



EFFECT OF APPRENTICESHIP ON YOUTH UNEMPLOYMENT IN SOUTH EASTERN NIGERIA

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Abstract

This study investigated the effect of apprenticeship on youth unemployment in the five South Eastern states of Nigeria. Apprenticeship was disaggregated into traditional, modern and vocational apprenticeship systems while youth unemployment rate was used to represent youth unemployment. The population of the study consisted of staff of National Directorate of Employment in Abia, Anambra, Ebonyi, Enugu and Imo States. This placed the population of the study at 250 while the sample size, determined using the Krejcie-Morgan sample size determination technique, was 152. The stratified sampling method was used in determining the sample units. Data generated for the study via questionnaire were analyzed using simple percentage, descriptive analysis and Ordinary Least Square (OLS) multiple regression techniques. The regression results revealed that traditional, modern and vocational apprenticeship systems have negative and significant effects on youth unemployment rate. It further revealed that these systems of apprenticeship have a joint significant effect of about 93.4% on unemployment rate. The study then concluded that apprenticeship has a significant effect on youth unemployment in South Eastern Nigeria. Hence, the recommendations that the traditional apprenticeship system should be encouraged further by improving training quality and structure, fostering partnerships for better job placements, and integrating basic literacy and numeracy skills; there is need to strengthen modern apprenticeship systems by way of aligning training with emerging industry needs in technology and renewable energy, increasing access and inclusivity for youths, and providing entrepreneurship training for self-employment; and the authorities should expand vocational apprenticeship programs with respect to scaling up vocational training in high-demand sectors, enhancing infrastructure and equipment for practical training, and further promoting public-private partnerships for job placements.

(Keywords: Apprenticeship, Youth Unemployment, Traditional Apprenticeship, Modern Apprenticeship, Vocational Apprenticeship, South Eastern Nigeria)

1.0 INTRODUCTION

1.1 Background to the Study

Nigeria is a country that is divided into six geopolitical zones and the South East is one of them. The South Eastern zone is predominantly occupied by the Igbo speaking people of Nigeria. Abia, Anambra, Ebonyi, Enugu and Imo are the states that make up the South Eastern zone of Nigeria. Happenings in the South East reflect what happens in other zones and by extension, the entire country. The country today is grappling with so many macroeconomic problems like poverty, instability and unemployment. Unemployment in the South Eastern part of Nigeria is more pronounced amongst the

youths. Today, youth unemployment in the zone is a pressing issue, with many young people struggling to find jobs. According to Petu-Georgewill, Uko and Adebayo (2021), a limited job opportunity is one of the causes of youth unemployment in the region. This is because the region's economy is largely agrarian, with few industries and limited private sector growth, leading to few formal job openings. Education-employment mismatch is another cause of youth unemployment in the region as graduates often lack practical skills needed to available jobs, making it hard to secure employment. Infrastructural deficit contributes also to this macro-economic menace as the region is associated with poor infrastructure (power, road network etc.) and this hampers



business growth and job creation. Other causes are high population growth, cultural factors and security challenges are some of the factors adduced for the high rate of unemployment in the zone (Adekola, 2019). The direct and indirect consequences of youth employment are increased poverty rate, economic instability, social unrest, brain drain, mental health issues, reduced economic growth etc. (Oyebade, 2023). To address the consequences of this monster called youth unemployment, the Federal government over the years has established various apprenticeship schemes in Nigeria aimed at providing training and employment opportunities for young Nigerians. The National Directorate of Employment (NDE) and Basic National Open Apprenticeship Scheme (B-NUAS) had established apprenticeship centers in the major cities in South-Eastern Nigeria. The aim of these schemes is to equip youths with such skills that will enable them to be self-employed and employable in multinational corporations (Okeyika, Uzoehina, Jegbefumwen, Ozulumba & Ekwoh, 2025). In 2018, a total of 9,360 (nine thousand, three hundred and sixty) trainees were recruited nationwide into the B-NUAS. By July 2022, the scheme had recruited and trained nineteen thousand, two hundred and nineteen youths (NDE, 2022). The skills available in the centers include furniture making, fashion designer, soap making, catering, boat making, panel beating mechanics and electrical works (NDE, 2022). The governors of the South Eastern states on their part are not left out as they are constantly innovating on ways to tackle youth unemployment. In Imo State for instance, there is the Skill-Up Imo programme, Imo State Special Youth Empowerment and Intervention Programme (IMYEIP), One Kindred, One Business Initiative (OKOBI) and Youth Empowerment Scheme aimed at training 500,000 youths in different skills acquisition programmes (Nlerum, 2023).

However, these countless apprenticeship related efforts of the various States and Federal governments to alleviate unemployment rate can be broadly categorized into traditional, modern and vocational apprenticeship. Traditional apprenticeship involves one-on-one training with a master craftsman; modern apprenticeship is a structured programme that combines work and training; while vocational apprenticeship focuses on specific trades or industries (Okpokwasili & Onwuatuogwu, 2024).

