

Human Capital Investment and Economic Growth in Nigeria: an Empirical Approach

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Abstract: This research is set out to examine the relationship that exists between human capital investment and economic growth for the period 1980 to 2018. The selected macroeconomic variables are Primary School Enrolment (PSE), Public Expenditure on Education (PEE), and Public Expenditure on Health (PEH). The study is an attempt to evaluate how these key macroeconomic variables explain economic growth in Nigeria. The scientific method adopted for this investigation is multiple regression analysis using vector error correction model to estimate both the short run and long run relationship between the regressor and the regressand. The result obtained indicate that the selected macroeconomic variables have a positive but poor effect and contribution on economic growth. The granger causality test established a unidirectional causality running from primary school enrolment to economic growth in Nigeria. Based on the findings, the researcher made the following recommendations: The educational and health sectors should be looked into, and urgent attention should be accorded to these sectors. Efforts should be geared towards improving the standard of education in Nigeria. Substantial amount of government budgetary allocation should be directed towards the educational sector. There should also be establishments of special agencies with the responsibility of improving the skills and capabilities of human capital.

Keywords: Economic Growth, Primary School Enrolment, Public Expenditure on Education, Public Expenditure on Health, Vector Error Correction Model

INTRODUCTION

No country has achieved sustained economic development without substantial investment in human capital. The role and importance of human capital in propelling the pace of economic growth cannot be overemphasized. The development of human capital has been recognized by economists to be a key prerequisite for a country's socioeconomic and political transformation. Therefore, human capital is considered as the most valuable asset and needs to be mobilized, developed and empowered to participate fully in all socio-economic activities.

Human capital becomes a tool for competitive advantage since it involves the process of training, knowledge acquisition (education), initiatives and so on, all these are geared towards skill acquisition. Human capital development is human centered because its major concern is on human empowerment which would lead to active participation. According to OECD (2001), human capital is concerned with knowledge, skills competitiveness and attributes embedded in an individual that facilitates the creation of personal, social and economic wellbeing. In order to achieve positive economic growth in Nigeria, human capital development should be considered

as an integral and important factor for economic growth. A major challenge facing the global community and Nigeria at large is how to achieve sustainable development. The three pillars of sustainable development cannot be achieved if human capital development doesn't come to play as an integral part. In Nigeria, the annual federal government budget to educational sector (in percentages) is nothing to talk about, statistics show that the percentages over the years are not in line with the United Nations Educational Scientific and Cultural Organization's (UNESCO) recommendation of 26.0%. It was discovered that from 2013-2015, the percentage was 10.3%, 11.8%, 12.7% respectively. A poor country is a country, which never invested sufficiently in its human capital development and the citizens who are supposed to be at the centre of the economic growth would be poverty stricken.

The effects of human capital variables (namely, health and education) imply that the investment rate tends to increase as levels of education and socioeconomic status of health rise. Longer life expectancy encourages larger investments in human capital, which in turn accelerates the per capita income. The provision of public resources for better health in a developing country can assist the poor to release resources for other investments, such as in education, as a means to escape poverty. Therefore, the development and proper utilization of human capital, plays a very paramount role in every nation's economic growth. That is, human capital is an important factor for the wealth of a nation due to its influence on the overall production of the country. Hence, the development of Nigeria's human capital is therefore of great importance if Nigeria wants to be competitive in the future (Bloom 2016).

Investment in human capital is also required to raise the general living standards of the people in LDCs. This is possible when education and training make fuller and rational utilization of surplus manpower by providing larger and better jobs opportunities in both rural and urban areas. These in turn, raise incomes and living standards of the people. Therefore, economists are of the view that it is the lack of investment in human capital that has been responsible for the slow growth of less developed countries (LDCs) such as Nigeria.

Statement of the Problem

A nation cannot experience economic growth without human capital. And for human capital to actually have any impact on economic growth some investments have to be made. Investment in human capital consists of; investment in education, training, health and other social services that will help in enhancing the productive capacity of labour.

Nigeria as a country is immensely endowed with both natural and human resources. In spite of all these abundant resources, economic growth in Nigeria has not grown to the expected standard. This is simply because, Nigeria has failed to realize her full development potential especially in education and health, with the top most priority, currently given to sustainable human capital development or people oriented development by many countries and multilateral organizations like UNDP. That is, the Human Development Index (HDI) provides a measure of human capital development in three dimensions: income, health, and education. But the values of HDI show that Nigeria is ranked 156 with the value of 0.459 among 187 countries (World Bank, 2015). This value places Nigeria in the bottom, meaning that Nigeria is considered to have low level of human development.

