics, sociology, and psychology. As a result, various entrepreneurs have diverse definitions of entrepreneurship. The definitions of entrepreneurship that relate to the various theoretical frameworks and the empirical measurements that are relevant to the work are highlighted for the purposes of this study. In this context, the definition prioritized the role that entrepreneurship plays in fostering sustainable economic growth. Richard Cantillon divided economic agents into three groups in the 18th century: wage earners, landowners, and financiers. This is when the idea of entrepreneurship first emerged. In contrast to wage and rent earners, he initially viewed entrepreneurs as a factor of production who are in charge of the exchange and circulation of goods and services within the economy and who also generate an uncertain profit. Stough (2016) defines entrepreneurship as a process of information revelations that provide a dynamic externality that provides market information to potential future market entrants, outside firms, and lenders. For the majority of African countries, entrepreneurship is a veritable channel of reducing poverty. The impact of information technology on entrepreneurship has also shed additional light on the definition of entrepreneurship. According to Schumpeter's definition, which is adopted in this study, entrepreneurship is the act of spotting and seizing opportunities through ongoing initiative and innovation in the face of risk and uncertainty in order to either create or reorganize the available resources in a way that can create jobs for long-term economic growth. Bello (2022) asserts that the core of entrepreneurship is innovation, as entrepreneurs create new combinations of production variables, such as hired labor, which boost economic growth. Balthelt (2019) goes on to show how entrepreneurs innovate by finding new markets and niches,

combining preexisting assets in novel ways, and increasing productivity. According to Ayo and Adam (2021), entrepreneurship stimulates economic growth and diversity, makes it easier to build networks, fosters collaboration, enables the flow of information, and provides crucial innovations through the introduction of new goods or manufacturing techniques. One essential element is entrepreneurship training, which is given to people who want to start their own businesses with the goal of making money. According to Odah (2019), entrepreneurship is defined as practical creativity that combines opportunities and resources in new ways to succeed in the economic world. Similar to this, Emmanuel (2022) emphasizes opportunity creation and social requirements by defining entrepreneurship as the readiness and capacity to recognize investment possibilities, launch businesses based on them, and effectively manage them. In order to stimulate employment, accelerate the implementation of universal primary education, reduce poverty, and advance gender equality, Shane and Venkataraman (2022) stress that entrepreneurship training entails identifying sources of opportunities as well as processes of discovery, evaluation, and exploitation. The ability to recognize environmental resources and impart new ideas to improve creativity, invention, beliefs, and recombination skills are among the results of entrepreneurship education.

(i) Entrepreneurship Development

The process of improving entrepreneurs' knowledge and abilities in the areas of business venture development, management, and organization while taking associated risks into consideration is known as entrepreneurship development (UNESCO & ILO, 2022). This is accomplished by emphasizing entrepreneurial aptitude through training sessions and initiatives. If you choose to pursue this career path, you will be helping aspiring company owners develop their skills and overcome the challenges they face in starting their enterprises (UNESCO & ILO, 2022). The process of improving entrepreneurial knowledge and abilities through a structured training program is known as entrepreneurship development. It covers the study of business dynamics, entrepreneurial behavior, and the growth and development of businesses. Increasing the knowledge and expertise of current entrepreneurs and inspiring others to start their own

business are the goals of entrepreneurship development programs. In the end, it contributes to the growth of such individuals within an economy (UNESCO & ILO, 2022). Training those who want to start their own business or grow their current one is the main goal of entrepreneur development. Additionally, it focuses more on promoting innovation and assessing an organization's potential for growth. New businesses benefit from this development process by performing better, achieving their objectives, and growing. Consequently, a country's economy likewise gets better. Additionally, it helps business owners better manage and grow their company while overcoming the financial risks involved. An economy's unemployment issue is lessened as the rate of entrepreneurial venture creation rises. It also improves market competition and lessens the problem of stagnation. The goal of such a process is to increase an entrepreneur's and his or her venture's competency. As a result, it raises the bar for entrepreneurship and inspires more people to pursue it. The strategic process of entrepreneurship development uses a variety of instruments that focus on the individual's skill development in a number of ways (UNESCO & ILO, 2022).

(ii) Employment

According to Merriam-Webster (n.d.), employment is the act of hiring someone or something, or the state of having a job. Full-time According to the World Bank (2018), employment is any job, or combination of jobs, where a person does the entire regular work week as required by the governing authority or receives the full salary for the position. Part-time Employment is defined as a job in which a worker completes half or less of the typical workweek and receives no more than half of the rate that is appropriate for the position if it is part of a graded salary schedule (World Bank, 2018). In order to help people with disabilities find and keep jobs in competitive employment or customized environments, supported employment entails giving them continuous assistance, making sure the work is integrated, and paying at least the minimum wage (World Bank, 2018). People with severe disabilities who might not have historically been able to find competitive employment are the focus of this strategy (World Bank, 2018). According to the World Bank (2018), customized employment is a strategy that involves individualized job tasks and reasonable adjustments in order to tailor the employment relationship to the needs of the employer and employee. Rehabilitative employment does not full-time performance include of all the responsibilities of a regular vocation, but it does include work for which a person's education, training, or experience is properly fit, subject to clearance by a doctor or qualified specialist (World Bank, 2018). Temporary Employment and Transfer: Temporary employment is defined as hourly, limited-duration positions that do not require permanent status, whereas a transfer is the movement of a permanent employee to a position that is within the same pay range (World Bank, 2018). By strengthening business settings, boosting educational and vocational training, and encouraging entrepreneurship and equal opportunities, youth employment initiatives seek to solve youth unemployment (Okigbo, 2019). Economic stability and development are significantly impacted by youth unemployment worldwide, with young women frequently experiencing more obstacles (Okigbo, 2019).