1.2 Statement of the Problem

In Nigeria, youth unemployment rate is on the increase year-in-year-out. This has triggered countless research on the possible causes of this increase even in the midst of countless government programmes aimed at empowering the youths and the humongous budgetary allocations of the Federal and State government to arrest the rising youth in employment rate in the country. Accordingly, Okeyika, Uzoehina, Jegbefumwen, Ozulumba and Ekwoh (2025) sought to ascertain the extent to which Federal government apprenticeship schemes has propelled youth employability with focus on the South-South region. Nlerum (2023) examined the effects of national open apprenticeship scheme on youth employment in Ikwere Local Government Area of Rivers State. Similarly, Maiyaki, Shehu and Musa (2020) studied the impact of local apprenticeship

scheme on employment generation with emphasis on selected local governments in Adamawa State. Considering a wider scope, Petu-Georgewill, Uko and Adebayo (2021) examined the imperatives of apprenticeship education as a panacea for youth unemployment in Nigeria while Adewuyi and Adeniran (2019) investigated the impact of apprenticeship training scheme on employment in Ogun State.

These studies in their right produced empirical results that suggested diverse effects of apprenticeship on youth unemployment but none of these studies and other reviewed focused on the South Eastern states in Nigeria. This raises the question: What is effect of apprenticeship on youth unemployment in the South Eastern region of Nigeria?

1.3 Objectives of the Study

The main objective of this study is to investigate the effect of apprenticeship on youth unemployment in South Eastern Nigeria. The specific objectives are to:

1. determine the extent to which traditional apprenticeship system has affected youth unemployment rate in South Eastern Nigeria;
2. examine the effect of modern apprenticeship system on youth unemployment rate in South Eastern Nigeria; and
3. ascertain the extent to which vocational apprenticeship system has influences youth unemployment rate in South Eastern Nigeria.

1.4 Research Questions

1. To what extent has traditional apprenticeship system affected youth unemployment rate in South Eastern Nigeria?
2. What is the effect of modern apprenticeship system on youth unemployment rate in South Eastern Nigeria?
3. To what extent has vocational apprenticeship system influenced youth unemployment rate in South Eastern Nigeria?

1.5 Research Hypotheses

- Ho₁:** Traditional apprenticeship system has not significantly affected youth unemployment rate in South Eastern Nigeria.
- Ho₂:** Modern apprenticeship system has an insignificant effect on youth unemployment rate in South Eastern Nigeria.
- Ho₃:** Vocational apprenticeship system has no significant influence on youth unemployment rate in South Eastern Nigeria.

1.6 Scope of the Study

This study focused on the cause-effect relationship between apprenticeship and youth unemployment in South Eastern Nigeria with special focus on the staff of the National Directorate of Employment (NDE) in Umuahia, Awka, Abakaliki, Enugu and Owerri of Abia, Anambra, Ebonyi,

Enugu and Imo states respectively. The choice of NDE staff in these cities is purely down to convenience and accessibility. Apprenticeship was disaggregated into traditional, modern and modern apprenticeship while youth unemployment rate was used as a proxy for youth unemployment.

1.7 Significance of the Study

At the end of the day, this work will be useful to a wide spectrum of people ranging from students to researchers, entrepreneurs, policy makers, the government and others. Specifically, the work will be a good reading material to students in the areas of apprenticeship and youth unemployment. Thus, the work will be useful to students from different fields of study. The study will be also useful to prospective researchers as it will serve as a premise for further studies in related areas. Findings from the study and recommendations will serve as policy templates that will guide policy makers in their future policy formulation and execution. The government on their part will not be left out as findings from the study will provide further insights into the extent to which apprenticeship systems have affected youth unemployment. Finally, the work will be good for public consumption.

2.0 LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Apprenticeship

Apprenticeship is a concept that has been widely defined. The Research Associate, Centre for Economic Performance, London School of Economics and Political Science (2023) defines it as "any system by which an employer undertakes by contract to employ a young person and to train him (or her) or have him (or her) trained systematically for a trade for a period the duration of which has been fixed in advance and in the course of which the apprentice is bound to work in the employer's service." It is also seen as a training program for individuals who desire to become recognized in a specific trade or craft and do so in a way that adheres to the most current standards (Okpokwasili & Onwuatuegwu, 2024). The person completing the apprenticeship is known as an apprentice, and this individual learns the necessary skills of his or her chosen trade by carrying out common tasks for a predetermined length of time. Training is administered by a seasoned trade or craftsman. According to Okpokwasili and Onwuatuegwu (2024), while an apprenticeship could be compared to classroom learning, apprentices receive pay while learning how to become experts in their trades. Examples of industries that offer apprenticeships include healthcare, food preparation/serving, manufacturing and public safety.

The International Labor Organization's Toolkit for Quality Apprenticeship (2013) see it as a formal agreement that regulates the training of an individual in a recognized profession, either under the guidance of an independent artisan or within an organization, and adheres to established standards. The OECD-ILO (2020) recognizes apprenticeship as an effective mechanism to aid young individuals in their smooth transition from education to employment. UNESCO

(2015) characterizes apprenticeship as a distinctive type of vocational education that integrates practical job experience with formal school-based training, aimed at acquiring specific competencies and work processes, governed by legal regulations and founded on a written employment contract that includes remuneration and standard social protection provisions. It is a structured, legally sanctioned program that integrates classroom instruction with practical training. An apprentice typically obtains the requisite qualifications upon the completion of their training period.

