

Effect of Education on Youth Unemployment in Nigeria.

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Abstract

The Nigerian economy has undergone structural changes precisely the improvement of the educational system since independence. However, this effort does not provide adequate employment opportunities to the teeming youths as a large number of the country's teeming youths unemployed are certificate holders. This study examines the relationship between education and youth unemployment in Nigeria, Also, it ascertains the causality between education and youth unemployment in Nigeria. This study employed secondary data of a period from 1990 to 2021 estimation technique. Also, Autoregressive Distributive Lag model (ARDL) and the Causality test was employed to examine the causal relationship between education and youth unemployment. The findings indicate that education impacts positively on youth unemployment if it is in line with the labour market demand. Also, it indicates that the improvement of GDP does not necessarily increase job opportunities to Nigeria's teeming youth. This is connected to the most economic sectors' improvements do not lead to expansion and establishment of new firms to absorb youths in the labour market. The study recommended that Nigeria's educational policies must change towards the

creation of more jobs opportunities to the teeming youths. Moreover, economic sectors like agriculture and manufacturing sectors should be given more priority because of their influence in providing job opportunities.

KEYWORDS: education, employment, policy, unemployment, youth

INTRODUCTION

Education is seen from two physical development and human development. The former seen education as the basis for literacy, skills acquisition, technological advancement, and the ability to explore the environment's natural resources for development. The latter is seen as it lays the foundation of personality, and it is the medium by which an individual achieves success in his/her life, society, and the world (Kumar, Kumar, & Sanjay, 2017). Educational outcomes usually refer to the goals of learning and development, upon which general educational programs are based and learners are required to be successful on the job, in family, and their communities. These include among others knowledge, skills, attitudes, and values. They also refer to what learners should know, understand, and be able to do (University., 2011).

Unemployment is a complex phenomenon. It connotes to lack of employment. This means anyone who can work and above certain age limit and is unoccupied may be considered as being unemployed for that period. Normally, the term unemployment implies a condition of joblessness. Also, unemployment refers to a phenomenon where people who are willing and capable of working are unable to find suitable paid work (Emeh, Nwanguma, & Abaroh, 2012). Some believed that unemployment as a condition in which people who are willing to work at the normal wage rate are unable to find jobs. The existence of a natural rate of unemployment is rooted in imperfections in the labour market. The marginalist economic theory lessens the preoccupation with high youth unemployment, since it

recognises the existence of a natural rate of unemployment. Thus, the problem of youth unemployment remains a considerable obstacle in every country in the world.

Youth unemployment does not derive from the macroeconomic conditions of a country but rather from models of transition from education to work (Refrigeri & Aleandri, 2013) . It was estimated that the global unemployed persons amount to about 74.6 million youths. Out of an estimated Nigeria's population of about 217, million people in August 25, 2022. The youth population accounting for 70 percent of the population (151 million youth) out of which about 53.40% of youths are unemployed (Federal Ministry of Budget and Economic Planning). This data supports the notion that youth unemployment is a challenge that needed commendable attention. This is because unemployment is highly influential in propagating poverty (World Bank Group, 2019). Moreover, according to the International Labor Organization (ILO, 2020) report, the young population constitutes an essential share in overall unemployment. From the report the share of young people neither in employment nor in education (NEET) is more than 22% which has not improved since 2005. The report indicates that higher education schooling can be seen as one reason for the high level of youth unemployment. Similarly, gaining employment upon graduation signifies a young person's pursuit of independence. Postsecondary education is an important means towards securing a job. Because individuals may choose to pursue post-secondary education as a bridge towards employment, or in tandem with employment (Cheatham & Randolph, 2020).

The data from the Bureau of Labour Statistics report that the yearly unemployment rate in 2017 was 6.3% among high school dropouts, 3.5% among those with a high school degree, and 2.2% among those with a college degree. This data underscores the importance of education as a means of increasing odds of employment among the general population.

Since 2009, the rate of youth unemployment is increasing across Europe. Youth unemployment bring on social exclusion, and it has negative consequences for their future working prospects. African countries allocated considerable resource to improve educational quality. These countries continue to exhibit unsatisfactory educational outcomes and their graduates often lack the appropriate skills and qualifications required by employers in many industries and sectors (Morsy & Mukasa, 2019). For instance, according to Otonko (2022) Nigeria has done a lot to improve education, effective efforts need to be made to face the ever-increasing challenges of our time. It is indisputable that education is a great tool that makes a person's ability to gain employment. Investment in education is imperative to a sustainable economy. In addition, studies like Mercy & Chinwe (2020)

argued that successive governments in Nigeria have invested a lot on education without correspondingly increasing employment opportunities.

