

An Evaluation of the Expenditures on Education in Nigeria and Other West African Countries

*Chukwudi Anderson Ugomma

Department of Statistics, Imo State University, Owerri, Nigeria.

*Corresponding Author

DOI: <https://doi.org/10.51244/IJRSI.2023.10924>

Received: 15 August 2023; Revised: 11 September 2023; Accepted: 11 September 2023; Published: 14 October 2023

ABSTRACT

The study seeks to compare the education expenditures in Nigeria and other West African countries. The data for this study were gotten from a secondary source obtained from World Bank Annual Report. The data were analyzed using one way ANOVA with the aid of SPSS version 20, and the result showed that there is no significant difference in the expenditures on education between Nigeria and other West African countries at 5% level of significance. We therefore, recommend that Governments of West African Countries should allocate a higher percentage of their budgets to education as to ensure adequate funding for infrastructural development, teacher training, and curriculum enhancement, enhance improvement of budget and monitoring and for overall improvement of the education sector.

Keywords: Education, Expenditures, West African Countries, ANOVA

INTRODUCTION

Education plays a very important role in human capital formation. Education elevates the output and competence of individuals and as a result produces skilled manpower that is able to leading the economy towards the path of sustainable economic development. Furthermore, education is expected to perform positively towards world economic development and poverty alleviation, both of which are the priorities of the world community. An asset in human capital, especially in education allows each person to add to their society in a productive way. It becomes a significant issue of an economy's capacity to achieve high level of growth with low unemployment, high wages and strong social unity. Therefore, along with elements such as low unemployment and balance of payments equilibrium, education is a vital matter that each country's government deals with and strives to get better. However, in many countries in Africa today, formal education is in a state of crisis. While curricular reform countries to serve as an ongoing source of public policy debate, African leaders are confronting increasing difficulty in allocating educational resources to meet present and future levels of demand. The paralysis that has been unfolding is one characterized basically by education's rising claim on public sector resources against a backdrop of widespread poor economic growth, mounting international debt, and rapidly growing populations whose demand for education cannot be met readily by traditional means. There has been a positive relationship between per capita GDP and education's share of GDP. Wide disparities suggest that since education must compete against other claims for investment resources, how efficiently education is delivered may be as important as the level of resources. Within this context, we ask what options are available to respond to Africa's growing educational demand, how can they be managed, and what role can these options play in promoting accelerated economic growth and development?

Primarily, education in the West African region, just like other regions in Africa, is funded by the government, which allocates its public education resources based on the country's priorities and needs. In many of the West African countries, the public spending on education is complemented by the private sector through private ownership of some of the educational institutions. Thus, there is a combination of both

public and private owned educational institutions at all tiers of education co-existing with one another. Nonetheless, access to higher education is unevenly distributed. This can be attributed to the variations in the number of educational institutions in the countries of the region as both scarce human and financial resources are spread skewed throughout the sub-region. This notwithstanding, government role in enhancing education and research, in this region, cannot be underestimated and over time, there have been increased government spending on education (World Bank, 2016) but whether these spending translate to improvements in both education and manpower development remains contentious. Thus, to progress towards greater prosperity and economic growth, countries need to provide higher education that is relevant to current market needs, and this, among others, justifies the need for more government spending on education.

Nigeria is the most heavily populated country in Africa and is frequently referred to as the “Giant of Africa.” However, the country’s educational system has been facing a lot of challenges over the years, including insufficient funding, poor infrastructure, and low quality of education. In recent years, the government has made efforts to boost funding for education, but there is still a significant gap among Nigeria’s educational expenditure and that of other West African countries. According to data from the World Bank, Nigeria’s expenditure on education as a percentage of its GDP was 1.5% in 2019. This is lower than the average for sub-Saharan Africa, which was 4.6%, and significantly lower, than the global average of 4.9%. In comparison to other West African countries, Nigeria’s expenditure on education is also lower than Ghana’s (4.1%), Cote d’Ivoire’s (4.2%), and Senegal’s (5.4%) (World Bank, 2022). Nigeria’s low expenditure on education has contributed to a range of problems in the country’s education system, including inadequate facilities, inadequate teacher training, and low enrollment rates. The country has one of the maximum rates of out-of-school children in the world, with an estimated 10.5 million children not attending school. The quality of education is also a worry, with low learning outcomes and high dropout rates.