2.1.2 Traditional Apprenticeship

The traditional apprenticeship system is an informal, time-honored method of skill acquisition where an apprentice learns a craft, trade, or business by working directly under an experienced master for several years (Okpokwasili & Onwuatuegwu, 2024). Put differently, it is a non-formal, long-established method of skills transmission where a learner (apprentice) acquires practical knowledge and trade expertise by working directly under an experienced mentor (master). It focuses on hands-on training, moral upbringing, and mentorship, often culminating in the apprentice being "settled" with tools or capital to start their own business. Unlike formal modern apprenticeships, this system is primarily governed by social norms, family ties, and community trust rather than legal contracts or standardized curricula. According to Kendra (2021), the key attributes of the traditional apprenticeship system are:

1. Informal Learning: Training is hands-on and occurs on-the-job through observation, imitation, and trial-and-error.
2. Holistic Upbringing: Beyond technical skills, it often includes "moral upbringing," teaching the apprentice ethical business practices and social values.
3. Duration: It typically requires a long-term commitment, often lasting between 3 to 7 years depending on the complexity of the trade.
4. Unwritten Agreements: Arrangements are often private and based on a "gentleman's agreement" between the master and the apprentice's family.
5. Settlement or Graduation: Upon completion, many systems involve a "graduation" or "blessing ceremony." In some cultures, like the Igbo Apprenticeship System (Igba-Boi), the master provides startup capital or equipment to help the apprentice launch their own business

Traditional systems are vital to informal economies worldwide, particularly in West Africa. Examples include: artisanal crafts (carpentry, blacksmithing, leatherwork, weaving, and tailoring); technical services (auto mechanics, plumbing, electrical work, and welding); and commerce (wholesale and retail trading) (Okafor, 2019).

2.1.3 Modern Apprenticeship

The modern apprenticeship system is other known as formal apprenticeship. It is a structured training program that combines paid on-the-job experience with formal classroom instruction (Ohazuruike & Ekechi, 2023). Thus, it combines

on-the-job training with formal learning, offering a structured program that leads to a recognized qualification. Unlike traditional models based on informal "gentleman's agreements," modern systems are regulated by law and lead to nationally recognized qualifications. Modern apprenticeships cater for various sectors, including tech, healthcare, and trades, providing a pathway to employment and career progression. The key attributes of this apprenticeship system, according to (Eze, 2023), are:

1. **Dual Learning:** It alternates between practical work at a company and theoretical study at a vocational school or college.
2. **Legal Framework:** Apprentices sign a formal employment contract or training agreement that outlines their rights, including a guaranteed wage, paid holidays, and social protection.
3. **Standardized Curriculum:** The training follows an established industry "framework" or "standard" to ensure the skills learned are consistent across the sector.
4. **Formal Certification:** Upon completion, apprentices receive an accredited credential, such as an NVQ or a degree-level qualification, which is recognized by other employers.
5. **Broad Industry Reach:** While traditional systems focus on manual crafts, modern systems extend to high-tech and service sectors like cyber security, financial services, healthcare, and engineering.

The modern apprenticeship system is associated with some benefits for all parties involved. According to Eze (2023), for individuals, it allows people to start their career, gain skills, and earn a qualification without accumulating debt, with 92% staying in work after qualifying; for employers, it helps develop a skilled and loyal workforce, and fills skill gaps; and for the economy, it reduces youth unemployment and improves productivity. In Nigeria, recognized qualifications associated with modern apprenticeship include:

1. **National Technical Certificate (NTC):** Awarded after completing formal apprenticeships in Technical and Vocational Education and Training (TVET) programs.
2. **National Skills Qualification (NSQ):** A framework that recognizes vocational and technical qualifications, with six levels corresponding to employment levels in the Nigerian labor market.
3. **Trade Test Certificate of Competence:** Issued to successful apprentices after undergoing oral, written, and practical tests, often at a subsidized fee.

These qualifications are offered in various fields, including: Creative Fields: Fashion design, tailoring, graphic design; Artisan Trades: carpentry, masonry, welding, automotive mechanics, electrical installation; and Professional Fields: Accounting, law, engineering (Adewuyi & Adeniran, 2019).

2.1.4 Vocational Apprenticeship

Umogbai, Adudu and Agwa (2018) defined vocational apprenticeship as a type of apprenticeship that focuses on

providing young people with specialized skills and training in a specific trade or industry, like automotive repair, construction, or hospitality. Chineze (2022) sees vocational apprenticeship as a structured training model that combines on-the-job experience with classroom instruction, allowing individuals to learn a skilled trade while earning wages. Apprentices work under expert supervision to gain practical skills, often leading to industry certification and employment. It is designed to equip apprentices with practical, hands-on experience and industry-recognized certifications, making them job-ready. In Nigeria, vocational apprenticeships can be particularly valuable in sectors like agriculture, manufacturing, and construction, where there's a high demand for skilled workers. By combining theoretical knowledge with practical training, vocational apprenticeships can significantly enhance a young person's employability and career prospects. The benefits of this type of apprenticeship include:

1. **Practical Skills:** Hands-on training in a specific trade or industry;
2. **Industry Connections:** Opportunities to network and build relationships with potential employers;
3. **Job Readiness:** Apprentices are often job-ready upon completion;
4. **Certification:** Industry-recognized certifications can boost employability; and
5. **Earning Potential:** Apprentices can earn while they learn and increase their earning potential post-apprenticeship (Umogbai, Adudu & Agwa, 2018).

2.1.5 Youth Unemployment

Unemployment is one of the developmental problems currently facing all developing economies of the world and Nigeria is not an exception. Unemployment or joblessness occurs when people are without jobs and they have actively sought work within the past five weeks (International Labour Organization, 1982; Fajana, 2000). World Bank (2018) defines the unemployed as numbers of the economically active population who are without work but available for and seeking work, including people who have lost their jobs and those who have voluntarily left work. Examples of those ineligible to work and/or leaves work voluntarily according to Aiyedogbon and Ohwofara (2022) include housewives, full time students, invalids, those below the legal age for work, old and retired persons. Unemployment has been grouped into two categories: first, the older unemployed who lost their jobs through retrenchment, redundancy, or bankruptcy; and second, the younger unemployed, most of who have never been employed (Oyebade, 2023). Though unemployment occurs to people of all categories but its effect has bitten more sarcastically hard on the youth. Unemployment is a global challenge, but worse in developing countries of the world, with attendant social, economic, political, and psychological consequences. It contributes to low GDP and leads to increase in crime and violence, psychological effect, adverse effect on health and political instability (Njoku & Ihugba, 2021).

