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Human Capital Development and Economic Growth in Nigeria (1982-2022)

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Abstract

The study examined the impact of human capital development and economic growth in Nigeria. Time series data range between 1982-2022 were used. The study employs ordinary least square (OLS) method of estimation and the stationarity properties of the model were also explored. The study carried out by means of secondary data and used gross domestic product (GDP) as the Dependent Variable while government expenditure on education (GEE), government expenditure on health (GEH), primary school enrolment (PSE), secondary school enrolment (SSE), tertiary school enrolment (TSE) and life expectancy rate (LER), as proxies for human capital development as independent variables. The results revealed from the empirical analysis showed that that human capital development has a positive and significant relationship with economic growth over the study period 1982-2022. Based on these findings, this study recommends that efforts should be made by every entity of the economy to harmonize the activities in the educational and health sectors of the economy. This will have a long run effect on the economy. Nigerian government should also increase its allocation to education in its future annual budgets in order to set standards in the education sector.

Keywords; Gross domestic product, Government expenditure on education, government expenditure on health, Life expectancy rate and (OLS).

1.1 Introduction

Every nation in the world recognizes human capital as a tool for national growth. One of the main strategies for raising the caliber of human resources is to provide individuals with health and education. In addition to being social concerns, these challenges also give an economy the well-trained people resources needed for expansion and prosperity. Any nation's ability to quickly develop socioeconomically depends on its human capital. According to Musa and Ali (2020), a nation's human resources are its most precious resource. Natural resources and capital are passive agents. Humans are the only species that can collect wealth and use natural resources for long-term economic growth and development, making them the active agents of modernity. The foundation of a country's prosperity is its people, not its natural resources or physical capital. The growth of a nation's human capital is a necessary condition for its socioeconomic and political transformation. Humans are the most valuable resource in both developed and developing nations. It follows that careful management and efficient use of these assets are essential for achieving economic growth and development.

Ogunleye and Owolabi, (2017). Every nation in the world recognizes human capital as a force for national growth. Wakeel A. Isola and Alani (2016). While human capital development is the process of acquiring and increasing the number of people who have the knowledge, training, and experience that are essential for a country's economic growth and development, human capital refers to the abilities and skills of a nation's human resources (God's time and Uchechi, 2014).

According to Ejere's (2011) theory, human capital refers to the human element in the production process and is made up of the workforce's collective knowledge, competencies, and talents. Humans are the only components of production with the capacity for learning, adapting, and changing, as well as being innovative and creative. Numerous theoretical and empirical research have acknowledged the significance of human capital development as an engine of economic growth and development. Numerous research works have examined the ways in which human capital influences economic expansion. It seems that highly educated people, like scientists and technicians, are better at comprehending and incorporating new or preexisting concepts into manufacturing processes.

Hassan , Rahmah and Oboh (2010) Compared to other emerging and frontier countries, Nigeria has the highest percentage of people living below the poverty line, despite having one of the largest economies in Africa and one of the fastest expanding economies globally between 2001 and 2015 (African Development Bank, 2017; Udemba, 2020). Huge natural resource deposits can be found in six geopolitical zones around the nation, ranging from substantial amounts of natural gas and crude oil to substantial quantities of solid minerals. It is hardly a formidable global rival, though, and it suffers from poor education quality. Nigeria is "one of the world's most youthful countries," according to the World Bank (2020), thus it stands to reason thatThis favorable age profile would be linked to high productivity, a labor force that is actively employed, and developing nations experiencing rapid economic expansion. Nigeria's prospects are not good when it comes to education, though. Even though basic education is legally free and required, Nigeria has the worst incidence of school exclusion in Africa as of 2020. Approximately 10.5 million children in the country, aged 5 to 14, do not attend school. According to the UNESCO Institute for Statistics (2020), just 35.6% of children aged 36-59 months receive early childhood education, while only 61% of children aged 6-11 regularly attend primary school. According to the "2020 Poverty and Inequality in Nigeria" study published by the National Bureau of Statistics (NBS), about 83 million individuals, or 40% of the entire population, live below the national poverty threshold of 137,430 naira ($381.75) annually.Nigeria has low human capital, according to statistical data. A human development trap is created by childhoods that are characterized by disadvantage and little or no schooling.