In contrast, countries like Ghana, Cote d’Ivoire, and Senegal have made significant growth in improving their educational systems through increased investment in education. These countries have higher enrollment rates, better infrastructure, and higher learning outcomes than Nigeria. This significant inequality in educational expenditure has led to many challenges within Nigeria’s education system. Insufficient funding has resulted in inadequate infrastructure, a lack of essential learning resources, and limited access to quality education. Additionally, the low financial commitment has contributed to a shortage of qualified teachers, low teachers’ salaries, and an inadequate ability for teacher training and professional development. The crisis at hand is the disparity in educational expenditures between Nigeria and other West African countries. While other countries in the region have made noteworthy progress in improving and stabilizing their education systems through increased investment in education, Nigeria’s education system continues to face many challenges due to inadequate funding, poor infrastructure, and low quality of education. The problem of low education expenditure in Nigeria needs to be addressed urgently as to advance the quality of education in the country. Without adequate investment in education, Nigeria’s educational system will continue to lag behind other West African countries, and the country’s economic growth and development will be negatively affected. Therefore this paper aims at comparing the expenditures on education in Nigeria with that of other West African countries. The study will also empirically examine the differences and similarities in government spending and international aid allocated to education in order to gain insights into the educational landscape of the region.

REVIEW OF RELATED LITERATURE

Brief overview of Educational Sector

Education as a critical sector plays a vital role in the social and economic development of nations. The allocation of financial resources to education is indispensable for ensuring excellence in education and

improving educational outcomes. This literature review aims to examine the existing body of research on the comparison of expenditure on education in Nigeria and other West African countries. By exploring the available literature, this review seeks to identify key findings, trends, challenges, and potential areas for improvement in education expenditure in the region.

Several studies have focused on analyzing educational expenditures in Nigeria. These studies have examined government budgets and expenditure reports to understand the allocation of funds to the education sector. They have found that education expenditures in Nigeria represent a significant part of the national budget, demonstrating the government's assurances to investing in education. However, challenges live in effectively utilizing the allocated funds and ensuring precision and accountability in educational spending. Relative studies have also been conducted to evaluate educational expenditure across West African countries. These studies have also revealed disparities in expenditure prototypes and priorities between diverse countries. Factors such as political stability, economic conditions, and government policies influence the allocation of resources to education. Understanding these disparities could offer insights into best practices and potential areas for enhancement in educational expenditure.

Socio-economic factors have been recognized to significantly impact educational expenditures in Nigeria and other West African countries. Researchers have also examined the connection between economic indicators, such as GDP and income levels, and educational spending. Higher GDP has been connected with increased assets in education, reflecting the significance of economic resources behind educational development (Bawa, 2017). Moreover, population size, governance, and public finance management have been identified as influential factors in education expenditure.

Several researchers have examined the impact of expenditure on enrollment rates, literacy levels, and academic performance and they found a positive correlation between education spending and primary school enrollment rates in Nigeria and other West African countries. This emphasizes the importance of sufficient asset in education to get better access to schooling. Despite the pledges to educational expenditure, Nigeria and other West African countries face a variety of challenges. These challenges include inadequate funding, inefficient utilization of funds, and disparities in resource allocation. Policy recommendations also have been projected to address these challenges, such as enhancing governance structures, strengthening financial management systems, and adopting evidence-based decision-making processes. Since the 2000 millennium development goals (MDGs), covering the gap of unequal education has been an economic debate among the technocrats and academic community, see for example, Bakar and Tuah,(2006); Miyagishima, (2016)). The notable feature of the human capital stock lies on the promise of moving up the developing countries' technological hierarchy with try to diversify the economy (Acemoglu and Angrist, 1999; Yusuf, et al 2009). With this conscious attempt of knowledge and diversification, investment in human capital, like the physical capital, becomes an inherent economic value for national development. As such, education investment becomes more noticeable both at public and private fields to decrease the spread of inequalities of education (Mariana, 2015). The truth underlying asset in education is the labour market demand such that disparities in educational attainment (knowledge, skill and training) across households and countries should encourage sufficient funding of education at all levels (Bakar and Tuah, 2006). No doubt, the difference in the educational achievement usually confines individual household to low status and low wages as well as high status and high wages (Miyagishima, 2016). In that case, both government and individual household should be enthusiastic towards education investment due to the public and private returns to education (Mariana, 2015; Psacharopoulos and Patrinos, 2004). However, in spite of social and private returns from investment in education, modern studies indicate that most developing countries face challenges of inequality of education, which appears as an impediment to human welfare and growth (Bakar and Tuah, 2006; Thomas, et al, 2001). The quantity of education disparity for the West African countries is explained in the Human Development Report (HDR, 2015). For instance, the education index parameter for development which classifies education inequalities and defines the status of country