According to Oyebade (2003) unemployment in Nigeria can be classified into two categories: the older unemployed who lost their jobs as a result of retrenchment, redundancy or bankruptcy; and the younger unemployed, most of who have never being employed. Youth unemployment, could be termed as numerous youths from diverse background, willing and able to work, but cannot find any. When the supply of labor surpasses the demand for labor, it results to joblessness and unemployment. Given the lack of sufficient employment opportunities in the formal sector, youths may be forced to engage in casual work and other unorthodox sources of livelihood, thus leading to underemployment (Echebiri, 2005). Youth's unemployment in Nigeria is a consequence of several factors. These include among others public negative attitudes towards Technical Vocational Education (TVE) as education for the low-status (Nwokomah, 2005) and, a high rate of population growth. This increasing population growth has produced an

overwhelming increase in the youth population thereby increasing the size of the working age population. Lack of employable skills due to inappropriate school curricula, poor governance, overlapping of functions, poor coordination and lack of sustainable measures are the major factors hindering youth employment (Musari, 2009). The implications of this challenge include rising insecurity and restiveness, political instability, violence and other social vices that have placed the challenge of youth unemployment at the forefront of policy discussions.

The difficulty that arises in many countries including even developed countries is the insufficient capacity of the education system and vocational and professional training to keep frictional unemployment under control (Refrigeri & Aleandri, 2013). Since the attainment of political independence in 1960, the Nigerian economy has undergone fundamental structural changes from planned government economy to a mixed economy to then to a market economy. According to the World Bank (2020), the economy of Nigeria is creating employment but mainly in the informal sector at 54%, the private formal sector accounted for 37%, and the 9% left were generated by the public sector.

The gross disparities between the kinds of manpower most needed and the kinds, proportions, and quality of actual well-being stirred out by the educational system are connected with the nature and level of Nigeria's industrial development. Traditional education in Nigeria as in any other African country emphasized functionalism as people were trained on specific jobs (Mercy & Chinwe, 2020). Instead, it emphasized the development of manpower interested in white-collar jobs and not in manual work. Thus, employment is not readily available to the majority of youths specifically certificate holders. Some see the major cause of Nigeria's youth unemployed are the failure of the

educational system to prepare them for the labor market as they lack marketable skills (Mercy & Chinwe, 2020).

Though, the government has implemented several policies to expand the education system to reduce youth unemployment. However, Nigerian youths are confronted with many difficulties when it comes to their integration into the labor markets and the search for decent and productive jobs, as such the youths are the highest age category of unemployed persons in Nigeria. This motivates the researchers to conduct a study to:

- I. Examine the relationship between education and youth unemployment in Nigeria from 1990 to 2021
- II. Ascertain the direction of causality between education and youth unemployment in Nigeria from 1990 to 2021.

This study provides in-depth knowledge of Nigeria's education and unemployment causes, the relevance of unemployment and the impact of education on unemployment among Nigerian youths, as well as areas that needed to be touched on and how this should be done to rescue the phenomenon as well as to provide a solution to address massive youth unemployment problem in Nigeria and some developing countries with similar challenges.

LITERATURE REVIEW

The youth category is a special group of people with strong stamina and passion for realizing certain set goals and objectives. How a nation defines its youth is related to the objective conditions and realities that exist on the ground especially historical and contemporary socio-economic and political issues that need to be addressed (Mutiat & Adam, 2021). Thus, culture and tradition play a great role in the definition of youth as some literature defines youth from different age ranges, and stages of life which are categorized

by specific changes, attitudes, and wishes (Datti, Said, Ismail, & Rahman, 2021; Leavy & Smith, 2010; United Nations, 2009) defined youth as people between 15 and 24 years of age. Also, Baseline Youth Survey Report defined the youth age bracket in Nigeria starting from 18 – 35 years old (NBS, 2012). This category represents the most volatile and yet the most vulnerable segment of the population, socioeconomically, emotionally and in other respects.