According to Beegle and Christiaensen (2019) and Omodero (2019), the human development trap will keep families and eventually entire generations trapped in poverty cycles. Thus, in order to address this pervasive issue, human capital investment is required. A significant portion of Nigerian planning in previous decades was focused on accumulating material capital for quick growth and development, with little regard for the critical role that human capital plays in the process of economic and social progress. According to Dauda (2010), Mba, Ogbuabor and Ikpegbu (2013), spending on health and education as a gauge of human capital has a favorable impact on economic growth. For a brief period, some economists have contended (Lawanson, 2009; Jaiyeoba, 2015) that government spending on health and primary school enrollment had a detrimental effect on growth. The documented literature is equivocal due to divergent opinions regarding the relationship between economic growth and investments in human capital. Nigeria, a developing nation in Sub-Saharan Africa, has previously launched a number of educational initiatives in an effort to increase her human capital and achieve sustainable growth. However, these initiatives have only ever operated as channels for the transfer of funds to the corrupt political leaders and their allies. Nigeria introduced Universal Basic Education (UBE), a mass-oriented education program, in 1967. Olusegun Obasanjo, the president at the time, introduced the program in Sokoto. However, soon after the program began, the federal government stated that there is a "acute shortage of qualified teachers in the primary school level," which is the reason behind Nigeria's declining educational standards.It was reported that even though the National Certificate of Education (NCE) is the minimal educational requirement one should possess to teach in the

nation's primary schools, roughly 23% of the over 400,000 teachers employed in the country's primary schools do not hold the Teachers' Grade Two Certificate. Nigeria relaunched Universal Primary Education (UPE) in 1976, but as previously said, the program was unsuccessful because to a shortage of funding brought on by corruption, among other reasons. These have had unfavorable effects on Nigeria's efforts to build high-quality human capital, but they haven't altered the country's concentration on this goal in order to attain notable rates of economic growth.

Nigeria's high unemployment rate, extreme poverty, and unsustainable growth can be attributed, in part, to the fact that technical expertise and skills are typically acquired through foreign physical capital, which is insufficient for the country's varied and comprehensive development needs. Additionally, less developed nations—Nigeria included—are defined by their economic backwardness, which is demonstrated by low labor productivity, immobility of factors, restricted occupational specialization, a lack of entrepreneurship, and traditional social structures and customs that reduce the incentives for economic change. Furthermore, when people lack understanding of the natural resources that are accessible and when there are insufficient chances for entrepreneurship, alternative production methods, required skills, and other growth and development-promoting factors, the population's economic quality remains low. In actuality, progress is impossible without an advance in the human dimension, or the quality of people. The path to advancement involves education, learning, on-the-job training, improvements in health, and an expanding repository of economic data—which, it seems, is lacking in Nigeria.

Nigeria, like many other wealthy economies around the world that have embraced a similar strategy to boost their economic growth, has not been able to realize her full development potential in terms of sustainable human capital development or people-oriented development despite the abundance of resources bestowed upon the nation. According to World Bank estimates, 202 million people live in Nigeria, the majority of who have very low literacy rates and frequently limited access to education. Similar to this, despite the government's enormous efforts to raise human potential and improve people's quality of life, the results have not been as expected, primarily due to a lack of funding and shifting policies. All levels of education have seen a rise in funding recently, but the returns are quite poor since there is a lack of entrepreneurship. In order to address the ongoing problems of a high unemployment rate, inadequate education, poor health, and other related issues, the government should be able to allocate more funds to education, healthcare, training, skills, and other related areas. These measures will then support economic growth by feeding back into the economy.

This research work therefore aimed at answering the following questions:

1. What was the influence of government Expenditures on Education to economic growth in Nigeria?
2. Had government Expenditures on health care sector affected Nigerian economic growth?
3. Did Human capital exert a positive impact on the economic growth of Nigeria?

The following Hypothesis will be addressed

H_1: Government Expenditures on Education has significant impact on Nigerian economic growth.

$H_{2;}$ Government Expenditures on health care has significant impact on economic growth in Nigeria.