development have ranked Togo, Niger, Nigeria, Mali, Gambia and Cote d'Ivoire as the 166, 187, 152, 176, 172 and 171 out of 195 countries respectively. With this ranking, it is argued that not only that physical capital is essential for growth, but a significant investment in education also points to growth and productivity through balancing of education distribution (Yusuf et al., 2009). It connotes that investment in physical and human capital (i.e. education) complements each other. The investment in education as a tonic to inequality of education (Gruber and Kosack, 2014) is confined by government spending that goes to education. In universality, the expectation of education investment is that a higher percentage of public spending that goes to education, expressed as a ratio of gross domestic product (GDP), explains the volume of the national economy and the degree of reduction in educational disparities (UNESCO, 2018). Educational disparities arise from differences in schooling completion. Within the grade transition, a number of school-age children dropped out from schooling. Given that the state of out-of-school is a measure of disparity in educational allocation (Gamoran, 2015), the out-of-school matter could arise from inadequate educational funding and un-affordability such as the upward rise of school fees (Hendel, et al, 2005).

Review on Education Expenditure

It is a well established fact that education plays a basic role in economic prosperity of a country. The provision of excellence in education is a main strategy component that promotes efficiency within an economic setting as it enhances wages of workers and augments individual skills and work performance. Globally and locally, studies have established that education have many positive influences on economic welfare of a country (Ogbara, et al, 2018). Hence, it is usually accepted that education aids human capital development, motivates enhanced economic productivity and helps to improve the general standard of living in a country. In fact, education is seen as a long and lasting solution to various problems faced by developing countries, consequently, need for increased investments in the educational sector have been well documented in various literatures. This entails that ensuring that people of countries across the world are well educated and knowledgeable has far-reaching suggestions for economic growth and development. Thus, increased government investments in the educational sector have been proposed by researchers as a solution for declining human capital development in developing countries like Nigeria. In Nigeria, regrettably, government determined investments in education are very low as reflected in the annual budgetary allocation to the sector. This has consequences to private individuals and organizations making enormous investments in education which has led to the appearance of many private schools with very expensive tuition fees in the country. For example, according to data obtained from Central Bank of Nigeria (2017) opined that government's expenditures in educational sector expressed as a percentage of total government expenditures have been very insignificant; fluctuating between 0.31% and 8.26% between 1981 and 2012, while proposed expenditure on the educational sector in 2019 is 7.02% of the total budget allocation. In recent times, between 2013 and 2017 it was observed that government investments towards education increased from 2.02% to 2.20%. These figures show that government investments towards education have never reached the minimum 26% of total expenditure recommended by the United Nations. As such, the incapability of government to arouse growth of the educational sector through appropriate investment have led to increased private participation in the sector resulting to high school fees (Kabuga and Hussaini, 2015). The low investments in the education sector joined with increased enrolment into primary, secondary and tertiary educational institutions over the years have resulted to poor salaries to teachers, lack of infrastructural facilities, inadequate staffing, etc. which has in turn resulted to incessant industrial actions embarked upon by the Academic Staff Union of Universities (ASUU), Colleges of Education Academic Staff Union (COEASU), Academic Staff Union of Polytechnics (ASUP), National Union of Teachers (NUT), Academic Staff Union of Secondary Schools (ASUSS), Non-Academic Staff Union, etc. have really affected the education sector (Mallick, et al, 2016). For this reason, there have been vast disruption in the academic calendars as pupils and students enrolled for academic activities stay more years than necessary in their studies. On the other hand, staff in the educational sector have been agitating due to government failure

