

## HUMAN CAPITAL DEVELOPMENT AND NIGERIA'S ECONOMIC GROWTH

<https://doi.org/10.47743/jopaf1-2023-27-05>

**Titus Olufemi AWOGBEMI**

Department Of Economics, Delta State University, Abraka, Nigeria  
*femiawogbemi01@yahoo.com*

**Abstract:** *The study examined the effect of developing human capital on Nigeria's economic growth. Contextual analysis served as the main information source for this study, in addition to various documentary and electronic sources. The human capital theory is the foundation of this study. The study concludes that there is a clear and evident link between the development of human capital and economic growth in Nigeria and makes several recommendations, including encouraging private sector investment in health and education to increase their involvement in the delivery of human capital services to the populace. This assumes that government spending on the health sector is ineffective in addressing health challenges without private investment in health. Also, an increase in the welfare programs for health care workers in order to lower the misery index in Nigeria and prevent a mass flight of doctors and other health professionals from the country's shores is important as this would improve the quality of life for Nigerians.*

**Keywords:** *Human capital, economic growth, health, education, development*

**JEL Classification:** *E6, G3, O4*

### Introduction

Any nation's growth process depends heavily on its human capital. There are three types of capital that any corporate organization uses: intellectual capital, financial capital (investments), and physical capital (factories, stocks, etc). (Obeidat, 2016). A part of intellectual capital is also thought to be human capital. It encapsulates human-related factors like knowledge, skills, experience, sufficiency, business quality, employee relations, emotional intelligence, entrepreneurship, flexibility, employee loyalty, employee satisfaction, education, and creativity and serves as a representation of investments made in people (Isola & Alani, 2012). The significance of human capital is still significant when analyzing a country's growth rate, even though investing in people is often the most challenging investment to manage. The main goal of any economic system, whether it is market-based or centrally planned, is to raise per capita output, which can be done through raising productivity levels. Growth in per capita output is a factor in economic welfare. Experience has shown that, in addition to labor and physical capital, human capital is the most significant and promising source of increase in productivity and economic growth. Technology and equipment are creations of human minds, and only people can make them useful. Any productive program's success depends on the originality and ingenuity of its participants (Pangeran, 2015; Skapska & Samul, 2015).

Human capital development is the process of obtaining and expanding the number of people with the skills, education, and experience that are essential for a country's economic progress. Human capital refers to the abilities and skills of human resources (Eigbiremolen & Anaduaka, 2014). Theoretically, this Human Capital Development (HCD) has a favorable influence on economic growth. However, it could not be applicable or equally

accurate in all actual scenarios since this depends on a number of variables, including the level and quality of education, government policy on education, economic structure, and others. As a result, investigating the link between Nigeria's economic progress and the development of its human capital is an excellent empirical verification project that is unquestionably necessary. Nigeria is a nation with abundant natural and human resources (Sankay, Ismail & Shaari, 2010). Without taking into account the role that human capital plays in the development process, Nigeria used to rely on physical capital for its growth and development. In recent years, all nations around the world have come to regard human capital as a driving force behind national progress (Afridi, 2016). Human capital development becomes a key concern for policymakers and practitioners involved in economic development at the national and regional level as the global economy shifts toward more knowledge-based sectors and skills (such as the manufacturing sector like the manufacturing of ICT devices, pharmaceuticals, and telecommunication) (Adelakun, 2011, Amassoma & Nwosa, 2011). This has the potential to revitalize the economy of Nigeria. Studies by Schultz (1961), Denison (1962), Todaro and Smith (2003), among many others, confirmed that education is essential for the growth of an economy. Investment in education, according to Bachama, Hassan, and Ibrahim (2021), increases per capital. The growth of knowledge and the reduction of poverty are two ways that the gross national product (GNP) lowers inequality. They contend that spending on training and education has an impact on people's productivity. Because education is essential to the development of human capital, a nation cannot afford to leave it up to individual preferences. Similar to how it is essential to human development and growth, health is a major factor in determining economic performance both at the micro and macro levels. This stems from the notion that health is a direct contributor to human wellbeing and a type of human capital that broadens a person's potential (Bloom & Canning, 2003). Health has been shown to be a kind of human capital by both Akaakohol and Ijirshar (2018) and Grossman and Eihannah (1989), in equal measure. A healthy population, according to Schultz (1959), is the determining element in productivity. He also underlined the benefits of making investments in education and health. Health has been referred to as a capital productive asset and an engine of economic growth by Barro (1991), Adeyemi and Ogunsola (2016), and others. A healthy person is more effective at digesting information, which increases productivity levels. In a similar spirit, Ogujiuba (2013) claimed that without sufficient human capital development, no country can see significant economic growth.