The large literature on youth unemployment highlights the importance of education to reduce the youth unemployment rate. Equally, many international organizations have been carrying out studies aiming to increase educational opportunities in world countries and indicate the impact of education on employment (OECD, 2012). Many researchers believe that despite the initiatives and commitment of the government in coming up with several programs to reduce the level of youth unemployment, the desired outcomes fail due to less attention given to the technical and vocational education (Rufai, Salman, & Salawu, 2018). Ramzan, Abbas, Aslam, & Farooq (2018) examine the short and long-term effects of technological development variables and public education expenditures on unemployment using the ARDL-PMG approach. Panel ARDL model was used. The findings indicate that R&D spending increases unemployment in the short term, a % increase in R&D spending decreases unemployment by 1.42% over the long term. Similarly, a 1% increase in education expenditure decreases unemployment by 0.165% over the long term.

Lauretta (2021) examines the effects of youth unemployment on Nigerian society: A sample of 150 respondents were selected using a purposive sampling technique and a simple random sampling technique. The findings indicate that the Nigerian youths are frustrated due to failure to be employed even though, they are qualified and capable and willing to work. Besides, the increasing rate of unemployment amongst youths has

increased the upsurge of armed robbery, prostitution, drug trafficking kidnapping, terror threats, and ongoing abductions of Nigerians with reckless abandon. Again, the study links youth unemployment to violence, drug trafficking and sometimes suicide.

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Abid et al.(2023) establish the asymmetric effects in the short and long term of cyclical output on Algeria's unemployment rate during the period 1970– 2018. NARDL model methodology in the estimation. From the results of this study, an increase in economic growth will not only have the desired result of reducing the overall unemployment rate, but will also have the distributional effect of reducing youth unemployment. Omoju et al., (2023) reviewed Nigeria youth employment policies using mixed research methods and primary data collected through focus-group discussion and key-informant interviews. The results indicates although there are several youth-employment programs in Nigeria, they have not yielded a marked reduction in youth-unemployment rates. The programs are challenged by factors such as lack of framework for proper governance and coordination, inadequate funding, lack of institutional implementation capacity, limited political inclusive, lack of prioritization of vulnerable and marginalized groups, inadequate oversight of implementation and focus on stand-alone programs that are not tied to long-term development plans.

Binuomoyo (2020) investigates the impact of government spending on unemployment in Nigeria. OLS estimates were adopted for over 27-year period for unemployment, federal government recurrent expenditure on education and economic growth were assess. The results indicate that while growth is significant and indeed influence unemployment negatively, in Nigeria context though, educational capacity has increased, its impact is shallow as the economy is unable to absorb the graduates.

Kuldasheva, Qadamboevich, Balbaa, & Ismailova (2023) analyzed the impact of education and employment opportunities on poverty reduction in both rural and urban areas in Uzbekistan in 2018 using the based on a monthly “panel” survey of a subset of 1,500 households and a Probit model was used in the analysis. The findings indicate that the education of one person plays a major role in providing employment and lifting many people out of poverty. Alcin, Şahin, and Hamzaogulu (2021) analyses the relationship between youth unemployment and education in countries with a high level of youth unemployment but having different characteristics: Turkey and Spain. The analysis was conducted using Johansen Cointegration tests. The results indicate no unidirectional causal relationship between enrollment in higher education towards youth unemployment rate in Turkey and Spain. Besides, it has been observed that the increase in the higher education schooling rate does not decrease youth unemployment.

METHODOLOGY

This study employed secondary data from a period from 1990 to 2021. For the avoidance of scantiness of data, the study subscribed databanks such as World Bank Development Indicator (WDI) and Central Bank of Nigeria (CBN) among others. The Analysis for the procedure is on different stages. The descriptive statistics of the variables were carried out first before any other inferential analysis. The main estimation technique is the Autoregressive Distributive Lag model (ARDL) which is based on the result of the long run test. In addition, the Causality test was employed to examine the causal relationship between education and youth unemployment. The Autoregressive Distributed Lag (ARDL) Bounds testing approach is proposed by Pesaran & Shin (1999). It is used to establish the existence of a long-run relationship between industrial output and unemployment in Nigeria. The justification of the use of the ARDL technique is in its ability to handle relationships irrespective of whether the regressors are I(0) or I(1) (Adu, 2018). The ARDL

process starts with the testing of the significance of the lagged values of the variables in the error correction form of the underlying ARDL model through the use of the F-statistics (Okodua & Ewetan, 2013). In order to avoid the problem associated with the non-standard nature of the asymptotic distribution of the computed F-statistics irrespective of whether the regressors are I (0) or I(1).