to meet their demand for new salary scale and allowances, poor state of academic environment, etc. (Lawal and Wahab, 2011). Based on these identified inefficiencies, private individuals and organizations have taken advantage of government's inability to investment in the Nigerian educational sector to build up lots of private primary, secondary and tertiary educational institutions across the country. Poor financial resources to the educational sector have been a main problem in the Nigeria educational system. There has been enormous increase in the number of student intake at all levels of education including the primary, secondary and tertiary. Though, actual expenditure level falls short of the budgetary allocation. Abada and Aminu (2018) observed that poor financial investment has been the curse of Nigerian educational system. Against this background, the funding formula of the educational sector was reviewed and is still undergoing appraisal by the government and stakeholders in the educational sector. According to the 1994 funding formula of the educational sector, states would share 50 percent equally; educationally disadvantaged states 25 percent, pupil enrolment 25 percent and population of the state 10 percent (Ojewunmi and Oladimeji, 2016). In spite of all the alternatives and the suggestion of UNESCO, public expenditure on education in Nigeria remains inadequate for coping with a system that is growing at very fast speed. Due to poor financing the quality of education accessible is affected by poor attendance and insufficient preparation by teachers at all levels. The feelings of teachers are low as a result of basic conditions of services and low salaries. Access to education is more compounded by over payment of school fees and other accessible in Nigerian Educational system. As a result, 15-30 percent of the infrastructure, equipment and books are not useful, out of date or dilapidated (Ogbara, et al, 2018).

In conclusion, this literature review highlights the existing researches on the comparison of expenditure on education in Nigeria and other West African countries. The findings showed the commitment of governments to spend in education, but faced a lot of challenges in successfully utilizing resources and improving transparency. Socio-economic factors, education outcomes, and policy recommendations have been explored to provide insights into the multifaceted dynamics of education expenditure. Further research is needed to expand our understanding of the precise issues and potential strategies for improving educational expenditure in the region.

Some Empirical Review of Educational Expenditures

Muktdair-Al-Mukit (2012) studied on the long-run relationship between public expenditure on education and economic Growth in Bangladesh. The study used an econometric model and time series data from 1995 to 2009 and the result revealed that public spending in education has a positive and significant impact on economic growth in the long run. Furthermore, the study observed that a 1% increase in public expenditure in education contributed 0.34% increase in GDP per capita in the long run.

Mekdad, et al (2014) studied the relationship between education and economic growth in Algeria over the period 1974 to 2012 with the use of endogenous growth model and their results supported their main hypothesis that public spending on education affects positively economic growth in Algeria. They also found a bilateral causality and long run relationship between per capita GDP and public education expenditure.

Lawanson (2015) empirically investigated the relevance of education and health components of human capital to economic growth, using a panel data from 16 West African countries over the period 1980 to 2013 and using the Diff-GMM dynamic panel technique and findings indicated that coefficients of both education and health have positive statistically significant effects on GDP per capita, hence, confirming the strong relevance of human capital to economic growth of West Africa.

Mussagy and Babatunde (2015) study focused on the effect of government educational expenditures and economic growth in Mozambique using a co-integration method and quarterly data between 1996 and 2012. They found out that the government expenditures on education in Mozambique was quite low and the

government spending allocated from the budget was not more than 20% in the past 15 years. This was below the recommended percentage of 26% set by UNESCO and NEPAD (2002). Their co-integration and error-correction analysis established that a long run relationship existed between economic growth and government expenditures in Mozambique.

Hua (2016) studied on the Relationship between public expenditure on education and economic growth in China. The study made use of unit root and granger casualty analysis and data from 1992 to 2013 and found that the contribution of public expenditure on education was significant and high and that GDP granger caused public expenditure on education but public expenditure on education does not granger cause GDP.

Mallick, et al (2016) investigated dynamics of expenditure on education and economic growth in selected 14 major Asian countries by using econometric analysis and balanced panel data from 1973 to 2012. The results of Pedroni co-integration stated the existence of long-run equilibrium relationships between expenditure on education and economic growth in all the countries. Also, expenditure on education only Granger caused economic growth in long-run in all the countries. The result of the Fully Modified OLS (FMOLS) showed a positive impact of educational expenditure on economic growth. The study argues that education sector is one of the important ingredients of economic growth in all 14 Major Asian countries.

Wang and Shasha (2016) constructed a panel data model to investigate the effect of education human capital on economic growth, using the latest education data of 55 countries and regions from 1960 to 2009. In the study, they subdivided education human capital into higher education, secondary education and primary education and examined the effect of different education level on economic growth. Their result showed that in general, education human capital had a significant positive impact on economic growth. The positive impact of higher education on economic growth was particularly significant, however, the primary education and secondary education does not have a significant impact on economic growth.