Therefore, the development of human capital has become crucial in determining the rate of economic growth of a country's economy. Despite the significance of educational institutions and the relevance of human capital development in general, Nigeria only devotes a small percentage of its financial resources to health and education, frequently falling short of the UN and World Health Organization (WHO) standards for both. Between 1986 and 1990, Nigeria's education spending as a percentage of GDP averaged 5.64 percent, whereas it was 5.84 percent from 2005 to 2008. Records also reveal that the federal government spent an average of 49.69 billion in 1981 and 85.92 billion in 2015 on health and education, respectively (CBN, 2015). In general, education spending performance falls far short of the United Nations' required 26 percent of the national budget (CBN, 2015). Furthermore, it is clear from the repeated mentions of the WHO proposal that nations spend 5% of their GDP on health, a recommendation that was never formally accepted and has scant scientific support (Savedoff, 2003).

On the other hand, Nigeria's unchecked population growth has made human capital development there an unsolvable issue (Allege & Ogujiuba, 2005; Umoru & Odjgba, 2013). Due to the ongoing pressure for higher human resource development costs, there is now a huge gap in the cost of training that the government must close. Even though successive governments have cut back on resources intended to boost economic growth, little has changed because Nigeria's economic growth position is still dire. The paradox with this belief is that, despite massive investments in education, there is little solid evidence of education's positive effects on growth in Nigeria. Instead, the spread of education has exacerbated social inequality and fostered undesirable social changes like cultism, rent-seeking, sexual harassment, sorting, result racketeering, industrial disputes, brain drain, and other social vices in the country's educational system and society as a whole (Uduh & Beredict, 2017). Some of the methodological techniques used in the works under examination were insufficient for addressing the problems surrounding the connection between Nigeria's economic growth and the development of its human capital. For instance, when public spending on health and education is not truly exogenous in an economic growth model, the use of the ordinary least square technique or the Auto-Regressive Distributed Lag (ARDL) approach, and/or the use of Johansen co-integration, was egregious misuses of the proper technique (s). Therefore, it is essential to produce a high-quality study on the connection between economic growth and human capital development in Nigeria. This is the driving force underlying the current investigation.

## **Literature Review**

### *Human Capital Development*

The process of gaining and growing the pool of skilled workers with the training and experience necessary for the nation's economic progress is known as human capital development (Harbison, 1973). In Nigeria, the education and healthcare sectors are where most human capital is created. The government invests public funds in the education sector of the economy by paying for textbooks, instructional supplies, and other components of the development of human capital. Thus, time spent on education by the individual and government spending on education makes up the input in the education sector. Intrinsic sequences of non-overlapping generations of people fill the economy. As a result, the different types of human capital available vary in how they are developed and in the rewards that people might derive from them (Odo, Eze & Onyeisi, 2016). Individual talent and educational time are the major inputs in developing human capital. From the perspective of the individual, the amount of time is constrained by the anticipated lifespan, which is taken as a given by the person. Additionally, increased educational opportunities boost economic and national production. Human capital is defined by economists as the knowledge, health, and other qualities of people that, if increased, might raise productivity (Todaro & Smith, 2003). Human capital formation (development) refers to the process of acquiring and growing the number of people who have the skills, education, and experience that are essential for economic for economic growth and development of a country. Human capital refers to the abilities and skills of a country's human resources (Okojie, 1995). Human capital is directly helpful in the industrial process, according to Becker (1964). It boosts a worker's productivity across the board, albeit it may vary depending on the task, the organization, and the environment. Gardener believed that human capital was one-

dimensional because there are numerous dimensions or kinds of skills, according to Acemoglu (2013). While Schultz (1959) and Nelson and Phelps (1966) assume that human capital stock determines the ability to assimilate technologies and that human capital affects speed of technological catch-up and diffusion of knowledge, a straightforward version of this approach would emphasize mental and physical abilities as distinct skills. Human capital, according to Bowles and Gintis (1993), is the ability to work in groups, follow instructions, and generally adjust to life in a capitalist/hierarchical society. They assert that the primary purpose of education is to instill in students the proper worldview and outlook on life. This explains why investing in education is important for the growth of human capital. Spence also stated that observable indicators of human capital function more as a signal of aptitude than as traits that are individually beneficial to the production process. Because it boosts businesses' revenues, it follows that human capital will be valued in the market (Ogunleye, Owolabi, Sanyaolu & Lawal, 2017).

On the other hand, human capital development, which is synonymous with human capital formation, human resource development, and investment in human capital, refers to the process of acquiring and growing the population of people who have the knowledge, abilities, and experience necessary for a nation's economic and political development (Wilson, 2017). The origins of disparities in human capital are innate ability, education, teaching quality, non-schooling investments, training, and effects prior to the labor market. The primary subjects of this study are government spending on health care and other non-educational initiatives like training. The development of human capital in Nigeria began with the Eric Ashby Commission in 1959. It served as the cornerstone for the growth of higher education in Nigeria (Oluwatobi & Ogunrinola, 2011).