METHODOLOGY

By dividing the entire "Abeokuta" region into a few local governments and then into settlements inside those local government areas as geographical clusters, the researchers employed area sampling. Because the researchers lacked a list of the people in question, they decided to use area sampling (Sam, 2018).

Data Reliability Test

The dependability or consistency of the data used and the events in this research project were tested using Cronbach's Alpha. The findings indicate that 82% of the data utilized in this investigation is consistent. As a result, the study's data is highly trustworthy.

Model Specification

Important macroeconomic factors and indicators are included in the model to support the investigation's emphasis. The logit regression model used in the analytical framework is shown as follows:

 $\begin{array}{l} \text{Log YER} = \beta_0 + \beta_1 \text{ Log YEMP} + \beta_2 \text{ Log YTRN} + \\ \beta_3 \text{ Log TVED} + \beta_4 \text{ Log INOR} + \mu \end{array} \tag{1}$



Where:

YER=Youth employment rate YEMP = Youth empowerment programme YTRN = Youth training TVED = Technical and vocational education INOR = Innovation rate β_0 = Intercept β_1 , β_2 , β_3 , and β_4 = Partial slopes of the regression model μ = Stochastic error term.

A thorough investigation of the connection between Nigeria's young employment rates and the growth of entrepreneurship is made possible by this model framework. A comprehensive understanding of the factors impacting young employment in Nigeria is ensured by the inclusion of government spending and innovation rates. While the stochastic error term (μ) consideration unobserved takes into factors influencing the young employment rate, the model's coefficients (β_1 to β_4) shed light on the individual effects of each variable. This exacting model specification serves as the cornerstone for a thorough examination of the study hypotheses and advances a sophisticated comprehension of the complex connections between youth employment and entrepreneurial development in Nigeria.

Logit Regression Model

Logit regression (more precisely, logistic regression) is often used in medicine with the aim of, for example, testing a certain drug (predictor) for its effectiveness (outcome variable - 1 / effective; 0 / ineffective), and also in natural sciences (Sufahani & Jun 2020). However, it is very rarely used in education sciences, although there especially in pedagogy, are justifications for its application (Joyami & Salmani, 2019; Andegiorgis, 2020; Niu, 2020). The truth is that we frequently only have categorical or dichotomous dependent variables in our research designs, which prevents us from using tests for complex relationships between variables (chi square is typically the only test used when the dependent variable is categorical). But logistic regression in this case allows us to investigate the predictive role even though the dependent variable is categorical (Kim, Song, Kim, Lee & Cheon, 2018; Ozvurmaz, 2016). By fitting data to a logistic curve, logistic regression calculates the likelihood that an

event will occur by analyzing the relationship between several independent variables and a categorical dependent variable. Logit regression is actually a nonlinear regression (Kim et al., 2018). Binary logit, which is used when the dependent variable has only two categories, and multinomial logit, which is used when the dependent variable has more than two categories, are the two basic categories into which logistic regression can be separated. The maximum likelihood is the basis for logit regression, not residuals (OLS), a regression line that minimizes the sum of squares, or R2. In a normal distribution, the maximum likelihood of σ is the normal distribution's standard deviation (curve width), and the maximum likelihood of μ is the location of the normal distribution's center. The log-likelihood is based on summing the probabilities associated with the predicted and actual outcomes (Said, Salman & Elnazer, 2019), that is, the goal is to find the best linear combination of predictors to maximize the likelihood of obtaining the observed outcome frequencies. Said et al. (2019) indicates that log likelihood is analogous to the residual sum of squares in multiple regression due to the fact that it is an indicator of how much unexplained variance remains after the model is set (this is evident from LL values which if high indicate a poorly fitting model). Since -2LL has a chi square distribution that is better suited for comparison (χ^2 = -2 (Co_{nstant} –LL_{full model}), LL is typically multiplied by -2. The fundamentals of computing Logit requires knowledge of probability, odds, and log odds, among other statistical processes. Probability is the ratio of something happening (event occurring) to everything that could happen (occurs), and odds are the ratio of something happening to something not happening (p / 1-p).

Binary Logit Regression Model

If the dependent variable is binary (dichotomous) and we want to examine the relative impact of continuous and/or categorical independent variables on the dependent variable as well as evaluate the interaction effects between the independent variables, binary logit regression is the preferred method. The impact of independent variables is typically described in terms of odds since logistic regression computes the probability of an event occurring over the probability of an event not occurring. The mean of the response variable "y" in terms of an explanatory variable x is



modeled in relation to p and x using the logistic regression equation.

$$y = \alpha + \beta x \tag{2}$$

Unfortunately, extreme values of x will result in values $\alpha + \beta x$ that do not fall between 0 and 1, making this a poor model. The logistic regression solution to this problem is to transform the odds using the natural logarithm (Peng, 2002). The natural log odds are modeled using logistic regression as a linear function of the explanatory variable.