H_3 Human capital wields a positive impact on the economic growth of Nigeria

The broad or general objective of this research is to identify the general impact of Human capital development on Nigerian economic growth. The research would specifically investigate the following:

1.0. To examine the impact of Government Expenditures on health care to economic growth in Nigeria.
2.0. To find out the effect of Government Expenditures on Education to Nigerian economic growth.
3.0. To investigate the Human capital impact on the economic growth of Nigeria.

Literature Review

Numerous academics have conducted numerous researches to objectively ascertain the connection between the increase of human capital and economic expansion. Whatever the model used, it appears that everyone agrees that economic growth is stimulated by human development. In their 2022 study, Muhammad, Maureen and Itodo, examined how government spending affects the development of human capital and how it affects Nigeria's economic growth between 1970 and 2011. Real Gross Domestic Product, Gross Fix Capital Formation, Total School Enrollment, Government Recurrent Health and Education Expenditures, Political Environment Dummy, and Interactive Government Recurrent Health and Education Expenditures are the study's variables. The Federal Bureau of Statistics (FBS), the World Bank, and the CBN were the sources of their data. Using the Ordinary Least Square (OLS) regression model, the study analyzed the data and found that the Gross Fix Capital Formation, Total School Enrollment, Government Recurrent Expenditure on Health, Government Recurrent Expenditure on Education, Political environment Dummy, and Interactive Government Recurrent Expenditure on Health and Education were all positively correlated with the growth in Real Gross Domestic Product. The study found that in order to guarantee consistent economic growth, the budgets for the health and education sectors need be greatly expanded.

Shobowale, Olopade and Oladeji (2022) used the panel least square approach to evaluate the direct effects of human capital development on economic growth in a subset of Sub-Saharan African countries from 1981 to 2020. The enhanced Solow growth model was used in the investigation. Human capital showed a positive relationship with economic growth, which suggests that the economy grows when the human capital is strengthened. This was revealed by the direct effect of technology, physical infrastructure, and human capital development on economic growth in a subset of Sub-Saharan African countries. Physical infrastructure had a favorable effect on the nation's economic expansion as well. Martha Matashu (2022) looks into the connection between SSA's economic growth and human capital. Theoretical and empirical study results show that education in SSA nations appears to have little effect on the creation of human capital and overall economic growth. In conclusion, the differences in economic development seen among the nations may point to the necessity of context-based, human capital-based educational strategies in order to support economic growth in the SSA nations. The report suggests that in order to support economic growth in SSA nations, educational strategies that enhance the formation of human capital should be used.

According to a recent study by Redmond and Nasir (2020), natural resources significantly boost economic growth. In a similar vein, Shahbaz et al. (2018) present data showing that a nation's natural resources support economic expansion. Zallé's (2019) study looked at the relationship between natural resources and economic growth from 2000 to 2015. When human capital is present, natural resources are found to boost economic growth, according to the ARDL model. Kumar and Paramanik (2020) used a non-linear ARDL approach to study how India's financial development compared to economic growth from 1996Q1 to 2018Q3. The findings show that, over time, financial development has a beneficial effect over economic growth. Ali et al. (2016) looked into how trade openness and industrial value addition affected Bangladesh's economic growth from 1981 to 2015. Using the Granger and OLS causality approaches, the study discovered that industry value added positively correlated with economic growth. Economic growth is positively correlated with increasing industry value added.

Raheem et al. (2018) investigated the effect of human capital supported by government expenditure via natural resource rent investments over economic growth using the financing gap model and simulation approach. The study's goals were to be met by focusing on 18 Sub-Saharan African nations. The study's conclusions show how important health care costs associated with natural resources are to the process of inclusive economic growth. Furthermore, the rise in government health spending raises per capita GDP by more than 3.1%. While taking into account natural resources, Shao and Yang (2014) discussed the resource curse and resource blessings phenomenon. Abdoulganiour Almame Tinta (2022) examined the relationships between financial development, ecological transition, and economic growth in Sub-Saharan Africa between 1980 and 2019. A sample of 48 countries is subjected to the Dumitrescu and Hurlin causality tests, Pedroni and Westerlund cointegration, and the Augmented Mean Group algorithm. The results

corroborate the importance of human capital and institutional quality, but they are only noticeable in high- and upper-middle-income nations. The degree of economic development is important, and once it is reached, human capital and renewable energy start to have an impact on the financial system's performance. Only in these nations do investments and trade openness appear to have a positive and significant impact on the ecological transition. Moreover, non-renewable and renewable energy consumption in these nations can be substituted, whereas complementarity exists in lower middle-class and low-income nations. Key policy recommendations are highlighted in the study's conclusion to support the ecological transition.