UNICEF in its state of the world's children report for 2017, pointed out that about 13.2 million Nigerian children have no access to basic education, and that majority of those that are lucky to enter schools are given sub-standard education (Ubec, 2017). Recently, there are about *58,242* primary schools with *31,796,078* students in public schools and *42,965,517* in private schools in Nigeria. In addition, Nigeria has *7,104* secondary schools with *8,748,981* students (Dumaka, 2016). Funding has been in response to conditionalties imposed by international financial institutions (IFIs). Statistics show that federal government expenditure on education between 2010 and 2015 has been below 15% of overall expenditure. The national expenditure on education cannot be determined, in relation to the UNESCO recommendation of 26% of national budgets (Dumaka, 2016).

The Federal Government reformed agenda is anchored on the National Economic Empowerment Development Strategy 2002 (NEEDS) document. It was indicated that adult literacy rate of at least 65% by 2020 would be attained. The NEEDS recognize the centrality of human capital development towards achieving economic growth. It was described as a vital transformational tool. Going by the UNESCO report 2015, clearly, Nigeria is still very far from meeting the global economic development target.

Therefore, having observed the above problem, the need to empirically investigate the relationship existing between human capital development and economic growth in Nigeria is felt.

Research Questions

This study is aimed at finding answers to the following research questions

- 1. Does primary school enrolment predict economic growth in Nigeria?
- 2. To what extent has public expenditure on education impacted on economic growth in Nigeria?
- 3. Is there any significant impact between public expenditure on health and economic growth in Nigeria?
- 4. Is there any significant long run relationship between the identified independent variables and economic growth in Nigeria?

Objectives of the Study

The broad objective of the study is to determine the relationship between human capital investment and economic growth in Nigeria. Specifically, the study will:-

- 1. Evaluate if primary school enrolment significantly predicts economic growth in Nigeria
- 2. Determine if public expenditure on education impact on economic growth in Nigeria.
- 3. Examine to what extent public expenditure on health have explained economic growth in Nigeria
- 4. Establish the existence or not if any significant causal relationship exist between the identified independent variables and economic growth in Nigeria.

Research Hypotheses

For the proper analysis of this research work, the following hypotheses have been posited

- 1. **Ho₁:** Primary school enrolment does not significantly predict economic growth in Nigeria.
- 2. **Ho₂:** Public expenditure on education does not significantly impact on economic growth in Nigeria
- 3. **Ho₃:** Public expenditure on health does not significantly explain economic growth in Nigeria
- 4. **Ho**₄: Causality does not significantly run from the identified independent variables to economic growth in Nigeria.

REVIEW OF RELATED LITERATURE

Theories of Human Capital Development and Economic Growth

Contemporary discussions on human capital development and economic growth have been dominated by three theories as discussed below:

Human Capital Theory

The human capital theory emphasized that human capital development relates to schooling and training as an investment in skills and competences (Schultz, 1992). This theory bases its argument on national expectation of return on investment, as individuals make decisions based on the education and training they have received as a way of augmenting their productivity. As the global economy shifts towards more knowledge based sectors (such as the manufacture of ICT based services), skills and human capital development becomes a central issue for policy makers and practitioners engaged in economic development, both at the national and regional levels (Adelakun & Joseph, 2011).

According to this theory, a more educated/skilled workforce makes it easier for a firm to adopt and implement new technologies, thus reinforcing returns on education and training. That is, this theory shows how education leads to increase in productivity and efficiency of workers by increasing the level of their cognitive skills. To proponents of this theory, people invest in education so as to increase their stock of human capabilities which can be formed by combining innate abilities with investment in human beings (Adelakun & Joseph, 2011). Examples of such investments include expenditure on education, on- the- job training, health, and nutrition.

The Modernization Theory:

This theory focuses on how education transforms an individual's value, belief and behavior. Exposure to modernization institutions such as schools, factories, and mass media inculcate modern values and attitudes. The attitude include openness to new idea, independences from traditional authorities, willingness to plan and calculate further exigencies and growing sense of personal and social efficacy. According to the modernization theorists, these normative and attitudinal changes continue throughout the life cycle, permanently altering the individual's relationship with the social structure. The greater the number of people exposed to modernization institutions, the greater the level of individual modernity attained by the society. Once a critical segment of a population changes in this way, the pace of society's modernization and economic development quickens. Thus, educational expansion through its effects on

individual values and benefits sets in motion the necessary building blocks for a more productive workforce and a more sustained economic growth (Adelakun & Joseph, 2011).