Logit (y) = ln(odds)
= In
$$\left(\frac{p(y=1)}{1-p(y=1)}\right) = \alpha + \beta x$$
 (3)

That is,

$$\ln(p) - \ln(1-p) = \text{logit}(y)$$
 _(4)

Where x is the explanatory variable and p is the probability of the desired outcome. " α " and " β " are the logistic regression's parameters. The basic logistic model is this. By taking the antilog of equation (5) on both sides, the following equation can be used to predict the likelihood that an outcome of interest will occur:

$$p = P(Y = \text{desired result} / X = \chi, \text{ a particular value})$$

$$= \frac{e^{a+\beta x}}{1+e^{a+\beta x}} = \frac{1}{1+e^{-(a+\beta x)}}$$
 (5)

A complex logistic regression can be created by applying the reasoning of the simple logistic regression to multiple predictors, as follows:

$$logit(y) = In\left(\frac{P}{1-P}\right)$$
$$= \alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k \quad (6)$$

Therefore, $p = P(Y = \text{desired result } / X_1 = \chi_1, X_2 = \chi_2, \dots, X_k = \chi_k)$

$$= \frac{e^{\alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k}}{1 + e^{\alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k}}$$
$$= \frac{1}{1 + e^{-(\alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k)}}$$
(7)

Log Odds and the Odds Ratio

Log odds is simply natural log of odds. The ratio of the likelihood that an event will occur to the likelihood that it won't is known as the odds of an event. An event's probability of not happening is (1p) if its probability of happening is p. The matching odds, then, are a value provided by

Odds of {Events} =
$$\frac{p}{1-p}$$
 (8)

A comparative measure of two odds in relation to distinct events is the odds ratio (OR). The corresponding odds of two events, A and B, happening in relation to each other are

Odds ratio [A vs B] =
$$\frac{Odds [A]}{Odds [B]} = \frac{PA/(1-PA)}{PB/(1-PB)}$$
 (9)

A measure of the correlation between an exposure and an outcome is called an Odd Ratio [OR]. The odds that an outcome will occur given a specific exposure are represented by the OR, which contrasts those odds with the odds of the outcome occurring without that exposure. The estimated increase in the logged odds of the outcome per unit increase in the value of the independent variables is known as the regression coefficient (b_i) in logistic regression calculations. Stated differently, the OR linked to a one-unit increase in the independent variable is the exponential function of the regression coefficient (e^{b_i}) . The OR can also be used to compare the relative importance of different risk factors for an outcome and to ascertain whether a specific exposure is a risk factor for that outcome. Exposure has no effect on outcome odds, as indicated by OR = 1. Exposure linked to higher odds of outcome is indicated by an OR > 1. Exposure linked to lower odds of outcome is indicated by OR < 1. Logistic is one way to generalize the OR beyond two binary variables (Peng, 2002). Assume we have a binary predictor variable (X) and a binary response variable (Y). We also have other predictor variables Z_1 , Z_2 , ..., Z_k that may or may not be binary. When Y is regressed on X, Z_1 , Z_2 , ..., Z_k using multiple logistic regression, the estimated coefficient $\hat{\beta}X$ for X is associated with a conditional OR. In particular, at the level of the population,



$$e^{\hat{\beta}X} = \frac{P(Y=1/X=1, Z_1, Z_2, ..., Z_k)/P(Y=0/X=1, Z_1, Z_2, ..., Z_k)}{P(Y=1/X=0, Z_1, Z_2, ..., Z_k)/P(Y=0/X=0, Z_1, Z_2, ..., Z_k)}$$

$$(10)$$

So $e^{\hat{\beta}X}$ is a conditional odds ratio estimate. When the values of $Z_1, Z_2, ..., Z_k$ are held constant, $e^{\hat{\beta}X}$ can be interpreted as an estimate of the OR between Y and Х.

The Logit Regression Model's Fit

The underlying distribution is binomial, and the parameters, α and β , cannot be estimated in the same manner as for simple linear regression, despite the fact that the logit regression model, logit $(y) = \alpha + \beta X$, appears to be similar to a simple linear regression model. Instead, the parameters are usually estimated using the method of maximum likelihood of observing the sample values (Menard, 2004). Values of α and β that maximize the likelihood of obtaining the dataset will be provided by maximum likelihood. It calls for computer software and iterative computing. Given the unknown parameters (α and β), the likelihood function is used to estimate the probability of observing the data. The probability that the observed values of the independent variables can be used to predict the observed values of the dependent variable is known as the "likelihood." Like all probabilities, the likelihood ranges from 0 to 1. Working with the likelihood function's logarithm is more convenient from a practical standpoint. Loglikelihood is the name of this function. When comparing multiple models, inference testing is done using log-likelihood. Since the natural log of any number smaller than one is negative, the loglikelihood ranges from 0 to $-\infty$. By observing binary outcomes and predictors, logit regression allows us to make inferences about the likelihood of a given event occurring in the population. Assume that every member of the population we are sampling has an equal chance, p, of experiencing an event. If an event occurs for the i^{th} subject for each individual in our sample of size $n, Y_i = 1$; if not, $Y_i = 0$. The data that were observed are Y_1, \ldots, Y_n and X_1, \ldots, X_n . The likelihood, or joint probability, of the data is provided by

$$L = \prod_{i=1}^{n} p\left(\frac{y}{x}\right)^{Y_i} \left[1 - p\left(\frac{y}{x}\right)\right]^{1 - Y_i} \quad (11)$$

$$= p\left(\frac{y}{x}\right)^{\sum_{i=1}^{n} Y_i} \left[1 - p\left(\frac{y}{x}\right)\right]^{n - \sum_{i=1}^{n} Y_i}$$

The likelihood's natural logarithm is

$$l = \log(L) = \sum_{i=1}^{n} Y_i \log \left[p\left(\frac{y}{x}\right) \right] + (n - \sum_{i=1}^{n} Y_i) \log \left[1 - p\left(\frac{y}{x}\right) \right]$$
(12)
re $p\left(\frac{y}{x}\right) = \frac{e^{a+\beta x}}{1 + e^{a+\beta x}}$ (13)

_(13)

Where

Estimating Logit Regression **Coefficients** $(\boldsymbol{\beta}_0, \boldsymbol{\beta}_1, \boldsymbol{\beta}_2, \dots, \boldsymbol{\beta}_k)$