The goal of the study by Zarish, Uzma and Humaira (2022) was to identify the factors that significantly and favorably relate to economic growth. The study uses World Bank time series data from 1980 to 2018 to quantify the influence of social and human capital on Pakistan's economic growth. The direction of the connections between the variables and the value of their relationships are done using the autoregressive distributed lag framework. The findings indicated that the two major areas in which the government needs to focus its attention are health and education. Furthermore, increasing human capital investment can improve social capacity. Keji (2021) looked at the relationship between Nigeria's economic growth and human capital between 1981 and 2017. Johansen and vector autoregressive approaches were used in this investigation. The findings showed that the projected human capital coefficients have a major long-term influence on Nigeria's economic growth. According to the report, Nigeria's economy must be sustained by increasing budgetary support for the health and education sectors in order to improve the human capital capabilities necessary to power a knowledge-based economy.

Wang, Lin, Xiao, Bu and Li, (2022) investigate the human capital perspective of sustainable development of the regional economy. The article first examines the interaction coupling mechanism between human capital and sustainable economic growth using panel data from Shandong Province, China, from 2005 to 2019. It then builds the coupling coordination degree evaluation model. According to the findings, human capital and sustainable economic growth in Shandong Province gradually increased; their degree of coupling coordination changed from mild imbalance to slight coordination; sustainable economic growth trailed the development of human capital; the main factors influencing sustainable economic growth are the scale of education, innovation capacity, growth level, economic openness, and investment and consumption levels. Based on the aforementioned findings, the paper proposes policy recommendations that support China's sustainable growth.

Between 1980 and 2016.Saka and Olanipekun (2021) looked at the relationship between Nigeria's industrialization process and growth and the function that human capital plays in it. Their results show that factors related to human capital are important for Nigeria's economic development. In 2020, Musa, N. and Ali, M. investigated the connection between Nigeria's economic expansion and the development of human capital. Co-integration and the error correction model (ECM) were used in the study's analysis. All of the variables in the data were found to be stationary at first difference (1) by the stationarity test, and the results of the co-integration test verified the existence of a long-run trend. The error correction model's results showed that human capital and economic growth in Nigeria were positively and significantly correlated. Nonetheless, there was a small but favorable correlation between government spending on health and education and Nigeria's economic expansion.

Based on the endogenous growth model, Ajala and Adebayo (2020) investigated the relationship between the development of human capital and economic growth in Nigeria between 1981 and 2019. In order to prove that there is proof of a long-term relationship between the development of human capital and economic growth in Nigeria, the study used Johansen's co-integration test. The Phillips Perron (PP) unit of rest was used in the study to test for stationarity between the variables. To analyze the data, the Autoregressive Distributed Lag Model (ADRL) was employed. The results showed that capital accumulation, public spending on health and education, the life expectancy rate, and economic growth has favorable long-term relationships. The results also showed a negative correlation between economic growth and the literacy rate. In keeping with the results, the study suggested that in order to address the numerous issues facing the industry, there should be more funding allocated to education in the nation. The current

commitment of less than 10% of the overall budget towards education is insufficient to yield a substantial and noteworthy influence on the industry. In order to improve human capital development, the government should also allocate more money to the health sector. Agbo (2021) looked at how Nigeria's economic growth is impacted by human capital. OLS multiple regression was used in this work to examine the time series data spanning 1985 to 2018. The average year of schooling and capital expenditure on education were found to have a considerable impact on the growth of the Nigerian economy. The source of the information was the CBN statistical bulletin (2018). It is crucial that the government rise its funding for education on a yearly basis.