The dependence theory:

This theory arose from Marxist conceptualizations based on the dynamic world system that structures conditions for economic transformation in both the core and periphery of the world economy. Certain features of the world polity such as state fiscal strength, degrees and regime centralization and external political integration may contribute to economic growth in the developing world (Adelakun & Joseph, 2011).

Generally, economic development theorists agree that the quality of human resources has significant impact on economic growth. This body of thinking is of the opinion that the quality and quantity of labour determine production by virtue of it being a factor of production. The wealth and vitality of nations rest ultimately upon the development of people and the effective commitment of their energies and talents. Capital and natural resources are passive agents. The active agents of modernization are human beings, for them alone can accumulate capital, exploit natural resources and build political and social organizations.

The importance of human capital accumulation as an engine of economic growth and development has been widely recognized in theoretical and empirical studies. No country has achieved sustained economic development without substantial investment in human capital.

Empirical Literature Review

A review of some of the empirical literature is provided below;

Sankay, Ismail and Shaari (2010), investigated the impact of human capital development on economic growth in Nigeria during the period 1970 to 2008. Johansen cointegration technique and vector error correction analysis were used to ascertain this relationship. The basic macroeconomic variables of concern derived from the literature review are: Real gross domestic product (RGDP), real capital expenditure (RCE) on education, real recurrent expenditure (RRE) on education, real capital stock (RCS), total school (SCHE) enrolments and labour force (LF) are used to proxy human capital development. The result indicated that human capital development has a significant impact on Nigeria's economic growth.

Amassoma and Nwosa (2011), studied the causal nexus between human capital Investment and economic growth in Nigeria for sustainable development in Africa at large between 1970 and 2009 using a Vector Error Correction (VEC) and Pairwise granger causality methodologies. The findings of the VAR model and pairwise estimate reveal no causality between human capital development and economic growth. The study recommends the need to increase budgetary allocation to the education and health sector and the establishment of sound and well-functioning vocational institute needed to bring about the needed growth in human capital that can stimulate economic growth..

Johnson (2011), evaluated human capital development and economic growth in Nigeria by adopting conceptual analytical framework that employs the theoretical and ordinary least square (OLS) to analyze the relationship using the GDP as proxy for economic growth; total government expenditure on education and health, and the enrolment pattern of tertiary, secondary and primary schools as proxy for human capital. The analysis confirms that there is strong positive relationship between human capital development and economic growth. Following the findings, it was recommended that stakeholders need to evolve a more pragmatic means of developing the human capabilities, since it is seen as an important tool for economic growth in Nigeria.

Oluwatobi and Ogunrinola (2011), examined the relationship between human capital development efforts of the Government and economic growth in Nigeria. It seeks to find out the impact of government recurrent and capital expenditures on education and health in Nigeria and their effect on economic growth. The data used for the study are from secondary sources while the augmented Solow model was also adopted. The dependent variable in the model is the level of real output while the explanatory variables are government capital and recurrent expenditures on education and health, gross fixed capital formation and the labour force. The result shows that there exists a positive relationship between government recurrent expenditure on human capital development and the level of real output, while capital expenditure is negatively related to the level of real output. The study recommends appropriate channeling of the nation's capital expenditure on education and health to promote economic growth.

Adawo (2011), used an econometric model to examine the contributions of primary education, secondary education and tertiary education to economic growth of Nigeria. These variables were proxied by school enrolments at various levels. Other variables included physical capital formation, health measured through total expenditure on health. In all primary school input, physical capital formation and health were found to contribute to growth. Secondary school input and tertiary institutions were found to dampen growth. Among others, this paper recommends that there should be adjustment in admission process in favour of core science.

Dauda (2010), using the human capital model of endogenous growth developed by Mankiw, Romer and Weil (1992), examined empirically the role of human capital in Nigeria's economic development. The paper employed a variety of analytical tools, including unit root tests, cointegration tests and error correction mechanism (ECM). Empirical results indicated that there is, indeed a long-run relationship among labour force, physical capital investment proxied by real gross domestic capital formation, human capital formation, proxied by enrollment in educational institutions and economic growth in Nigeria. Findings show that there is a feedback mechanism between human capital formation and economic growth in Nigeria. Thus, the policy implication of the findings is that government should place a high priority on human capital development. Efforts should be intensified to increase investment in human capital to achieve the growth which would engender economic development. Most importantly, education should be given prominence in Nigeria's developmental efforts. This would propel the economy to higher levels of productivity.