The probability that the binary response depends on a set of predictor variables is modeled by the logistic function $X = [X_1, X_2, \dots, X_k]^T$ and regression regression coefficients $\beta = [\beta_0, \beta_1, \beta_2, ..., \beta_k]^T$ as given by

$$\pi(x) = \frac{e^{\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k}}{1 + e^{\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k}} \quad (14)$$

In reality, the likelihood function is maximized to estimate the regression coefficients, which are unknown. Note that the w_i below are case weights and are assumed to be positive. All observations that have a case weight less than or equal to zero are excluded from the analysis and all subsequent results.

$$L = \prod_{i=1}^{n} \pi_i(x)^{w_i y_i} [1 - \pi_i(x)]^{w_i(1-y_i)}$$
(15)
Where, $\pi_i(x)$ = probability for the *i*th case.

An iterative process known as Fisher Scoring is used to maximize the likelihood. Fisher scoring is comparable to the Newton-Raphson method, with the exception that its expected value is used in place of the hessian matrix, which is a matrix of second-order partial derivatives.

The regression coefficients' Fisher scoring update formula is provided by

$$\hat{\beta}_{k+1} = \hat{\beta}_k + \left[I(\hat{\beta}_k) \right]^{-1} S(\hat{\beta}_k) \quad _(16)$$

 $\hat{\beta}_k = \beta$ estimate from the k^{th} iteration. Where

When the maximum number of iterations is reached or the convergence criterion is met, the algorithm is said to be finished. When there is little variation in the log-likelihood function between iterations, convergence is achieved. Since Ie^{-7} is the default convergence criterion, convergence is achieved when

$$|\ln L_{k+1} - \ln L_k| \le Ie^{-7}$$
 (17)

Where, L_k = Probability assessed at $\hat{\beta}_k$ In the equation below: $\hat{\pi}_i$ = estimated likelihood of the i^{th} case. The score vector is given by:

$$S(\hat{\beta}) = \frac{\partial l}{\partial \hat{\beta}} = \begin{bmatrix} \sum_{i=1}^{N} w_i (y_i - \hat{\pi}_i) \\ \sum_{i=1}^{N} w_i (y_i - \hat{\pi}_i) X_{i1} \\ \vdots \\ \sum_{i=1}^{N} w_i (y_i - \hat{\pi}_i) X_{ip} \end{bmatrix}$$
(18)

The information matrix is given by:

$$I(\hat{\beta}) = -E\left[\frac{\partial^2 l}{\partial \hat{\beta}_i \partial \hat{\beta}_j}\right] \qquad _(19)$$

$$\begin{bmatrix} \sum_{i=1}^{N} w_i(\hat{\pi}_i)(1-\hat{\pi}_i) & \dots & \sum_{i=1}^{N} w_i(\hat{\pi}_i)(1-\hat{\pi}_i) X_{ip} \\ \sum_{i=1}^{N} w_i(\hat{\pi}_i)(1-\hat{\pi}_i) X_{i1} & \dots & \sum_{i=1}^{N} w_i(\hat{\pi}_i)(1-\hat{\pi}_i) X_{ip} \\ \vdots & \vdots & \vdots \\ \sum_{i=1}^{N} w_i(\hat{\pi}_i)(1-\hat{\pi}_i) X_{ip} & \dots & \sum_{i=1}^{N} w_i(\hat{\pi}_i)(1-\hat{\pi}_i) X_{ip} X_{ip} \end{bmatrix}$$
(20)

=

The estimated coefficients' asymptotic estimated covariance matrix is provided by

$$\hat{\Sigma}\hat{\beta} = 1 - (\hat{\beta})^{-1}$$
 (21)

DATA PRESENTATION AND ANALYSIS

A total of four hundred (400) surveys were distributed. With the assistance of field research assistants, the respondents completed and submitted 389 questionnaires. This means that 97.25 percent of

the surveys were retrieved. The data gathered from the surveys was analyzed using both descriptive and inferential statistics. In order to investigate respondents' comments on their characteristics and their comprehension of the meaning of youth employment and entrepreneurial development, descriptive statistics were taken into consideration. The inferential statistics were taken into consideration in accordance with the study's stated aims, particularly with regard to the Logit model. SPSS version 30 program was used to achieve this.

Unwei	Ν	Percent	
Selected Cases	Included in Analysis	389	100.0
Missing Cases		0	.0
Total		389	100.0
Unse	0	.0	
	389	100.0	

 Table 1: Case Processing Summary

Table 1 above shows that we are modelling 389 cases here. The SPSS default for this is listwise.

Original Value	Internal Value
NO	0
YES	1



The Table 2 shows us that we have coded our dependent variable (Youth Employment Rate) in the right direction.

		Frequency	Parameter coding
			(1)
Youth Empowerment Programme	No	167	1.000
	Yes	222	.000
Youth Training	No	107	1.000
	Yes	282	.000
Technical and Vocational	No	182	1.000
Education	Yes	207	.000
Innovation Rate	No	163	1.000
	Yes	226	.000

Table 3: Categorical Variables Codings

Table 3 shows that the categorical variable for YouthEmpowermentProgramme,YouthTraining,Technical and Vocational Education, and Innovation

Rate respectively has reference category of YES. The (1) means that YEMP (1), YTRN (1), TVED (1), and INOR (1) in the results refer to NO here.