Babatunde (2018) investigated government spending on infrastructure in Nigeria. The data for the study involved both primary and secondary data. The secondary data comprised of a reported annual spending on selected infrastructure and annual Gross Domestic Products for 1980 to 2016. The study also carried out unit root and co- integration tests using Augmented Dickey–Fuller and Phillip–Perron model. Weighted least square was used to test the sample of 37-year annual time series using vector error correction model and the findings indicated that government spending on transport and communication, education and health infrastructure have significant effects on economic growth while spending on agriculture and natural resources infrastructure recorded a significant inverse effect on economic growth in Nigeria.

MATERIALS AND METHOD

Population and Sample of the study

The population of this study consists of all the West African countries defined by the United Nations defined as Benin, Burkina Faso, Cape Verde, The Gambia, Ghana, Guinea, Guinea-Bissau, Ivory Coast, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, and Togo and for the purpose of this research a simple random sample of 4 countries such as Senegal, Ghana, Côte d’ivoire and Guinea were selected. The yearly educational expenditures of each of these 4 selected countries were collected for a period of 11 years to be compared with Nigerian Educational expenditures for the same of years

Method of data Analysis

The method of analysis used in this study is One-Way Analysis of Variance (ANOVA).

One-way ANOVA is a statistical method used to compare the means of samples to check whether they are

significantly different. If any of the group means is significantly different from the overall mean, then, the null hypothesis would be rejected.

ANOVA uses the F test for statistical significance because it allows for comparison of multiple means at once since the error is calculated for the whole set of comparisons. The F test compares the variance in each group mean from the overall group variance. If the variance within groups is smaller than the variance between groups, the F test would find a higher F value, and therefore, a higher likelihood that the difference observed is real and not due to chance.

The One-way ANOVA model is statistically represented as

$$X_{ij} = \mu + \tau_i + \varepsilon_{ij} \tag{1}$$

where,

X_{ij} is an observation in which i represents the observation number, and j represents a different group (level) of the variable X

τ_i is the population mean for the j th group (treatment)

ε_{ij} is the random error, independent and normally distributed, with zero mean and constant variance, that is, $\varepsilon_{ij} \sim N(0, \sigma^2)$

The general procedure for analyzing the data using One-way ANOVA is summarized in Table 1

Table 1 One-Way ANOVA Table

Source of variation	Sum of Squares	Degree of freedom	Mean Squares	F-ratio
Within	SS_w	$k-1$	MS_w	$F = \frac{MS_w}{MS_B}$
Between	SS_B	$n-k$	MS_B	
Total	SS_T	$n-1$		

where

$$SS_w = \sum_{i=1}^k \sum_{j=1}^p (X_{ij} - \bar{X})^2 \tag{2}$$

$$SS_B = \sum_{i=1}^k (X_i - \bar{X})^2 \tag{3}$$

$$SS_T = \sum_{j=1}^n (X_j - \bar{X})^2 \tag{4}$$

$$MS_w = \frac{SS_w}{k-1} \tag{5}$$

$$MS_B = \frac{SS_B}{n-k} \tag{6}$$

$$F = \frac{MS_W}{MS_B} \tag{7}$$

and

$$\bar{X} = \frac{1}{N} \sum_{i=1}^k \sum_{j=1}^p X_{ij} \tag{8}$$

The null hypothesis assumes that there is no variance data in different groups. This means that the mean are the same and it is stated as,

$$H_0 : \mu_i = 0, i = 1, 2, \dots, 5$$

$$H_1 : \mu_i \neq 0 \text{ (at least one of the means differ)}$$

Reject the null hypothesis if $F < 0.05$ at 5% level of significance , otherwise, do not reject the null hypothesis.

In case if the null hypothesis is rejected, the test would go further to review whether the significant difference between the populations means are statistically different. This test would be the Least Significant Difference (LSD).