Pritchett (2001), using time series data to study the effectiveness of human capital growth, found no association between increase in human capital attributable to the rising educational attainments of the labour force and the rate of growth of output per worker. Specifically, he reported that the estimates of the impact of growth in education capital on growth per workers are insignificant.

METHODOLOGY

Research Design

This study adopted Ex-post-facto research design. This design type is relevant in explaining a consequence based on antecedent conditions, as well as determining the influence of one variable on another variable. Besides, Ex-post-facto research design is described as empirical inquiry in which the scientist does not have direct control of variables. Inferences about relationships among variables are made from any determined variations between the studied variables, Kerlinger (1973). His reason is that Ex post facto research studies facts that had already occurred and applied the same logic of inquiry adopted in experimental research design.

Model Specification

The principal instrument adopted for this study was vector error correction model (VECM). Thus, the model specification was developed from the theoretical framework (Modernization Theory Model) presented in the literature review and was modified and adopted to suit Nigeria case. Subsequently, the following modified Modernization Theory Model in a VECM equations as presented below are specified and tested:

Model Specification

The VECM model adopted for the study is specified below:

 $GDP_t = \beta_0 + \beta_1 PSE_t + \beta_2 PEE_t + \beta_3 PEH_t + \epsilon_{1t}$

Where;

$$\begin{split} & \mathsf{GDP}_t = \mathsf{Value} \ of \ \mathsf{Gross} \ \mathsf{Domestic} \ \mathsf{Product} \ \mathsf{at} \ \mathsf{time} \ \mathsf{t} \\ & \mathsf{PSE}_t = \mathsf{Primary} \ \mathsf{School} \ \mathsf{Enrolment} \ \mathsf{at} \ \mathsf{time} \ \mathsf{t} \\ & \mathsf{PEE}_t = \mathsf{Public} \ \mathsf{Expenditure} \ \mathsf{on} \ \mathsf{Education} \ \mathsf{at} \ \mathsf{time} \ \mathsf{t} \\ & \mathsf{PEH}_t = \mathsf{Public} \ \mathsf{Expenditure} \ \mathsf{on} \ \mathsf{Health} \ \mathsf{at} \ \mathsf{time} \ \mathsf{t} \\ & \mathsf{\beta}_0 - \mathsf{\beta}_3 \ \mathsf{refers} \ \mathsf{to} \ \mathsf{the} \ \mathsf{parameters} \ \mathsf{to} \ \mathsf{be} \ \mathsf{estimated} \\ & \mathsf{\epsilon}_t = \mathsf{omitted} \ \mathsf{variable} \\ & \mathsf{A} \ \mathsf{priori} \ \mathsf{expectation}: \ (\mathsf{\beta}_{1-} \ \mathsf{\beta}_3 > \mathsf{0}) \end{split}$$

PRESENTATION OF RESULTS

The augmented Dickey-Fuller unit root tests are applied to determine whether the series are stationary. Table 1 below summarizes the results for all the variables.

The results show that all the variables are non-stationary at levels since the calculated tau values are less in absolute terms than the critical values. The variables are found to be stationary only when tested at first difference. Thus, they are integrated of order one I(1). Each of these variables becomes stationary if it is differenced once.

Variables	Level/first difference	Calculated tau	ADF critical (5%)	Stationarity
GDP	Level	-2.657543	-3.024581	Non-stationary
	First difference	-4.896541	-3.112654	Stationary
PSE	Level	-2.125490	-3.024581	Non-stationary
	First difference	-5.389012	-3.112654	Stationary
PEE	Level	-2.568904	-3.024581	Non-stationary
	First difference	-5.256908	-3.112654	Stationary
PEH	Level	-2.456752	-3.024581	Non-stationary
	First difference	-4.367907	-3.112654	Stationary

Table 1: Result of the Unit Roots for Stationarity

Source: Author's computation using Eview 9.5 computer software

The stationarities of all the series in the same order was thus a motivation to run for cointegration tests. This is aimed at finding the presence or absent of any long run relationship among the series.