Unemployment is one of the most closely-watched indicators for economic health, along with gross domestic product and the consumer price index.

While no single number captures all the nuances in the health of the labor market, the unemployment rate is considered one of the most important economic indicators that show the percentage of people that are unemployed in a country over a given period of time. It is the most commonly used indicator for understanding conditions in the labour market. The unemployment rate measures the share of workers in the labor force who do not currently have a job but are actively looking for work. People who have not looked for work in the past four weeks are not included in this measure. It is important to keep in mind that the rate measures the percent of unemployed job seekers in the labor force (the sum of employed and unemployed persons) and not the entire population. Thus, Okafor (2021) defines unemployment rate as the percentage of the labour force without a job. Unemployment rate is a lagging indicator, meaning that it generally rises or falls in the wake of changing economic conditions, rather than anticipating them. When the economy is in poor shape and jobs are scarce, the unemployment rate can be expected to rise. When the economy grows at a healthy rate and jobs are relatively plentiful, it can be expected to fall (Emeh, Anyadike & Ukah, 2022)

2.2 Theoretical Review

2.2.1 The Social Learning Theory

The social learning theory was initiated by Bandura (1977) in Alberta, Canada. The theory presents a comprehensive framework for understanding how individuals acquire knowledge and skills through observation, imitation, and modelling (Bergh & Theron, 2016). The theory believes that direct reinforcement could not account for all types of learning. While the behavioral theories of learning suggested that all learning was the result of associations formed by conditioning, reinforcement, and punishment; Bandura's social learning theory proposed that learning can also occur simply by observing the actions of others (Fryling, Johnston & Hayes, 2021). Thus, the theory added a social element, arguing that people can learn new information and behaviors by watching other people. Known as observational learning, this type of learning can be used to explain a wide variety of behaviors, including those that often cannot be accounted for by other learning theories (Kendra, 2021).

2.2.2 Human Capital Theory

The human capital theory is often attributed to Gary Becker who introduced the concept in his book "Human Capital" in 1964 with special reference to education (Ohazuruike & Elechi, 2023). He emphasized that an individual invests in education with an expectation that the investment will provide a benefit in the form of higher earnings. More generally, human capital theory assumes that individuals take actions that will likely increase their future earnings and overall well-being. Such investments are costly; they might involve direct costs such as tuition and fees for school, and indirect costs such as foregone earnings during the period spent in school. These investments result in some expected future benefits (Udu, 2015). According to Eze (2023), the benefits might include a higher wage, but can also be anything that the individual values, for example, better working conditions or a

longer life. Human capital theory typically models investment decisions such as those resulting from an optimization process; an individual will invest in such activities in order to maximize well-being over the course of a lifetime. Observed outcomes in the marketplace will be the result of an equilibrium process where the demand for specific skills and abilities is balanced with its supply. Human capital theory offers numerous useful insights and testable hypotheses about human behavior. One of the first to be explored is that observed differentials in earnings can be explained in part by differences in training costs. Adam Smith noted that professions that require years of training tend to have annual higher earnings than professions with no such restrictions (Ezeajughu, 2021).

2.2.3 Cognitive Apprenticeship Theory

According to Hisrich, Peters and Sherpherd (2008), the cognitive apprenticeship theory was developed by Collins, Brown and Newman in 1987 at the University of Illinois, United States of America. It emphasizes the importance of the apprentice learning a skill from the master of the skill as a constructive approach to human learning (Hisrich, Peters & Sherpherd, 2008). Thus, the theory pointed that teaching and learning were accomplished through apprenticeship (Neuwirth, 2017). This theory emphasizes the importance of the process in which a master of a skill teaches that skill to an apprentice. Cognitive apprenticeship theory emphasizes two issues: the teaching process to handle complex tasks and the cognitive processes involved in learning. A cognitive apprenticeship focuses on bringing internal thought processes into the open so they can be observed and learned by students (Neuwirth, 2017).

2.2.4 Theoretical Framework

For the theoretical underpinning of this study, the human capital theory was adopted. This is because the human capital theory suggests that investments in education and training, like apprenticeships, increase an individual's productivity and employability, leading to better job prospects and earnings. Using human capital theory, the explanation for this empirical observation is that a rational individual would only be willing to incur the costs of tuition and lost earnings during the training period if that investment has a sufficiently high rate of return in the form of higher earnings post training. This insight also suggests that lifetime earnings is a more appropriate measure when evaluating inequality: two individuals, one who invests in professional training and one who does not, can have identical lifetime earnings, but very different earnings at each point during their lives. Thus, apprenticeships provide skills and training, which enhances human capital; it focuses on individual investments in education/training for better outcomes; and it is relevant for understanding how apprenticeships impact youth unemployment.