The LSD is calculated as,

$$LSD_N = t_{\alpha/2, n-k} \sqrt{MS_w \left(\frac{1}{n_1} + \frac{1}{n_2} + \dots + \frac{1}{n_5} \right)}, N = n_1, \dots, n_5 \tag{9}$$

At 5% level of significance (i.e P-value = 0.05)

where,

t is the critical value from t-distribution table

MS_W is the mean square within (error) obtained from the result of the ANOVA test and

n is the number of scores used to calculate the mean

RESULTS AND DISCUSSIONS

Table 2 Educational Expenditures (*US\$billion*) from 2010 t0 2020 for the five West Africam Countries

Year	Nigeria	Senegal	Ghana	Côte d'Ivoire	Guinea
2010	5.47	0.58	1.46	0.59	0.20
2011	6.38	0.62	1.64	0.69	0.23
2012	6.44	0.67	1.94	0.73	0.23
2013	7.56	0.69	2.02	0.76	0.23
2014	7.99	0.78	2.09	0.80	0.25
2015	6.66	0.71	1.79	0.83	0.25

2016	6.26	0.71	1.85	0.83	0.24
2017	5.85	0.90	2.12	0.86	0.28
2018	6.38	1.11	2.27	0.97	0.29
2019	6.88	1.28	3.26	1.06	0.28
2020	6.15	1.11	3.14	1.05	0.27

4.1 Pictorial Presentation of Educational Expenditures in Selected West African Countries

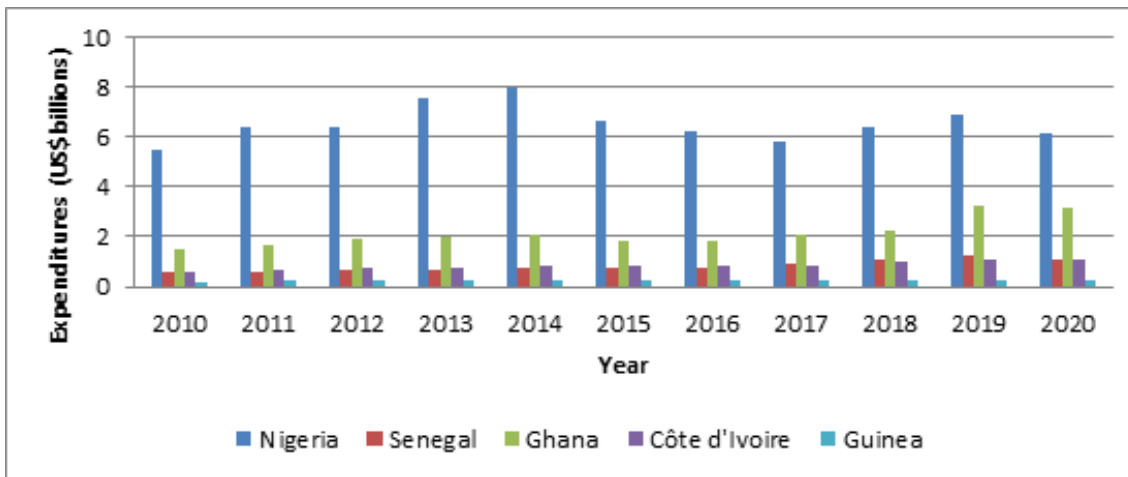


Figure 1. Multiple Bar Chart of Educational Expenditures of selected West African Countries

From the chart in Figure 1 showed that there is a significant difference between educational expenditure of Nigeria and the other four selected West African countries during the period of study. The plot brightly showed that Nigeria spends more than the other countries followed by Ghana and Guinea has the least educational expenditure. Therefore, it is now seen that if Nigerian government should invest more on educational sector, in the long run, Nigeria would improve tremendously in education than other West African countries, hence, the name of “giant of Africa” would be sustained.

Table 3 ANOVA Table on Educational Expenditures (US\$ billion) from 2010 to 2020 for the five West African Countries

		Sum of Squares	df	Mean Square	F	Sig.
Senegal	Between Groups	0.427	9	0.047	0.395	0.854
	Within Groups	0.120	1	0.120		
	Total	0.547	10			
Ghana	Between Groups	3.049	9	0.339	1.707	0.536
	Within Groups	0.198	1	0.198		
	Total	3.247	10			
Cote d'Ivoire	Between Groups	0.175	9	0.019	0.497	0.810
	Within Groups	0.039	1	0.039		
	Total	0.215	10			
Guinea	Between Groups	0.006	9	0.001	0.358	0.871
	Within Groups	0.002	1	0.002		
	Total	0.008	10			

By looking at the result in Table 4, we can observe that significance values are 0.854 for Nigerian and Senegal, 0.536 for Nigeria and Ghana, 0.810 for Nigeria and Cote d'Ivoire and 0.871 for Nigeria and Guinea. This are considerably higher than our significant threshold $P < 0.05$ of, therefore, we do not reject the null of hypothesis. At this point, we can confirm that there is no significant difference among the means of education expenditures of the selected West Africa Countries.