	Observed			Predicte	d
			You	th	Percentage
			Employm	ent Rate	Correct
			NO	YES	
Step 0	Youth Employment	NO	0	191	.0
	Rate YES		0	198	100.0
	Overall Percentag			52.2	
a. Constant is included in the model.					
	b. The	cut valu	e is .500		

 Table 4: Classification Table 1

Tables 4, 5 and 6 present the results with only the constant included before any coefficients (i.e. those relating to youth empowerment programme, youth training, technical and vocational education, and innovation rate) are entered into the equation. The Logistic regression compares this model with a model including all the predictors (Tables 11 and 12) to

determine whether the latter model is more appropriate. The Table 4 (Classification Table 1) suggests that if we have no knowledge of the youth empowerment programme, youth training, technical and vocational education, and innovation rate and guess that a youth would be employed, we would be 52.2% of the time correct.

Table 5: Constant only in the Equation

	Ii55	B	S.E.	Wald	Df	Sig.	Exp(B)
Step 0	Constant	.087	.049	3.223	1	.073	1.091

			Score	Df	Sig.
Step 0	Variables	YEMP(1)	31.518	1	.000
		YTRN (1)	38.434	1	.000
		TVED (1)	23.302	1	.000
		INOR (1)	52.139	1	.000
	Overall	Statistics	145.393	4	.000

Table 6: Variables not in the Equation

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Table 6 (Variables not in the equation) tells us whether each of the explanatory variables (youth empowerment programme, youth training, technical and vocational education, and innovation rate) improves the model. The answer is yes for all the four variables, as they are all significant and if included would add to the predictive power of the model. If they had not been significant and able to contribute to the prediction, then termination of the analysis would obviously occur at this point.

I ubic /						
		Chi-square	Df	Sig.		
Step 1	Step	152.467	4	.053		
	Block	152.467	4	.053		
	Model	152.467	4	.053		

Table 7: Omnibus Tests of Model Coefficients

Table 7, 8, 9, 10, 11, 12, and 13 present the results when the predictors (youth empowerment programme, youth training, technical and vocational education, and innovation rate) are included. Table 7 shows that we have added four variables to the model, which has collectively reduced the -2log likelihood by 152.467 with 4 degrees of freedom.

Table 8: Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square			
1	2198.235ª	.086	.115			
a. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.						

The -2log likelihood is a measure of how well the model explains variations in the outcome of interest (Youth Employment Rate). The -2log likelihood (sometimes called, deviance) has a chi-squared distribution. The p-value for the result of jointly adding the independent variables to the model is given as 0.053 which is greater than the conventional significance level of 0.05. Hence, we infer that the joint inclusion of youth empowerment programme, youth training, technical and vocational education, and innovation rate to the model is statistically insignificant. That is the predictors do not jointly exert significant effect. In other words, these explanatory variables do not jointly explain variations in the youth

employment rate. That is there is no difference between the observed and model-predicted values. Thus, the model is a good fitting model. The Cox & Snell R-square shows that 8.6% of the variation in the youth employment rate is being explained by the logit model. In other words, youth empowerment programme, youth training, technical and vocational education, and innovation rate contributed to approximately 9% of the variation in youth employment rate. The correlation coefficient, R, is estimated as 0.293, this implies that there is a weak positive imperfect relationship between the explained variable and the explanatory variables. The Nagelkerke R-square indicates a week relationship of 11.5% between the predictors and the predicted.

Table 3. Hoshiel and Lemesnow Test					
Step	Chi-square	df	Sig.		
1	30.361	6	.061		

 Table 9: Hosmer and Lemeshow Test

The Hosmer and Lemeshow goodness of fit test statistic of 0.061 which is greater than the conventional significance level of 0.05 indicates that

we accept the null hypothesis that there is no difference between the observed and model-predicted values, implying that the model's estimates fit the data at 5% significance level.



		Youth En	ployment	Youth En	ployment	Total
		Rate	= NO	Rate =		
		Observed	Expected	Observed	Expected	
Step 1	1	121	130.370	64	54.630	185
	2	95	96.451	52	50.549	147
	3	120	114.247	73	78.753	193
	4	75	88.868	86	72.132	161
	5	88	88.620	91	90.380	179
	6	101	88.121	93	105.879	194
	7	70	51.223	57	75.777	127
	8	70	64.958	103	108.042	173
	9	55	60.297	150	144.703	205
	10	17	28.844	117	105.156	134

Table 10: Contingency Table for Hosmer and Lemeshow Test

Table 11: Classification Table 2

Observed			Predicted			
		Youth Employment Rate		Percentage Correct		
			NO	YES		
Step 1	Youth Employment Rate	NO	103	193	51.6	
		YES	286	196	67.7	
	Overall Percentage				60.0	
	a. The	ue is .500				

Table 11 (Classification Table 2) shows how the classification error rate has changed from the original 52.2%. By adding the explanatory variables, we can now predict with 60% accuracy that with the knowledge of the youth empowerment programme, youth training, technical and vocational education, and innovation rate a youth would be employed. In

other words, if we have knowledge of the youth empowerment programme, youth training, technical and vocational education, and innovation rate and guess that a youth would be employed, we would be 60% of the time correct. Thus, we know that the model with the predictors is a significantly better model. The model appears relatively good, but we need to evaluate model fit and significance as well.

		В	S.E.	Wald	Df	Sig.	Exp(B)
Step 1 ^a	YEMP(1)	1.667	.108	7.127	1	.646	.749
	YTRN (1)	.153	.107	16.867	1	.000	.645
	TVED (1)	.703	.114	2.597	1	.018	.832
	INOR (1)	.247	.110	15.381	1	.242	.649
	Constant	1.144	.118	121.772	1	.000	3.693
a. Variable(s) entered on step 1: YEMP, YTRN, TVED, INOR.							