2.3 Empirical Review

Okeyika, Uzoechina, Jegbefumwen, Ozulumba and Ekwow (2025) examined youth employability in multinational companies and whether Federal Government Apprenticeship Schemes drive employability in South Southern Nigeria. A

total of 360 owners of micro, small and medium enterprises trained in Federal Government Apprenticeship Schemes from the capital cities of four South-Southern States were selected for the study. The data generated via structured questionnaire were analyzed using descriptive statistics, multiple regression and analysis of variance. Results indicated that federal government apprenticeship scheme has contributed significantly to job creation in South-Southern Nigeria through impartation of skills to unemployed youths. However, it has not contributed to youth employability in multinational corporations.

Nlerem (2023) assessed the effect of the National Open Apprenticeship Scheme on youth employment in Ikwere Local Government Area of Rivers State, Nigeria. Data were collected with the aid of structured questionnaires administered to 120 randomly selected youths in the study area. Data were analyzed using descriptive statistics. The results revealed high (79.2%) level of awareness and high (84.2%) level of participation by respondents in the scheme. More participation by the respondents in the scheme was on catering with 11.3% response and welding and fabrication with 10.0% response. Socio-economic effect of the scheme was more on employment generation with 87.5% response. Major problems of respondents in the scheme were exclusion of some participants from resettlement benefits which accounted for 76.3% of the problem and insufficient resettlement package which accounted for 71.3% of the problem.

Adeyemi (2023) studied transformation of apprenticeship through a competence based approach in the Benin crafts sector. The research examines the pedagogical transformation generated by dual apprenticeship training and its impact on the Benin crafts sector. The study adopted the qualitative research design. 39 workshops and 7 training centers were used as direct observatory. Using a life-history approach, they conducted formal and informal interview with craft people and semi-structured interview with graduates, and non-graduates, professional, training centre staff and farmers. The findings of the research showed favourable impact on skill development, competence transferred job performance. The study recommends that apprenticeship relationship should be passed down from one generation to another to sustain craftsmanship.

Chineze (2022) investigated the impact of apprentice skill acquisition on unemployment reduction in Onitsha apprenticeship training practices, and on unemployment reduction in Onitsha, Anambra State. Primary sources of data were used and the instrument employed in collecting data from the population was structured questionnaire. Correlation analysis was use data analysis and test of hypotheses. The population of the study was 3085 entrepreneurs, who have been in business for more than 10 years and a sample size of 592 was determined using Gorge & Ball formula. From the analyses, the study found that apprentice skill acquisition has significant effect on unemployment reduction in Onitsha, and apprenticeship training practices has significant effect on unemployment reduction at Onitsha, Anambra State.

Maiyaki, Shehu and Musa (2020) examined the impact of local apprenticeship scheme on employment generation in selected local government areas in Adamawa State by adopting a survey approach in order to gauge the impact of the scheme. Purposive random sampling approach was used to draw 200 respondents from the selected local government area while structured closed ended questionnaire was used to collect primary data from the respondents. The data collected were analysed using descriptive statistics and Structural Equation Modelling (SEM). The study revealed that the local apprenticeship scheme has yielded generated employment in the LGAs.

Adesola (2019) investigated the influence of compensation-related apprenticeships on employment growth within Igbo enterprises in Osun State. Ninety-two percent of apprentices trained using this compensation-linked apprenticeship method remained with the company post-training, in contrast to merely twenty-four percent of apprentices trained under alternative apprenticeship models. Apprenticeships linked to compensation shown greater reliability and efficacy in decreasing unemployment rates in the research area, with a p-value of 0.0001 versus 0.00062. The study posited that with appropriate consideration, remuneration-based apprenticeships may facilitate a decrease in unemployment in Nigeria.

Okafor (2019) examined entrepreneurship development as a means of reducing unemployment in Nigeria using selected small-scale businesses in Anambra State as the study units. The data generated from the practicing entrepreneurs via structured research questionnaire were analyzed using simple percentages and Chi-Square (X^2) inferential statistics at 5% level of significance. The study revealed that tertiary institutions and other entrepreneurial training centers can be reformed to make them responsive to the needs of the trainees. It was found also that the cost of doing business in Nigeria negatively affects entrepreneurship development in Nigeria.

Adekola (2019) examined the impact of entrepreneurial skills acquisition on the employability status of Nigerian graduates. The study provided understanding of the entrepreneurial intentions of small sampled Nigerian graduates. It reported findings from quantitative data retrieved from questionnaire administered to 353 graduates of the Faculty of Social and Management Sciences that were selected through stratified and simple random sampling. Analytical techniques used include frequency count, percentages and inferential statistics in the form of Chi-square. The study found that exposure to entrepreneurship education influences students' intentions of becoming self-employed and improve their employability status. It was however discovered that most students were not very confident about their intentions due to fear of capital, failure, and lack of experience in business management.

Umogbai, Adudu and Agwa (2018) examined entrepreneurship education and unemployment reduction in Benue State, Nigeria. The population of the study comprised of 270 beneficiaries of entrepreneurship training programmes

in Central Bank of Nigeria (CBN) Entrepreneurship Development Centre and Centre for Youths and Women Skills Acquisition training centers in Vandeikya Local Government Area; while the sample size was 125 respondents. Questionnaire was used as instrument for data collection and the data collected were analyzed using tables, simple percentages and multiple regression. Findings indicated that entrepreneurship education contribute significantly to unemployment reduction in Vandeikya Local Government Area of Benue State through wealth creation. It also revealed that entrepreneurship education has significant effect on unemployment reduction in Vandeikya Local Government Area of Benue State through employment generation.