Fisher's Least Significant Difference

$$LSD = t_{(50,0.025)} \sqrt{0.3590(0.4535)} = 0.8070$$

Given that the groups have 5 means given as $\bar{y}_1 = 0.8327$, $\bar{y}_2 = 2.1436$, $\bar{y}_3 = 6.5472$, $\bar{y}_4 = 0.8281$, $\bar{y}_5 = 0.2445$, and the arrangement of the means in ascending order are

$$\bar{y}_5 = 0.2445, \bar{y}_4 = 0.8281, \bar{y}_1 = 0.8327, \bar{y}_2 = 2.1436, \bar{y}_3 = 6.5472$$

The differences of the means are obtained as:

$$|\bar{y}_5 - \bar{y}_4| = 0.58364, |\bar{y}_4 - \bar{y}_1| = 0.00455, |\bar{y}_1 - \bar{y}_2| = 1.31091, |\bar{y}_2 - \bar{y}_3| = 4.40364$$

Hence, comparing the mean differences with the LSD value (0.8070), we observed that $|\bar{y}_5 - \bar{y}_4|$ and $|\bar{y}_4 - \bar{y}_1|$ are less than 0.8070. It is therefore seen that these groups are not significantly different from one another.

CONCLUSION

The findings of this study practically showed with the help of Analysis of Variance that there is no significant difference in the expenditures on education in Nigeria and other West African countries such as Senegal, Ghana, Côte d'ivoire and Guinea for the under study.

RECOMMENDATIONS OF THE STUDY

From the result of this study, we therefore, recommend the following that:

- Governments of West African countries should increase their overall education budget by allocating a higher percentage of their budgets to education as to ensure adequate funding for infrastructure development, teacher training, curriculum enhancement, and overall improvement of the education system.
- West African Governments should enhance budget implementation and monitoring: It is crucial to ensure that allocated funds are effectively utilized and reach the intended beneficiaries. Governments should establish robust mechanisms for monitoring and evaluating the implementation of education budgets to prevent mismanagement and corruption.
- West African Governments should as a matter of urgency prioritize access to quality education: In addition to increasing expenditure, emphasis should be placed on improving access to quality education for all segments of the population. This includes addressing issues of equity, reducing barriers to enrollment, and promoting inclusive education.
- Conduct research and data collection: Governments should invest in comprehensive research and data collection to understand the current state of education, identify gaps, and make informed policy decisions. Regular data collection and analysis can guide effective resource allocation and policy formulation.

DECLARATIONS

- Availability of Data and Materials: Data Available
- Competing Interest: Not Applicable
- Authors' Contribution: The author researched and type the manuscript
- Funding: Not Applicable
- Acknowledgement: The author acknowledges all those whose articles were cited and referenced in the manuscript.