Table 12: Variables in the Equation

From Table 12, the deduced model is:

$$logit(Y) = 1.144 + 1.667YEMP(1) + 0.153YTRN(1) + 0.703TVED(1) + 0.247INOR(1)$$

As we have recoded youth empowerment programme to 0 = NO, 1 = YES; youth training to 0 = NO, 1 = YES; technical and vocational education to 0 = NO, 1 = YES; technical and vocational education to 0 = NO, 1 = YES; technical and vocational education to 0 = NO, 1 = YES; technical and vocational education to 0 = NO, 1 = YES; technical and vocational education to 0 = NO, 1 = YES; technical education to 0 = NO, 1 = YES; technical education to 0 = NO, 1 = YES; technical education to 0 = NO, 1 = YES; technical education to 0 = NO, 1 = YES; technical education to 0 = NO, 1 = YES; technical education to 0 = NO, 1 = YES; technical education to 0 = NO, 1 = YES; technical education to 0 = NO, 1 = YES; technical education to 0 = NO, 1 = YES; technical education to 0 = NO, 1 = YES; technical education to 0 = NO, 1 = YES; technical education to 0 = NO; technical education tec

= YES; and innovation rate to 0 = NO, 1 = YES. This is equivalent to:

logit(Y) = 1.144 + 1.667YES + 0.153YES + 0.703YES + 0.247YES

The positive coefficient values of all the explanatory variables indicates that youth empowerment programme, youth training, technical and vocational education, and innovation rate individually have positive impact on youth employment rate. This indicates that a unit increase in youth empowerment programme, youth training, technical and vocational education, and innovation rate would bring about a respective increase in youth employment rate. The table equally revealed that the coefficients of youth training, and technical & vocational education variables with p = 0.000 and p = 0.018 respectively are significant while the coefficients of youth empowerment programme, and innovation rate variables with p = 0.646 and p = 0.242 respectively are insignificant. In other words, youth training and technical & vocational education independently contributed significantly to youth employment rate vouth empowerment programme while and innovation rate did not. The Exp(B) column shows the

relative odds (odds ratio) and indicates that youth are 0.749 times as likely to be employed than being unemployed when it has to do with youth empowerment programme, having allowed for youth training, technical and vocational education, and innovation rate; 0.645 times as likely to be employed than being unemployed when it has to do with youth training, having allowed for youth empowerment programme, technical and vocational education, and innovation rate; 0.832 times as likely to be employed than being unemployed when it has to do with technical and vocational education, having allowed for youth empowerment programme, youth training, and innovation rate; 0.649 times as likely to to be employed than being unemployed when it has to do with innovation rate, having allowed for youth empowerment programme, youth training, and technical and vocational education. We can thus derive an equation for the prediction of the probability of the youth employment rate as:

$$p(YER) = \frac{1}{1 + e^{-(1.144 + 1.667YEMP + 0.153YTRN + 0.703TVED + 0.247INOR)}}$$

If all the explanatory variables are taken to be zeros (0), then

$$p(YER) = \frac{1}{1 + e^{-(1.144)}} \approx 0.758$$

This shows that of all the sampled respondents who did not fully engage in the youth empowerment programme, youth training, technical and vocational education, and the innovation rate under study, approximately 76% of them would get employed. If all the explanatory variables are taken to be one (1). That is, YEMP = YTRN = TVED = INOR = 1

Then,
$$p(YER) = \frac{1}{1 + e^{-(1.144 + 1.667 + 0.153 + 0.703 + 0.247)}} \approx 0.977$$

This implies that of all the sampled respondents who fully engaged in the youth empowerment programme, youth training, technical and vocational education, and the innovation rate under study, approximately 98% of them would get employed.

		В	Bootstrap ^a					
			Bias	Std.	Sig. (2-	95% Cont	95% Confidence Interval	
				Error	tailed)	Lower	Upper	
Step 1	YEMP(1)	1.667	.000	.105	.006	491	079	
	YTRN (1)	.153	004	.109	.001	658	231	
	TVED (1)	.703	003	.118	.123	418	.051	
	INOR (1)	.247	.002	.114	.001	661	209	
	Constant	1.144	.005	.112	.001	1.096	1.531	
a. Unless otherwise noted, bootstrap results are based on 1500 bootstrap samples								

Table 13: Bootstrap for Variables in the Equation



		Constant	YEMP (1)	YTRN (1)	TVED (1)	INOR (1)
Step 1	Constant	1.000	.340	.273	.099	.541
	YEMP(1)	.340	1.000	.080	.117	.074
	YTRN (1)	.273	.080	1.000	.043	.228
	TVED (1)	.099	.117	.043	1.000	.279
	INOR (1)	.541	.074	.228	.279	1.000

 Table 14: Correlation Matrix

Table 14 above shows the relationship between the predictors. It is observed that there is a weak positive association among the predictors.

DISCUSSION OF FINDINGS

The goals of this study are the main focus of the finding's discussion. Determining the effect of vouth entrepreneurial development the on employment rate in Abeokuta, Ogun State, Nigeria, is the study's main goal. From the logit model, the coefficient value, $\beta_1 = 1.667$ implies that for every unit increase in youth empowerment programme while youth training, technical and vocational education, and innovation rate are kept constant, we expect youth employment rate to increase by 1.667, $\beta_2 = 0.153$ implies that for every unit increase in youth training while youth empowerment programme, technical and vocational education, and innovation rate are kept constant, we expect youth employment rate to increase by 0.153, $\beta_3 = 0.703$ implies that for every unit increase in technical and vocational education while youth empowerment programme, youth training, and innovation rate are kept constant, we expect youth employment rate to increase by 0.703, $\beta_4 = 0.247$ implies that for every unit increase in innovation rate while youth