Fajobi, Olatujoye, Amusa and Adedoyin (2017) examined the challenges of apprenticeship development and youth unemployment in Nigeria. The study adopted the Parson Functional Perquisite Postulate and Modernization Theory. The research work engaged a cross-sectional research approach that combines questionnaires and in-depth interviews (IDIs) to source useful information from selected wards in Ife-East Local Government, Osun State. The cluster sampling technique was used in selecting 150 respondents for the administration of the questionnaire, while purposive sampling was adopted in selecting 10 interviewees. The data were analyzed using descriptive and content analyses. Findings from the study revealed the Nigerian economy cannot develop until apprenticeship is encouraged among youths, and among other recommendations, it was strongly recommended that an incentive be started for youth who want to engage in skill acquisition and apprenticeship.

2.4 Gap in Literature

The most pronounced gap is a dearth of studies on apprenticeship and youth unemployment in the five South Eastern states at the same time. What we have in the literature are isolated studies that focused on Anambra state and other states alone. Again, examined studies laid emphasis on general unemployment while this study emphasized on youth unemployment which is a major macroeconomic indicator that tells the wellness of a state or an area.

3.0 METHODOLOGY

3.1 Research Design

The study adopted the survey research design. This is because the survey research design is cost effective, useful in describing the characteristics of a large population, flexible, dependable, and individuals were the unit of analysis in this study (Wakazik & Stallion, 2021).

3.2 Sources of Data

The study used primary data. These data were sourced using structured research questionnaire that were distributed by hand and the assistance of others.

3.3 Sampling Unit

The study used staff of National Directorate of Employment (NDE) in the five South Eastern states of Nigeria. These states are Abia, Anambra, Ebonyi, Enugu and Imo.

3.4 Population of the Study

The population of the study was all staff of NDE in these various states. Available records from the Human Resource Desk of these branches of NDE, the population of the study stood at 150. This consists of all categories of staff.

3.5 Sample Size

The Krejcie-Morgan sample size determination technique was used for sample size determination. Thus, with a population size of 250, a Chi-Square for 1 degree of freedom at the desired confidence Level, the sample size is 152 (See Appendix). This represents 61 percent of the population size, which is justified. This is because according to Maddala (2022) and Nkonyeasua (2021), the minimum percentage of samples that can be selected out of any given population that is less than a thousand (1000) is 20 percent.

3.6 Sampling Procedure

The stratified random sampling technique was used in selecting the staff that were used for the study. Here, the population was first divided into five homogeneous groups (the five South Eastern states) called strata, and then random selection was made within each stratum. Accordingly, about 30 staff were picked from each of the five states.

3.7 Validity and Reliability of Research Instrument

On one hand, validity is the degree to which a measure accurately represents what it is supposed to represent (Hair, Black, Babin, Anderson & Tatham, 2017). To this end, the researcher constructed the questionnaire in such a way that it adequately covered the scope of the study by asking relevant questions in order to make the questionnaire capable of eliciting the required responses from the respondents.

On the other hand, reliability measures the extent to which a research instrument is consistent. It shows the dependability of a research instrument. According to Chakrabarty (2023), reliability measures consistency, precision, repeatability, and trustworthiness of a research instrument. Hence, internal consistency of the questionnaire was measured using Cronbach's Alpha. Cronbach's Alpha reliability coefficient normally ranges between 0 and 1 with higher values indicating higher reliability among the indicators (Hair, Black, Babin, Anderson & Tatham, 2017). This is to say that the closer Cronbach Alpha's coefficient is to 1.0, the greater the internal consistency of the items in the scale. A value of 0.7 was obtained and this confirmed the reliability of the research instrument.

3.8 Method of Data Analysis

Simple percentage, descriptive analysis and Ordinary Least Square (OLS) multiple regression techniques were used to analyze the data generated for the study. The said data in the first place was quantified via coding in line with a 5-point Likert scale of 1 to 5 that indicated Strongly Disagreed, Disagreed, Undecided, Agreed and Strongly Agreed.

3.9 Model Specification

$$YUR = (TRAS, MOAS, VOAS) \dots\dots (1)$$

$$YUR = b_0 + b_1TRAS + b_2MOAS + b_3VOAS + e \dots\dots\dots (2)$$

Where:

YUA = Youth Unemployment Rate
 TRAS = Traditional Apprenticeship System
 MOAS = Modern Apprenticeship System
 VOA = Vocational Apprenticeship System
 b_0 = Intercept of the model
 b_i = Regression slopes of TRAS, MOAS,
 VOAS
 e = Error term of the models

3.10 A priori Expectations

b_1, b_2 and $b_3 < 0$; this implies that the study expected traditional, modern and vocational apprenticeship systems to have negative effects on youth unemployment rate in South Eastern Nigeria.

4.0 DATA PRESENTATION, ANALYSIS AND INTERPRETATION OF RESULTS

4.1 Presentation and Analysis of Data

4.1.1 Regression Analysis

Table 1: Distribution of Distributed, Returned and Not- Returned Questionnaires

Questionnaire	NDE Staff					Total	Percent (%)
	Abia	Anambra	Ebonyi	Enugu	Imo		
Returned	28	26	24	27	29	134	88
Not-returned	3	4	6	3	2	18	12
Distributed	31	30	30	30	31	152	100

Source: Field Survey (2026)

The above table captures questionnaires returned by NDE staff of the five South Eastern states study as against distributed questionnaires. It was revealed as such that out of the total 152 distributed questionnaires, 134 were returned. In

other words, about 88% of the distributed questionnaires were returned. As such, all other analyses were based on the 134 well-filled and returned questionnaires.