In view of the above therefore, since the variables are stationary at difference orders, there was the need for a test for co- integration test using the Johansen (1991) co- integration technique. The result is presented in table 2 as shown below:

TABLE 2: Johansen Cointegration Test

Date: 03/06/19 Time: 11:44 Sample (adjusted): 1982 2018 Included observations: 37 after adjustments Trend assumption: Linear deterministic trend Series: GDP PEE PEH PSE Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.559888	59.84167	47.85613	0.0025
At most 1	0.476859	29.47479	29.79707	0.0544
At most 2	0.136978	5.502323	15.49471	0.7534
At most 3	0.001395	0.051647	3.841466	0.8202

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**

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None *	0.559888	30.36688	27.58434	0.0214
At most 1 *	0.476859	23.97247	21.13162	0.0194
At most 2	0.136978	5.450676	14.26460	0.6842
At most 3	0.001395	0.051647	3.841466	0.8202

Max-eigenvalue test indicates 2 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Source: Author's computation using Eview 9.5 computer software

Table 2 above indicated the presence of (1) co-integrating equation for trace statistics and 2 cointegrating equation for maximum Eigen value at 1% and 5% level of significance. Co-integration exists at those ranks where the value of the trace statistic exceeds the 1% and 5% critical value. Again, the eigenvalues all lie below 1, indicating the presence of co-integration.

TABLE 3: Result of Vector Error Correction Model Analysis

Vector Error Correction Estimates Date: 03/06/19 Time: 12:21 Sample (adjusted): 1983 2018 Included observations: 36 after adjustments Standard errors in () & t-statistics in []

Cointegrating Eq:	CointEq1			
GDP(-1)	1.000000			
PSE(-1)	0.143081 (0.04327) [3.30654]			
PEE(-1)	0.092796 (0.33101) [0.28344]			
PEH(-1)	0.039439 (0.18259) [0.21599]			
C	18.03888			
Error Correction:	D(GDP)	D(PSE)	D(PEE)	D(PEH)
CointEq1	-0.292523 (0.45310) [-0.64560]	1.502467 (0.84277) [1.78278]	-0.331847 (0.18936) [-1.75251]	-0.037120 (0.23254) [-0.15963]
D(GDP(-1))	0.258826 (0.33587)	-1.466920 (0.62472)	0.124090 (0.14036)	0.030446 (0.17237)

	[0.77062]	[-2.34812]	[0.88406]	[0.17663]
	0.053801	0 1 4 2 9 1 5	0.000757	0 107274
D(GDP(-2))	0.052891	-0.143815	0.089757	0.107274
	(0.10140)	(0.30021) [0.4700E]	[1,22060]	(U.U6265) [1 20505]
	[0.32770]	[-0.47905]	[1.55069]	[1.29505]
D(PSE(-1))	-0.333983	0.052457	0.014989	-0.011983
	(0.13936)	(0.25922)	(0.05824)	(0.07152)
	[-2.39650]	[0.20237]	[0.25736]	[-0.16754]
D(PSF(-2))	0 166428	0 099139	0 104517	0 077535
	(0.21260)	(0.39545)	(0.08885)	(0.10911)
	[0.78281]	[0.25070]	[1.17633]	[0.71060]
	[(([,
D(PEE(-1))	1.213629	0.465726	0.729111	-0.346488
	(0.89669)	(1.66786)	(0.37474)	(0.46020)
	[1.35346]	[0.27924]	[1.94565]	[-0.75291]
D(PFF(-2))	0.250567	-3.364625	-0.125548	-0.152934
-((-))	(0.94133)	(1.75089)	(0.39340)	(0.48311)
	[0.26618]	[-1.92166]	[-0.31914]	[-0.31656]
	[0.20010]	[101100]	[0.0101.]	[0.01000]
D(PEH(-1))	0.251548	-0.637582	0.127396	-0.522760
	(0.39842)	(0.74107)	(0.16651)	(0.20448)
	[0.63136]	[-0.86035]	[0.76511]	[-2.55658]
D(PEH(_2))	-0 1/6869	0 295737	-0.075815	-0 12/853
	(0.38587)	(0 71772)	(0 16126)	(0.19803)
	[-0.38062]	[0/1205]	[-0.47014]	[-0.63046]
	[0.30002]	[0.41203]	[0.47014]	[0.03040]
С	2.576083	7.341353	-0.556862	1.545011
	(3.16740)	(5.89142)	(1.32370)	(1.62557)
	[0.81331]	[1.24611]	[-0.42069]	[0.95045]
R-squared	0.679975	0.252298	0.324941	0.342212
Adi. R-squared	0.569197	-0.006522	0.091267	0.114516
Sum sa. resids	6223.928	21532.68	1087.021	1639.332
S.E. equation	15.47197	28.77812	6.465950	7.940482
F-statistic	6.138189	0.974801	1.390572	1.502935
Log likelihood	-143.8293	-166.1703	-112.4200	-119.8152
Akaike AIC	8.546070	9.787241	6.801110	7.211958
Schwarz SC	8.985936	10.22711	7.240976	7.651824
Mean dependent	0.402486	7.500737	0.354434	1.438261
S.D. dependent	23.57254	28.68473	6.782879	8.438331
Determinant resid covariance	(dof adi.)	1.60F+08		
Determinant resid covariance		43603887		
Log likelihood		-520,9590		
Akaike information criterion		31.38661		
Schwarz criterion		33.32202		