Adejumo and Asongu (2021) looked at the dynamic interactions between Nigeria's school enrollment rates and employment rate (as measured by unemployment rates). To examine these correlations, the study used unrestricted VAR methodology and autoregressive estimations. The analysis supports the new-growth theory, often known as endogenous models, which holds that increasing investments in human capital—particularly in higher education—will enable human capital to develop dynamically and boost long-term growth in Nigeria. Given that employment is facilitated by growth led by education, this trend creates multiplier benefits in promoting sustainable development. Education spending has been found to be a key strategy for developing human capital and accomplishing long-term development goals. Therefore, this study advances the new growth theory in the emerging field of sustainable development by analyzing the moderating impacts of educational-driven growth (i.e., via school enrolment rates) in determining the rate at which employment patterns in Nigeria develop.

Adeyemi and Ogunsola (2019) employed the ARDL Co-integration approach to evaluate the relationship between the variables included in the study in order to investigate the effect of human capital development on economic growth in Nigeria. The study found that life expectancy, government spending on education, gross capital formation, and economic growth all had favorable long-term relationships with secondary school enrollment. They discovered that there was no statistically significant correlation between the two and came to the conclusion that economic growth would be stimulated by a high life expectancy rate. Azu (2021) looked at the obstacles to Nigeria's human capital development and how they affect the provision of public services. The obvious lack of highly qualified workers to staff the vital economic sectors made this inquiry necessary. Expert human capital is in short supply in a number of industries, including healthcare, education, telecom, the oil and gas sector, and others. This has raised concerns because it has a detrimental effect on the standard of service provided to the public. Secondary sources provided the data, and the endogenous growth model was used to explain how human capital contributes to the development of a country. The results indicated that low human capital development in Nigeria can be attributed to a number of factors, including indiscipline, a poor educational system, ineffective change management, a lack of strategic planning, and difficulty measuring the effectiveness of human resources. Low employee satisfaction, a drop in the retention rate, a lack of employee engagement, a low rate of return on investment, poor organizational communication, etc. are the outcomes of this situation. All things considered, these factors have not improved Nigeria's public service delivery very much. The study ends with a recommendation that, regardless of political affiliation, any government in power should unquestionably adopt the strategy for human capital development.

In order to test for a long-term relationship between the variables, Fadila and Olure-Bank (2019) used the Pedron Residual co-integration approach to examine the random effect of human capital development on economic growth of ECOWAS member states. The study came to the conclusion that the ECOWAS region's economic growth is positively impacted by the development of human capital. Olaoye (2019) assessed how the Nigerian economy is affected by the development of human capital. Correlation, the Convenger causality test, Johansen cointegration, and the error-correction mechanism are the estimation techniques that are employed. The study found hat the real gross domestic product increased with increases in life expectancy, gross capital formation, and secondary school enrollment.

Using time series data, Ogunniyi (2018) have investigated the relative contributions of human capital formation to economic growth in Nigeria between 1981 and 2014. An examination of the stationarity is the

first step in the empirical analysis. The study examined whether there is a long-term dynamic relationship between the creation of human capital and economic growth in Nigeria using the ARDL bound estimation techniques. The findings indicate that human capital formation and economic growth in Nigeria have a long-term, dynamic relationship.

Using ARDL bound estimation techniques, Mathew (2018) examined the relative effects of human capital formations on economic growth in Nigeria. The study looked at both short- and long-term dynamic relationships between human capital formation and growth. His findings demonstrated that human capital formation and economic growth in Nigeria have a long-term, dynamic relationship. Minhaj (2018) investigated how Pakistan's welfare was affected from 1972 to 2017 by trade deficits, private investment, and government spending.

This study set out to ascertain how various government spending categories, such as health, education, subsidies, and law and order, affected economic growth. The results were estimated using ARDL. In the first model, government spending on health, education, subsidies, and law enforcement were independent variables, while per capita income served as the dependent variable. The employment rate was the dependent variable, and the current account deficit in the second model and private investment were the independent variables. The empirical findings showed that all components of government spending, specifically per capita income, had a long-term, positive, and significant combination with the entity's welfare variable.

Using Fully-modified Least Squares, the Granger Causality test, the Augmented Dickey-Fuller Unit root, and the Johansen-Juselius Test, Ewubare (2018) investigated the relationship between economic planning and the development of human capital in Nigeria. The results were consistent with the theoretical Apriori expectation, which postulated that planned public investment is a significant source of human capital development. Jeffrey (2018) investigated the relationship between Ivory Coast's economic development and educational spending between 1970 and 2015. The findings demonstrated the beneficial and constructive impact of government spending on education, which temporarily boosted economic growth. The findings demonstrated a unidirectional causal relationship between several variables. Sushma (2017) also looked at how India's economy has grown by utilizing its human capital. Neo-classical solo production formation and multiple linear regression models serve as the foundation for this research paper. The study found a substantial positive correlation between economic growth and human capital.