empowerment programme, youth training, and technical and vocational education are kept constant, we expect youth employment rate to increase by 0.247. The positive coefficient values of all the explanatory variables indicates that youth empowerment programme, youth training, technical and vocational education, and innovation rate individually have positive impact on youth employment rate. In other words, entrepreneurship development effectively impacted youth employment rate in Abeokuta, Ogun state, Nigeria. These findings are in line with David G. Blanchflower and Andrew J. Oswald: Their research on the relationship between entrepreneurship and employment often highlights how entrepreneurship impacts job creation and economic growth. Their work suggests that while entrepreneurship can lead to increased employment, the effect may vary based on regional factors and the nature of government support and with findings of William J. Baumol's work on entrepreneurship and economic development discusses how entrepreneurship can contribute to economic growth and job creation, albeit with varying levels of effectiveness depending on the support structures and economic environment.

The prior test is summarized in the table below.

Variable	Expected sign	Obtained sign	Conclusion
YEMP	Positive (+)	Positive (+)	Conform
YTRN	Positive (+)	Positive (+)	Conform
TVED	Positive (+)	Positive (+)	Conform
INOR	Positive (+)	Positive (+)	Conform

SUMMARY OF RESULTS

The survey result shows the following in summary.

	Predictor Variables					
Opinion	Youth empowerment	Youth	Technical and	Innovation		
	programme	training	vocational education	rate		
NO	167	107	182	163		
YES	222	282	207	226		
			Statistic			



Parameters	Estimate	Sig.
β1	1.667	.646
β2	.153	.000
β ₃	.703	.018
β_4	.247	.242
Test		
Omnibust Tests for Model Coefficient	Chis-quare $= 152.467$	0.053
-2 Log likelihood	2198.235	-
Cox & Snell R Square	.086	-
Multiple correlation (R)	.293	-
Nagelkerke R Square	.115	-
Hosmer and Lemeshow Test	Chi-square = 30.361	0.061

The study examined the impact of entrepreneurship development on youth employment rate in Abeokuta, Ogun State, Nigeria. It defined entrepreneurship development and employment, reviewed their indices and correlations, and discussed the role of entrepreneurship in economic development. Despite the potential of entrepreneurship to enhance socioeconomic welfare, the study highlighted ongoing challenges in Nigeria that hinder its effectiveness in employment generation and poverty alleviation. Methodologically, the study used primary data collected through structured surveys and interviews. Data analysis employed descriptive statistics and logit regression. The research utilized Schumpeter's Innovation Theory, McClelland's Need for Achievement Theory, Schultz and Becker's Human Capital Theory, and Douglas and Shepherd's Expected Utility Theory to support its findings.

- The first objective of the study sought to ascertain the impact and significance of youth empowerment programme on youth employment rate. The result from the analysis revealed that youth empowerment programme has a positive but insignificant impact on youth employment rate in Abeokuta, Ogun State.
- The second objective aim to determine the influence and significance of youth training on youth employment rate. The result showed that youth training has a positive significant influence on youth employment rate in Abeokuta, Ogun State.
- The third objective aim to analyze the effect and significance of technical and vocational education on youth employment rate. The result revealed that technical and vocational education has a

positive significant effect on youth employment rate in Abeokuta, Ogun State.

- The fourth objective sought to investigate the significant relationship between innovation rate and youth employment rate. The result showed that innovation rate has a positive but insignificant effect on youth employment rate in Abeokuta, Ogun State.
- The fifth objective aim to assess the joint significant effect of youth empowerment programme, youth training, technical and vocational education, and innovation rate on youth employment rate. The result revealed that youth empowerment programme, youth training, technical and vocational education, and innovation rate do not jointly exert significant impact on youth employment rate in Abeokuta, Ogun State.

In addition,

- 1. If we have no knowledge of the youth empowerment programme, youth training, technical and vocational education, and innovation rate and guess that a youth would be employed, we would be 52.2% of the time correct.
- 2. We can predict with 60% accuracy that with the knowledge of the youth empowerment programme, youth training, technical and vocational education, and innovation rate a youth would be employed.
- 3. There is a weak positive imperfect relationship between the explained variable (youth employment rate) and the explanatory variables (youth empowerment programme, youth training, technical and vocational education, and innovation rate).

- 4. Youths are 0.749 times as likely to be employed than being unemployed when it has to do with youth empowerment programme, 0.645 times as likely to be employed than being unemployed when it has to do with youth training, 0.832 times as likely to be employed than being unemployed when it has to do with technical and vocational education, and 0.649 times as likely to be employed than being unemployed when it has to do with innovation rate.
- 5. Of all the sampled respondents who did not fully engage in the youth empowerment programme, vouth training, technical and vocational education, and the innovation rate under study, approximately 76% of them would get employeed while of all the sampled respondents who fully engaged in the youth empowerment programme, youth training, technical and vocational education, and the innovation rate under study, approximately 98% of them would get employeed.
- 6. There is no difference between the observed and model-predicted values, implying that the model's estimates fit the data at 5% significance level. Thus, the model is a good fitting model.

Thus, these results indicated that entrepreneurship development in Abeokuta, Ogun State positively affects youth employment rate by improving production methods, creating new markets, and increasing investments. However, challenges such as insufficient business capital, limited access to facilities, and inadequate entrepreneurial knowledge persist. Despite advancements, entrepreneurship has not fully achieved its potential in the region, with no significant positive impact from standard entrepreneurship vectors observed. Nevertheless, the correlation positive suggests potential for improvement if the right conditions are provided. The study also noted that while entrepreneurship has alleviated some social welfare issues, such as unemployment and poverty, it has not fully met its objectives in terms of generating substantial employment or business success.