Moreover, the endogenous growth theory was used as a framework which the models for this study is anchored. The endogenous growth model is an economic theory that contends that long-term economic growth is driven mostly by internal variables such as human capital, innovation, and technical progress rather than external forces such as capital accumulation or population expansion. Following the objectives of the study, two different models were used. In the first model, this study used unemployment as the dependent variable and regress it on education, population, Real gross domestic product per capita, foreign direct investment, gross fixed capita formation and trade openness as explanatory variables. The second model examine the causal relationship between education and youth unemployment in Nigeria.

The Specified model form is given below:

$$UN = \beta_0 + \beta_1(EDU) + \beta_2(POP) + \beta_3(RGDP) + \beta_4(PCY) + \beta_5(FDI) + \beta_6(GFCF) + \beta_7(TRO) + \varepsilon_t$$

Where $UN = Unemployment Rate$

$EDU = Education$

$POP = Population$

$RGDP = Real GDP$

$PCY = Per capita$

FDI = *Foreign Direct Investment*

GFCF = *Gross fixed capita formation*

TRO = *Trade openness*

Here β_0 is intercepted, $\beta_1, 2, \dots, 7$ are the slope determinants of variables and ε_t is the error term of the regression equation that captures noise for it.

RESULTS AND DISCUSSION

The summary statistics of the variables was indicated in Table I. The maximum, minimum and median values of the series are also reported on each row, respectively.

Table I: Descriptive Summary for the Variables

	YUN	EDU	POP	RGDP	PCY	FDI	GFCF	TRO
Maximum	6.50	11.34	4.10	3.24	10.45	9.87	11.87	10.26
Minimum	4.06	10.85	4.00	2.99	10.35	9.65	10.62	9.98
Mean	3.00	11.20	4.08	2.80	10.22	8.55	9.98	10.08
Median	3.20	11.20	4.04	3.00	10.20	7.75	9.87	10.08
Std.Dev	0.29	0.15	0.09	0.06	0.07	0.08	0.15	0.14
Observation	28	16	27	18	28	26	29	15

EDU = *Education* POP = *Population*, RGDP = *Real GDP*, PCY = *Per capita*, FDI = *Foreign Direct Investment*, GFCF = *Gross fixed capita formation*, TRO = *Trade openness*

The unit root test was employed through the use of the Augmented Dickey-Fuller (ADF) and the Phillip-Perron (PP) test statistics. This is to ensure that none of the variables are I (2) as this would render the result of the Bounds test to be invalid as they are founded on the condition that the variables are I(0) or I(1) or mutually co-integrated. Tables II and III present the result of the ADF test and the PP test, respectively. The results provide similar

findings of both ADF and PP test results in the sense that education, real gross domestic product, per capita, foreign direct investment, gross fixed capita formation and trade openness as explanatory variables are stationary except population after first differences. Both test of unit root shows the indication of I (0) and I (1) variables, thus justifying the use of the ARDL regression model. Since the observations are yearly, the maximum order of lags chosen in the ARDL model is 2 grounded on the suggestion of Pesaran & Shin (1999) and Narayan, (2004). The standard information used is the AIC as suggested by Liew (2004) for sample size less than 60.

Table II: ADF Unit Root Test Results

Variables	Test statistics	Critical value	Remark	Test statistics	Critical value	Remark	Order of integration
LnEMP	-3.214	-2.981	Stationary				I(0)
LnEDU	-3.450**	2.920	Stationary				I(0)
LnPOP	-1.303	2.900	Non stationary	-4.781**	-2.993	Stationary	I(1)
LnRGDP	-4.971	2.976	Stationary				I(0)
LnPCY	-3.121**	2.976	Stationary				I(0)
LnFDI	-3.240	2.960	Stationary				I(0)
LnGPCF	-4.430**	2.990	Stationary				I(0)
LnTRO	-4.850	2.961	Stationary				I(0)

Notes: Test Assumption: test includes an intercept but not a trend. **Significant at 5 percent level

Table III. PP Unit Root Test Result

Variables	Test statistics	Critical value	Remark	Test statistics	Critical value	Remark	Order of integration
LnEMP	-3.111	-2.988	Stationary				I(0)
LnEDU	-3.470**	2.871	Stationary				I(0)

LnPOP	-1.323	2.892	Non stationary	-4.21**	-2.760	Stationary	I(1)
LnRGDP	-4.871	2.999	Stationary				I(0)
LnPCY	-3.221**	2.987	Stationary				I(0)
LnFDI	-3.340	2.960	Stationary				I(0)
LnGPCF	-4.210**	2.894	Stationary				I(0)
LnTRO	-4.750	2.958	Stationary				I(0)