AbdulGhafoor and Muhammad (2017) also looked into how Pakistan's economic growth was affected by the development of human capital. The short- and long-term relationships between the development of human capital and economic growth were examined using the ARDL method. Their empirical findings demonstrated the critical role that human capital development plays in the nation's economic expansion. They suggested that the government increase funding for the fields of health and education.

(Paul Adeniyi ADEYEMI and Akindele John OGUNSOLA 2016) used time series data covering the years 1980 to 2013 to investigate the relationship between the development of human capital and economic growth in Nigeria. In order to estimate the relationship between the variables used in the study, ARDL Co-integration analysis was used. The long-term co-integration of the variables was established by the study. The study's conclusions showed a positive, albeit statistically insignificant, long-term relationship between life expectancy, public education spending, secondary school enrollment, gross capital formation, and economic growth. The findings also demonstrated a long-term negative correlation between public health spending, economic growth, and enrolment in primary and postsecondary education. According to the study's conclusions, the government should implement the necessary training and education policies to ensure high-quality primary and tertiary education. In order to improve human capital development, the government should also allocate more money to the health sector.

Mahesh (2015) looked at human capital as a tool for development and economic expansion. He came to the conclusion that in order to improve the caliber of human capital, the government should get involved in the health and education sectors to control the fee structure. Ibok and Ibanga (2014) looked into how Akwa

Ibom state's socioeconomic development was impacted by the development of human capital and economic empowerment. When allocating data, the study used a historical and descriptive methodology. According to the study, between 1999 and 2012, the government—which is primarily responsible for the economy—had a favorable effect on employees' training and retraining in the public sector. The study also showed that in addition to training, the government had started complex empowerment programs, which have aided a great deal of people in becoming independent contractors and employers of labor. Based on these results, the study made several recommendations, one of which was that the government start providing in-depth training for domestic engineers working in the state's oil and gas industry.

Methodology

Model Specification

The population of this study consists of Nigerian economy as represented by Gross Domestic Product (proxy for economic growth), Government Expenditure on Education, Government Expenditure on Health, Tertiary School Enrolment, Secondary School Enrolment, Primary School Enrolment, Life Expectancy. From (1982-2022) Therefore; the sample period for the research work is 40 years.

In this study, a sample size of Human capital is given as:

$GRGDP = \beta_0 + \beta_1 TGEE + \beta_2 TGEH + \beta_3 TSE + \beta_4 SSE + \beta_5 PSE + \beta_6 LER + U_t$

Where:

GRGDP = Gross Domestic Product (proxy for economic growth)
TGEE = Total Government Expenditure on Education.
TGEH = Total Government Expenditure on Health.
TSE = Tertiary School Enrolment
SSE = Secondary School Enrolment.
PSE = Primary School Enrolment.
LER = Life Expectancy Rate.

Sources of Data

National Bureau of Statistics, World Bank, and Central Bank of Nigeria Statistical Bulletin. The data covers the periods from 1982- 2022.

Method of Estimation

In order to achieved the stated objectives this study employed ordinary least square (OLS) method of parameters estimation technique using econometric views 12 (e-views 12) statistical package to run the regression of the data so as to find the level of relationship between the dependent and independent variables. The evaluation will be based on three criteria; economic criteria, statistical criteria and econometrics criteria.

Diagnosis tests**:** the study test for auto-correlation using the Durbin-Watson test for multi co-linearity, normality and Heteroskedasticity.

Durbin-Watson test: This is determined by the theory of econometrics. It is used to test for the percentage of first auto-correlation. The level of significance used is 5 percent.

Results and discussions

Unit Root Tests:

The Augmented Dickey Fuller (ADF) technique was used to ascertain the order of integration of the study variables, i.e., to check for the presence of a unit root in the variables. The ADF test statistic must be greater than the 1%, 5%, and 10% critical values in order for us to accept the null hypothesis, which states that there is no unit root. If it is, the variable is stationary. However, we reject the null hypothesis and proceed to the difference, i.e., the variable is non-stationary, if the ADF test statistic is less than the 1%, 5%, and 10% critical values.