CONCLUSIONS AND RECOMMENDATIONS

Advocates of entrepreneurship led economic development have persistently emphasized its relevance to economic development. This is seen in

the shift from the prioritised economic growth to development. This position naturally led to the campaign to encourage individuals, firms and the entire nation to embrace entrepreneurship, a rejuvenating economic platform that would not only lead to the efficient utilization of the resource and transform the economy but gives a lifetime assurance to the populace. The observation that entrepreneurship enhances economic development in employment generation and poverty alleviation is a conventional fact entrenched in most revealed literature, but the process by which this development is achieved is usually not detailed. Thus, this study accessed the impact of entrepreneurship on youth employment in Abeokuta, Ogun State, Nigeria bringing out the effects of entrepreneurship on the social economic structure of the people and making a practical contribution on the understanding of how entrepreneurship is used as a tool for economic productivity and development. Investigations on the economic development determinant and the mechanisms that enable a system to grow and achieve higher rates of output, greater levels of per capita income, lower unemployment rates, and higher levels of wealth through the link with entrepreneurship was explored. However, this study has helped to set a limelight on the entrepreneurship business in Nigeria, especially the new setup businesses, to have the right prospective concept and of entrepreneurial innovation, which would in due cause enhance and increase productivity, sustainable market for produce and enhance entrepreneurship growth in Abeokuta, Ogun State, Nigeria. Also from this study, detail facts were discovered on the transmission technique and tools of entrepreneurship. This will help to fashion out policy measures that would ensure optimal utilization of the above-mentioned development resource. These include:

1. That economic development policies via entrepreneurship programs have been planned by the government and implemented by its officers, yet the goal of employment generation and poverty reduction is not met.

2. That training programs for entrepreneurs have been few and far between and different in content from what is needed and that the training is urban-centered and given by people unfamiliar with the actual needs of rural based African entrepreneurs.



3. That, entrepreneurship programmes are set and are executed, and a backup program on entrepreneurship dynamism have not been given an appropriate attention. The real effect of entrepreneurship on people, the scrutinization of the resources available, and problems and limitations can be assessed only when the activities of the entrepreneurship players are examined.

4. That many of the entrepreneurship and other businesses regulation reforms in Nigeria are mostly reform laws on paper and there is struggle when it comes to enforcement as evident in the high cost of entrepreneurship set-ups, the rule for new entrepreneurship business entrants, the high business permit and license cost, the high legal and professional fees, high incorporation cost for and high interest rate. Those Nigerian lacks genuine enforcement of reform laws.

5. That the problem of entrepreneurship in employment generation and poverty alleviation is more than just skills acquisition, setting up entrepreneurship programme, sensitization and provision of a start-up fund. A gamut of social, economic, and political issues is responsible for poverty and underemployment of the entrepreneurs which require urgent attention.

6. That contrary to one of the aims of entrepreneurship in African, which is that entrepreneurship must disseminate to all areas in the rural areas in Africa (GEM, 2013), the growth of entrepreneurship in most of the urban areas in the study area has not disseminated to the rural areas and has not provided institutional opportunities for the emergence of entrepreneurship and competition in the states. Thus, an area to work on.

7. That, the States place more emphasis on skill acquisition programs, for example the activities of the National Directorate of Employment (NDE) are more on skill acquisition programs and less on entrepreneurship training programmed which is the mechanism of improving the skill acquired into more sustainable and lasting carrier for the entrepreneurs in the region.

8. That most entrepreneurs in the region lack entrepreneurial principle, facts, and entrepreneurial progress gimmicks. That more than 70% entrepreneurs emphasized on lack of access to loan from the banks and other financial organizations, a setback to entrepreneurship in Nigeria, mechanism or policy measures that would rectify the problem is not yet map out.

9. Lastly, a comfortable entrepreneurship working environment is an effective strategy for increasing prospect of economic development. Binding contractual agreements such as entrepreneurship training contracts, incubatorship, enforcement of property rights, workers' rights and dignity (freedom from too much fines levies and taxes and undue harassment from the government officers) are yet to be instituted in the region.

Given the conclusions drawn from this study, recommendations presented will help to promote entrepreneurship development for youth employment in Abeokuta, Ogun State, Nigeria at large.

- 1. Easy access to entrepreneurial services to potential and already entrepreneurs should be promoted by setting up macroeconomics policies such as judiciary to prosecute corrupt government officials whose aims and goal is to loot the treasury of entrepreneurship schemes and wreck the entrepreneurship training and skills acquisition centres.
- 2. Entrepreneurship programme should only be run by entrepreneurs or entrepreneurship instructors in each kind or field of entrepreneurship to avoid wrong teaching and implementation and more entrepreneurship programs should be administered and in appropriate content with what is needed and to the right set of people. Also, entrepreneurship programs should be presented more in the rural areas to enable a proper dissemination to the programs.
- 3. To promote entrepreneurship effectively, the Nigerian government should set up a policy strategy to embark on feedback mission on entrepreneurship through studying the entrepreneurship dynamism and its ecosystem. This can be done through the study on entrepreneurship and the network evolution of the main actors; the individual entrepreneurs, the government or the state men who regulate and control the affairs of entrepreneurship to prevent inappropriate policy interventions.

Issues responsible for low entrepreneurship productivity that led to poverty in the region also, are political insecurity, social evil such as terrorism, insurgencies, communal and inter-religious conflicts. These issues are security threat to business progress. Thus, as part of macroeconomic policy to guide economic activities, region security agency should be instituted by the Nigerian government. This will combat the business insecurity in the region

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