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Source: Author's computation using Eview 9.5 computer software

As shown in the upper region of the vector error correction model (VECM) above as well as the normalized cointegrating coefficients for three cointegrating equations given by the long run relationship as shown below:

Normalized	cointegrating c	oefficients (star	ndard error in parentl	neses)
GDP	PSE	PEE	PEH	
1.000000	0.143081	0.092796	0.039439	
	(0.04327)	(0.33101)	(0.18259)	

From the above result the coefficient showed by the constant is positive, proving that there are other factors outside this model which contributes positively to the economy growth. In other words, a unit change in the intercept will result to 18.03888 unit changes in the long-run on the Nigeria economy. The coefficient of primary school enrolment has a positive but poor effect and contribution on economic growth. It simply implies that a unit increase in primary school enrolment will increase GDP by 0.143081 units. The result also shows that PSE is statistically significant based on the t-value

It is also seen that the public education expenditure coefficient is positive, which is in line with the a priori expectation. Though a positive but also a poor effect and contribution on economic growth. Thus, the coefficient value of this variable is 0.092796, we can deduce that a unit increase in the public education expenditure, on contrary, impacts positively to economic growth. In other words, public education expenditure has not effectively impacted significantly to economic growth. The coefficient is statistically significant based on the t-value. The positive coefficient of the Public expenditure on health also showed positive but poor effect and contribution on economic growth, so a unit increase in the public expenditure on health will lead to 0.039439 units increase in the gross domestic product variable, thus public expenditure on health is statistically significant judging from the t-value.

Sample: 1980 2018 Lags: 2			
Null Hypothesis:	Obs	F-Statistic	Prob.
PEE does not Granger Cause GDP	37	4.89148	0.0140
GDP does not Granger Cause PEE		0.54808	0.5834
PEH does not Granger Cause GDP	37	3.39694	0.0459
GDP does not Granger Cause PEH		1.11322	0.3409
PSE does not Granger Cause GDP	37	3.78258	0.0335
GDP does not Granger Cause PSE		1.75238	0.1896
PEH does not Granger Cause PEE	37	0.13858	0.8711
PEE does not Granger Cause PEH		1.85405	0.1730
PSE does not Granger Cause PEE	37	1.48205	0.2424

TABLE 4: GRANGER CAUSALITY TEST RESULT

 Pairwise Granger Causality Tests

Date: 03/07/19 Time: 10:16

PEE does not Granger Cause PSE1.071940.3543PSE does not Granger Cause PEH372.000100.1519PEH does not Granger Cause PSE1.648980.2082

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Source: Author's computation using Eview 9.5 computer software

Table 4 above, depicts the result of the relationship among the variables. The result suggests that Primary School Enrolment (PEE), Public Expenditure on health (PEH) and Public Expenditure on Education(PSE) causes Economic Growth (GDP), hence the null hypothesis that PEE, PEH and PSE does not granger causes GDP cannot be rejected. The result also indicates that a unidirectional causality runs PEE to GDP, PEH to GDP, PSE to GDP

CONCLUSION AND RECOMMENDATION

From the result of this study, it has being proven beyond reasonable doubt that human capital development is crucial for sustainable economic development, that is there is actually a positive relationship between the human capital development and economic growth. Though the relationship has a positive but poor effect and contribution on economic growth. Our findings show that the key to the nation's economic development lies on the human capital development. It is important to note that although the primary school enrolments, total government expenditure on health and on education was significantly related to economic growth in Nigeria, yet our economic growth is not stable and sure so the educational and health sectors should be looked into, and urgent attention should be accorded to these sectors. Efforts should be geared towards improving the standard of education in Nigeria. Substantial amount of government budgetary allocation should be directed towards the educational sector. There should also be establishments of special agencies with the responsibility of improving the skills and capabilities of human capital.

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