Table: 1 Augmented Dickey Fuller (ADF)

Variables	t-Statistic	first difference at
Gross Domestic Product	0.6013 39281	0.01
Total Government Expenditure on Education.	-2.926388	0.01
Total Government Expenditure on Health.	0.8917 408	0.01
Tertiary School Enrolment	-0.2607 1025	0.01
Secondary School Enrolment.	0.6537 31677	0.01
Primary School Enrolment.	0.976 95687	0.01
Life Expectancy Rate.	-8.827025	0.01

Estimation of Regression Model

The empirical results based on OLS estimation technique, are presented in the table 2 below

Table 2 Results of OLS Regression

Variable	Coefficient	t-Statistic	Prob.
C	0.827708	0.6013 39281	0.0004
GEE	0.04532	0.8917 408	0.0000
GEH.	4.358369	-0.2607 1025	0.0141
TSE	0.472654	0.6537 31677	0.0000
SSE	0.398565	0.976 95687	0.0000
PSE.	-0.2658I4	-8.827025	0.0000
LER	-1.5478654	0.827708	0.0000
RESID01	0.998565	81.03644	0.0000
AR(1)	1.003217	27.06540	0.0000

From the table above, the interpretation of the result with regards to the coefficient of various regressors is stated as follows:

The estimate cointegrating vector coefficients of the model, where Gross Domestic Product (GDP) is used as the dependent variable, while Government Expenditure on Education (GEE), Government Expenditure on Health (GEH), Life Expectancy Rate (LER), Primary School Enrolment (PSE), Secondary School Enrolment (SSE) and Tertiary School Enrolment (TSE) are used as independent variables.

- An in increase in government expenditure on education by 1% will lead to an increase in GDP growth by 4%.
- Increase in government expenditure on health by 1% will lead to an increase in the rate of GDP growth by 436%.
- The coefficient of TSA is 47% which means 1% increase in TSA brings about 47% increase in Gross Domestic Product.
- SSE has the coefficient of 39% which means 1% increase in secondary school enrolment will increase Gross Domestic Product by 39%.
- The result of primary school enrolment has a negative coefficient which means it has not conformed to a priori statistical expectation. It also applicable to life expectancy to have a positive relationship with gross domestic product.

Conclusion and Policy Recommendation

The study's conclusion is that Nigeria's economic growth and the development of human capital are significantly and favorably correlated. The results of the study show that spending by the government, health care spending, life expectancy, and secondary school enrollment all positively and significantly

affect economic growth. Consequently, the research indicates that the promotion of economic growth in Nigeria necessitates investment in human capital, encompassing education and health. Numerous empirical studies that have discovered a strong correlation between the development of human capital and the nation's economic growth support this conclusion.

The study's conclusions suggest the following actions to advance human capital development and economic growth in Nigeria:

1. To enhance the development of human capital, the government should spend more on healthcare and education.
2. Enact measures to improve healthcare quality and life expectancy in order to improve population health as a whole.
3. Increase secondary education access in order to raise workforce skill and knowledge levels.
4. Promote and assist research endeavors to produce fresh insights and inventions that can boost the economy.

The study's main contribution is to show that Nigeria's economic growth and the development of human capital have a positive and substantial relationship. The study's conclusions imply that funding for healthcare, education, and other areas of developing human capital is essential for fostering national economic growth. The report also emphasizes the necessity of increasing secondary education access and the significance of government spending on healthcare and education. Policy decisions aiming at fostering economic growth in Nigeria through the development of human capital can be informed by these findings and recommendations.

In light of the study's conclusions, the following areas of further research could be investigated:

1. Effect of particular healthcare and education policies: Studies can be carried out to determine how particular healthcare and education policies affect Nigeria's economic expansion. This might entail assessing the efficacy of government initiatives meant to enhance the quality of healthcare and education.

2. Long-term effects of human capital development: Research on the impact of developing human capital on Nigeria's economic growth can be done. This might entail monitoring the long-term financial results of people who have benefited from human capital development programs.

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