4.1.2 Simple Percentage Analysis

Table 2: Demographics Distribution of Respondents

Variables	Options	Frequency	Percentage (%)	Cum. Percent (%)
Gender	Male	55	41	41
	Female	79	59	100
	Total	134	100	-
Age	21 – 40	32	24	24
	41 – 50	64	48	72
	51 – 60	24	18	90
	Over 60	14	10	100
	Total	134	100	-
Highest Level of Qualification	SSCE/GCE	62	46	46
	OND/NCE	23	17	63
	B.Sc./HND	13	10	73
	Post Graduate	15	11	84
	Others	21	16	100
	Total	134	100	-
Years of Experience	0 - 5 years	19	14	14
	6 - 10 years	28	21	35
	11 - 20 years	40	30	65
	More than 20 years	47	35	100
	Total	134	100	-

Source: Survey Research (2026)

The above table shows that out of the 134 respondents, 55 (41%) of them were male while 79 (59%) of them were female. This implies that the gender distribution of the respondents is skewed towards female. For age distribution, the same table revealed that 32(24%) of the respondents were between the ages of 21 and 40; 64(48%) of them were between 41 and 50 years; 24(18%) of the staff fell into the age bracket of 51 and 60; while 14(10%) of them were over sixty years. Hence, 90 percent of the respondents were at most 60 years of age. The table equally shows that 62(46%) of the respondents had SSCE/GCE as their highest level of education; 23(17%) had OND/NCE as their highest educational qualification; 13(10%) posted B.Sc./HND as their highest level of educational qualification; while 15(11%) had post graduate qualifications. However, 21(16%) of the staff had other qualifications like M-Phil. As such, majority of the respondents had SSCE/GCE as their highest educational qualification. Finally, the table shows that 19(14%) of the farmers have worked with NDE for between 0 and 5 years; 28(21%) of them have between 6 and 10 years work experience with the agency; 40(30%) of the respondents have between 11-20 years cognate experience; while 47(35%) have been into related jobs for over 20 years. Thus, 65% of the respondents have less than 21 years cognate experience.

4.1.3 Descriptive Analysis

Table 4: Linear Regression model Predicting Apprenticeship and Youth Unemployment

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	2.724	.473		5.757	.000		
TRAS	-.101	.036	.002	-2.806	.048	.851	1.175
MOAS	-.123	.061	.122	-2.016	.006	.913	1.095
VOAS	-.190	.068	.011	-2.794	.031	.891	1.123

a. Dependent Variable: YUR

Source: SPSS Output (2026)

The regression output in table 4 above shows the relationship between dimensions of apprenticeship and youth unemployment rate in Nigeria. Firstly, the result puts the intercept of the model at 2.724, which implies that keeping traditional apprenticeship system, modern apprenticeship system and vocational apprenticeship system constant (or equating them to zero), the score of youth unemployment rate will be about 54.48% (2.724 of 5, the maximum score). However, the regression coefficients of TRAS, MOAS and

4.2.1 Joint Test of Hypotheses

Table 5: Result of Joint Test

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	7.887	6	1.315	3.416	.003 ^b
Residual	76.603	199	.385		

Table 3: Descriptive Statistics of Variables

Variables	Mean	Std. Deviation	Respondents (n)
YUR	4.68	0.642	134
TRAS	4.60	0.592	134
MOAS	3.55	1.312	134
VOAS	4.61	0.636	134

Source: SPSS Output (2026)

As contained in the above table, out of a maximum score of 5, the mean score of youth unemployment rate (YUR) is 4.68 and its standard deviation is 0.642. Traditional Apprenticeship System (TRAS), Modern Apprenticeship System (MOAS) and Vocational Apprenticeship System (VOAS) which are the components of apprenticeship have mean scores of 4.60, 3.55 and 4.61 with standard deviations of 0.592, 1.312 and 0.636 respectively. It then follows that amongst the explanatory variables, MOAS has the highest standard deviation of 1.312 while TRAS has the least standard deviation of 0.592. Thus, modern apprenticeship system has the highest variation, followed by vocational apprenticeship system and traditional apprenticeship system.

4.1.4 Regression Analysis

VOAS are -0.101, -0.123 and -0.190 respectively. This implies that traditional, modern and vocational apprenticeship systems have negative effects on youth unemployment rate in Nigeria. In essence, an improvement in any of these apprenticeship systems will reduce youth unemployment rate in the country. However, vocational apprenticeship system is a better predictor of youth unemployment in Nigeria as it has the best regression coefficient of -0.190.

4.2 Test of Hypotheses

Total	84.490	205			
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a. Dependent Variable: YUR

b. Predictors: (Constant), TRAS, MOAS, VOAS

Source: SPSS Output (2026)

With the p-value of F-statistic (0.003) being less than 0.05 (5%) level of significance, it can be concluded that traditional apprenticeship, modern apprenticeship and vocational apprenticeship system have a combined significant effect on youth unemployment rate in Nigeria.

4.2.2 Individual Test of Hypotheses

Table 6: Individual Test Result 1

Variables	t-statistic	P-value	Remark
Constant	5.757	0.000	Significant
TRAS	-2.806	0.048	Significant
MOAS	-2.016	0.006	Significant
VOAS	-2.794	0.031	Significant

Source: Extract from SPSS Output (2026)

Given that the p-values of each of the explanatory variables (TRAS, MOAS and VOAS) are less than 0.05, the null hypotheses in all cases will be rejected. Hence, we can conclude that:

1. Traditional apprenticeship system has significantly affected youth unemployment rate in South Eastern Nigeria;
2. Modern apprenticeship system has a significant effect on youth unemployment rate in South Eastern Nigeria; and
3. Vocational apprenticeship system has a significant influence on youth unemployment rate in South Eastern Nigeria.