Notes: Test Assumption: test includes an intercept but not a trend. **Significant at 5 percent level

ARDL Long run coefficients

The long run coefficients based on the specified ARDL model are summarized in Table IV. Since that all the variables are expressed in logarithms, the estimated coefficient can be understood in terms of elasticity. The results inform that all the variables follow to theoretical expectations in terms of their signs. Similarly, all the variables are statistically significant with the exception of GDP. This may be connected to various economic sectors in the country do not really impact on jobs creation. This is cleared seen recently as Nigeria's GDP improved by 3 percent. In contrast, the level of unemployment is increasing in the country. Specifically, an increase of level or accessing education by 1 percent may likely lead to an increase in securing job by about approximately 4 percentage. This is associated to the nature of jobs available that tally with the labour market available in the country.

Table IV: ARDL Long run coefficients

AIC-ARDL (1,1,0.0.) Dependent variable: LnUNEMP	Coefficient	SE	T-statistics
LnEDU	-0.183**	0.052	-3.519
LnPOP	-2.187	1.182	-1.850

LnRGDP	0.067	0.281	0.238
LnPCY	0.001*	0.001	1.00
LnFDI	-0.064	0.030	-2.110
LnGPCF	-2.187**	1.187	1.842
LnTRO	-2.65	1.493	-1.775

Notes: *, **Significant at 10 and 5 percent levels, respectively

ARDL Short run coefficients

The short-run dynamics of the model is presented in Table V. We are concerned in the Error Correction Mechanism (ECM) of the model, the speed of adjustment. The rule of thumb states that the ECM which is must be negative and lie between zero and one. The findings show that for the model specified, the ECM result is (-0.877). This indicates that about 88 percent of the errors generated in each period are automatically corrected in the subsequent period (on an annual basis). As it was stated by Murthy & Okunade (2016), one of the econometric requirements for a well-specified ARDL model is the presence of parameter stability. Therefore, it can be concluded that the ARDL co-integration model displays parameter stability. Also, applying a number of other diagnostics tests, it was found out that there is no evidence of serial correlation and heteroskedasticity in the disturbances.

Table V: Error Correction Model

AIC-ARDL (1,1,0.0.) Dependent variable: DLnUNEMP	Coefficient	SE	T- statistics
DLnIEDU	-0.269	0.433	-0.621
ECM	-0.877**	0.111	-7.871

Causality Result

The Granger-causality based on the Vector Error Correction (VAR) was employed because the variables are co-integrated. In this study, the pair-wise granger-causality technique applied to examine the causality between youth unemployment and education as indicates in Table VI. The variables are youth unemployment, education and real GDP. This paper uses similar methodology adopted by Lwazi, (2018) in examining. Table VI presents the correlation coefficient results which proves that the variables appeared to be similar. The results also confirm the absence of the multicollinearity due to the degree of relationship. Besides, the expected correlation signs between youth unemployment with education real GDP rate is shown as negative, respectively. While on the other hand, the correction between Real GDP and education attainment is positive.

Table VI: Pair-wise correlation between youth unemployment, Education attainment and real GDP

	EDU	RGDP	YUN
Youth unemployment	-0.04	-0.08	1
Education	1	0.40	-0.04

Notes: EDU education, RGDP real GDP and YUN youth unemployment

CONCLUSION

The study examines the effect of education on youth unemployment. From the empirical findings, education has positive significant effect on the youth employment if it is in line with the labour market demand. Also, the findings indicates that, the improvement of GDP does not necessarily increase much job opportunities to Nigeria's teeming youth. This is connected to the most of economic sectors' improvement do not leads to expansion and establishment of new firms to absorb youths in the labour market. It is understood that a workforce that is healthy and well educated will help Nigeria reverse the drift of debility

and restore the economy on the path of inclusive growth, which will be strongly influenced by the accessibility of highly motivated and skilled labour. It has accepted that there needs to be enormous growth in per capita income and economic productivity by investing in human capital development of labour through training and value-based education the study recommends that Nigeria's educational policies must change towards the creation of more jobs opportunities to the teeming youths. Moreover, economic sectors like agriculture and manufacturing sectors should be given more priority because of their influence in providing job opportunities. A further study can be conducted on the effect of quality of education on the youth employment opportunities.

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