REFERENCE

1. Abada, I.M, and Aminu, (2018) the Determinants of Long Run Economic Growth In Nigeria, 8 No. 1.
2. Acemoglu, D., and Angrist, J. (1999). How large are the social returns to education? Evidence of Creativity. *The Journal of Creative Behavior*, 46(1), 3-15.
3. Babatunde, S.A (2018) "Government spending on infrastructure and economic growth in Nigeria", *Economic Research-Ekonomska Istraživanja*, 31:1, 997-1014, DOI: 10.1080/1331677X.2018.1436453.
4. Bakar, R., and Tuah, H. (2006). Education Inequality in Malaysia. *The Journal of Human Resource and Adult Learning*, 2(2), 47-51.
5. Bawa, I, K (2017): *Current Studies in Comparative Education, Science and Technology*, Vol 4(2), 10-21.=
6. CBN (2017). Central Bank of Nigeria. *Statistical Bulletin*, vol. 27: Abuja, Nigeria.
7. Gamoran, A. (2015). *The Future of Educational Inequality in the United States: What Went Wrong, and How Can We Fix It?* New York: William T. Grant Foundation (July 11). Available at: http://wtgrant_foundation.org/library/uploads/2015/11/The-Future-of-Educational-Inequality-Adam-Gamoran.pdf (accessed June 28, 2016).
8. Gruber, L., and Kosack, S. (2014). The Tertiary Tilt: Education and Inequality in the Developing World. *World Development*, 54, 253-272.=
9. (2015). *Education Index – Human Development Report*. United Nations Development Programme: Retrieved from: <http://hdr.undp.org/en/content/education-index>
10. Hendel, I., Shapiro, J., and Willen, P. (2005). Educational Opportunity and Income Inequality. *Public Economics*, 89, 841-870.
11. Hua, Y, (2016) "The Relationship between Public Expenditure on Education and Economic Growth: Evidence from China". All Theses. 2361.https://tigerprints.clemson.edu/all_theses/2361
12. Kabuga, N.A. and Hussaini, M. (2015). Government spending on education and economic growth in Nigeria: An Empirical Investigation. *Kano, Journal of Educational Studies (KAJEST)*, vol. 4 (3), 225-236.
13. Lawal, A. and Wahab, T. I. (2011). Education and economic growth: The Nigerian experience. *Journal of Emerging Trends in Economics Management Sciences*, 2(3), 225-231.
14. Lawanson, Akanni Olayinka (2015) "Economic Growth Experience of West African Region: Does Human Capital Matter?" *International Journal of Business and Social Science*, Vol. 6(12).
15. Mallick, L, Pradeep K.D and Kalandi, C.P (2016) "Impact of Educational Expenditure on Economic Growth in major Asian Countries: Evidence from Econometric Analysis". *Theoretical and Applied Economics*, Volume XXIII (2016), No. 2(607),173-186
16. Mariana, I. (2015). Consequences of the Investment in Education as Regards Human Capital. *Procedia Economics and Finance*, 23, 362-370
17. Mekdad Y, Aziz, D and Monir L (2014) "Public spending on education and Economic Growth in Algeria: Causality Test". *International Journal of Business and Management*, Vol. II (3).
18. Miyagishima, K. (2016). Education Inequality among Different Social Groups. *Hacienda Publica Espanola. Review of Public Economics*, 217(2), 11-35.
19. Muktdair-Al-Mukit, D (2012), *Public Expenditure on Education and Economic Growth: The Case of*

- Bangladesh. International Journal of Applied Research in Business Administration & Economics (IJARBAE) 1(4): p.10-18. Retrieved September 25, from: <https://core.ac.uk/download/pdf/33797956.pdf>
20. Mussagy, I.H and Babatunde, M.A (2015) “Government Spending on Education and Economic Growth in Mozambique: A Cointegration Approach”. *Revista Electrónica de Investigación e Desenvolvimento*, N° 5, Dezembro de. Retrieved September 25, 2018, from: <http://reid.ucm.ac.mz/index.php/reid/article/viewFile/68/84>
 21. Ogbara, I. A., Ebong, J. M and Abraham, N. M. (2018). Public Spending in Education Sector and Poverty Level in Nigeria (1980 – 2015). *International Journal of Education and Evaluation*, 4(1) 58-82.
 22. Ojewumi, J. S. and Oladimeji, W. O. (2016). Effect of Public Spending on the Growth of Educational Sector in Nigeria, *JORIND*, 14 (2).
 23. Olayinka, L, A (2015) “Economic Growth Experience of West African Region: Does Human Capital Matter?” *International Journal of Business and Social Science*, Vol. 6(12).
 24. Psacharopoulos, G., and Patrinos, H. A. (2004). Returns to investment in education: a further update. *Education Economics*, 12(2), 111-134.
 25. Thomas, V., Wang, Y., and Fan, X. (2001). Measuring Education Inequality: Gini Coefficients of Education. Policy Research working paper 1936, World Bank Institute [Data File]. Retrieved from: <http://elibrary.worldbank.org/doi/pdf/10.1596>
 26. (2018). Glossary -Government expenditure on education as % of GDP. Retrieved from <http://uis.unesco.org/node/334651>
 27. Wang, Y and Shasha, L (2016) “Education, Human Capital and Economic Growth: Empirical Research on 55 Countries and Regions (1960-2009)”. *Theoretical Economics Letters*, 6, 347-355. Retrieved September 25, from: https://file.scirp.org/pdf/TEL_2016042911245920.pdf
 28. World Bank (2022). World Bank Annual Report.
 29. World Bank, 2018, World Bank Annual Report
 30. Yusuf, S., Saint, W., and Nabeshima, K. (2009). Accelerating catch-up: Tertiary education for growth in Sub-Saharan Africa: Directions and development: Human development, World Bank. Retrieved from http://siteresources.worldbank.org/INTAFRICA/Resources/e-book_ACU.pdf