4.2.3 Model Fitness Test

Table 7: R-Square and Adj. R-Square Results

Model	R ²	Adj. R ²	Remark
YUR	0.934	0.866	Significant

Source: Extract from SPSS Output (2026)

Table 7 above revealed that traditional, modern and vocational apprenticeship systems have a joint effect of 93.4% on youth unemployment rate in Nigeria. However, the adjusted joint influence of these apprenticeship systems on youth unemployment rate in Nigeria is 86.6%. These give a good fit and suggest that the model is adequate, reliable, significant, and can be used for predictive purposes.

4.4 Diagnostics Tests

Table 8: Summary of Diagnostic Tests Results

Test	Criterion	Test statistic Value	Remark

Autocorrelation	Durbin Watson	1.971	No autocorrelation
Multicollinearity	VIF	1.175, 1.095, 1.123	No Multicollinearity

Source: Extract from SPSS Output (2026)

Table 8 revealed absence of autocorrelation and multicollinearity. This is because the value of Durbin Watson statistic (d) falls between 1.5 and 2.5. Secondly, the VIF (Variance Inflation Factor) values of the explanatory variables are less than 5. Hence, there is no correlation among successive values of the error term (e); and there is no correlation among the explanatory variables of the model. This validates the OLS estimates obtained.

4.5 Discussion of Findings

First, the study demonstrated that traditional apprenticeship system has negatively and significantly affected youth unemployment rate in South Eastern Nigeria. In other words, an improvement in traditional apprenticeship system significantly reduces unemployment rate in the South Eastern part of Nigeria and vice versa. This outcome was anticipated given that improvement in the traditional apprenticeship system comes with enhanced skills, increased productivity, job creation and addressing of skill gap (Umogbai, Adudu & Agwa (2018). These outcomes boost youth unemployment in sectors like manufacturing, construction and services. It also fosters entrepreneurship and self-employment; thereby contributing to poverty reduction and economic growth (Njoku & Ihugba, 2021).

Second, the effect of modern apprenticeship system on youth unemployment rate in South Eastern Nigeria is both negative and significant. This outcome too is desirable and it is likely because modern apprenticeship system focuses on high demand sectors like technology and manufacturing. It offers better training quality and industry partnership that enhances outcomes. Also, expanded access to modern apprenticeship opens doors for youth by engaging these youths and giving them a means of livelihood (Maiyaki, Shehu & Musa, 2020; Nlerum, 2023). In essence, modern apprenticeship system enhances employability by equipping youths with in-demand skills, thereby boosting job prospect. It creates a system that addresses skill gaps, thereby making apprentices more attractive to employers. Thus, trained youths are more likely to start their own businesses, thereby creating jobs (Maiyaki, Shehu & Musa, 2020; Adesola, 2019).

Finally, vocational apprenticeship system has a negative but significant influence on youth unemployment rate in South Eastern Nigeria. This outcome aligns with the study's a priori expectations of an inverse and meaningful association between vocational apprenticeship and youth unemployment rate. These outcomes in different studies were reported by the

likes of (Okafor, 2019; Aiyedogbon & Ohwofara, 2022). This like because vocational apprenticeship equip youths with hands-on skills for specific trades/industries. It focuses also on practical training which makes apprentices job-ready, thereby increasing employability. Again, vocational systems like modern systems often have strong employer partnership, which facilitates job placements.

5.0 SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

1. Traditional apprenticeship system negatively and significantly affected youth unemployment rate in South Eastern Nigeria;
2. Modern apprenticeship system has a negative and significant effect on youth unemployment rate in South Eastern Nigeria;
3. Vocational apprenticeship system has an inverse and significant influence on youth unemployment rate in South Eastern Nigeria;
4. Traditional, modern and vocational apprenticeship systems have a joint significant effect of about 93.4% on youth unemployment rate in Nigeria

5.2 Conclusion

In a bid to ascertain the effect of apprenticeship on youth unemployment in South Eastern Nigeria, this study was undertaken. Apprenticeship was disaggregated into traditional, modern and vocational systems while youth unemployment rate proxied youth unemployment. Adopting the Ordinary Least Square (OLS) multiple regression technique, results revealed that traditional, modern and vocational apprenticeship systems have negative and significant effects on youth unemployment rate. On this note, the study concluded that apprenticeship has a significant effect on youth unemployment in South Eastern Nigeria.

5.3 Recommendations

1. The traditional apprenticeship system should be encouraged further by improving training quality and structure, fostering partnerships for better job placements, and integrating basic literacy and numeracy skills.
2. There is need to strengthen modern apprenticeship systems by way of aligning training with emerging industry needs in technology and renewable energy, increasing access and inclusivity for youths, and providing entrepreneurship training for self-employment.
3. The authorities should expand vocational apprenticeship programs with respect to scaling up vocational training in high-demand sectors, enhancing infrastructure and equipment for practical training, and further promoting public-private partnerships for job placements.

5.4 Suggestions for Further Studies

There is need for a large scale comparative study on the extent to which existing apprenticeship systems have affected youth unemployment in different parts and zones of Nigeria. Such studies will go a long way in guiding both the Federal and State governments on the best system to adopt in the different zones/regions. The practice of applying the same system across board may not yield the desired result as states and regions have their peculiarities.

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