### *Economic Growth*

Economic growth has fallen victim to definitional pluralism and is sometimes mistaken for economic development. Economic growth is a term that is hard to define, and it is often believed that this is because there are so many different schools of thought in the social sciences and elsewhere that attribute different meanings to it. It could be seen as, for example, economic development (Raymond & Ekponaanuadum, 2021). To achieve that, both the overall and per-person output of goods and services must increase each year (Wilson, 2017). In other words, a nation would be considered developing if it could consistently raise its Gross National Product at a rate of between 5 and 7 percent year. According to Guru (2016), there are two methods to describe economic growth. Economic growth can be characterized in one sense as consistent annual gains in the real national income of an economy over an extended period of time. In other words, economic growth is the upward trend in the net national product when prices remain constant. Some economists have critiqued this description as being insufficient and unsatisfactory. They contend that even while the overall national income may be rising, the average level of living may be declining. When the population is growing more quickly than the total national income, this can occur. Therefore, defining economic growth in terms of per capita income is the second and preferable method. According to Guru's second perspective (2016), economic growth is the long-term annual rise in a country's real per capita income. Economic growth, according to Amadeo (2016), is measured by how much more the economy produces than it did previously, and if the economy is creating more, it motivates enterprises to work harder. The money can be used by businesses to grow and hire more

staff. According to Daly, Czech, Blackwelder, Magnus-Johnston, and Zencey, the phrase "economic growth" has two separate meanings (2010). On rare occasions, it might be connected to the growth of our economy (the physical subsystem of our world made up of the stocks of population and wealth; and the flows of production and consumption). The phrase also has a second, marginally distinct meaning that describes economically healthy expansion that makes a profit when advantages outweigh disadvantages. According to Kessier (2012), economic growth happens when a society is able to generate more commodities and services as a result of increased productivity. Therefore, economic growth can be defined as the sustained annual rise or development in a nation's real per capita income (real GDP per capita or production per person). The yearly real GDP, which is the monetary value of all finished products and services at market prices, and 2010 as the base year are used to compute this. Investment, human capital, innovation and R&D activities, trade openness, foreign direct investment (FDI), institutional framework, political concerns, and social-cultural aspects are a few of the elements that affect economic growth.

### **Theoretical Framework**

The human capital idea is the foundation of this study. The foundation for this idea was created by Schultz (1961), which was further developed by Nobel laureate in economics Becker in 1964 in his work on the economics of employer-provided training. According to the hypothesis, workers who receive education or training will be more productive and earn more money because of their increased knowledge and skill level. Becker (1967) divided human capital into two categories specific and general for which a clear division was drawn in order to emphasize the theory's central tenet. When employees learn skills explicitly related to their companies, such how to operate proprietary software, they develop specific human capital. Since this training is not transportable, businesses are eager to pay for it. The application of general human capital, on the other hand, focuses on the knowledge gained via education and training, which may be applied to all areas of productive engagement (writing and reading abilities fall under this category) (Adawo, 2011). Companies are frequently hesitant to pursue this since employees might leave for the company that offers the best pay. According to Becker's (1967) line of reasoning, human capital is comparable to more conventional production variables like real estate, machinery, and equipment. As a result, money can be used to invest in the development of human capital through education, training, and the provision of high-quality healthcare, and the level of overall production, like the tangible investment in capital, changes in part with the rate of return on the capital. This makes human capital an element of production for which ongoing investment leads to higher levels of output. For the purposes of this study, the idea best captures how human capital development contributes to Nigeria's economic growth.

### **Empirical Review**

Johnson (2011) looked at the relationship between economic growth and human capital development in Nigeria and said that human capital is a key element in transforming all resources for the benefit of humanity. In order to analyze the relationship between GDP as a proxy for economic growth, total government spending on health and education, and the

enrolment pattern of tertiary, secondary, and primary schools as a proxy for human capital, the study used a conceptual analytical framework that employs the theoretical and ordinary least square (OLS). The concluded that there is a strong positive relationship between the development of human capital and economic growth and advised stakeholders to devise more practical methods of developing human capabilities because they are viewed as a key tool for economic growth in Nigeria. They also suggested that appropriate institutional frameworks be put in place to examine the manpower needs of the various sectors and implement policies that will promote the country's overall growth. The contribution of various metrics of human capital development to economic growth in Nigeria was assessed by Jaiyeoba (2015). It employed the growth account paradigm and used data from Nigeria, which defines GDP growth as a function of labor and capital. In the model, there was also a component for policy changes. Based on the estimated regression and a descriptive statistical analysis of trends in government commitment to human capital development, it was discovered that, despite health receiving less commitment than education, both the education and health components of human capital development are essential for Nigerian economic growth.

According to Mba, Mba, Ogbuabor, and Ikpegbu (2013), the development of human capital is important for the expansion of the Nigerian economy. The Ordinary Least Square (OLS) approach was employed in the investigation. The study also employed the GDP as a stand-in for economic growth, as well as the per capita real gross domestic product, the enrollment in primary schools, public spending on health and education, life expectancy, and the stock of physical capital as a stand-in for human capital. According to research, economic growth and the development of human capital are strongly positively correlated. The study thus suggested revisiting the labor requirements of the various economic sectors, putting in place practical policies to promote overall economic growth, and making effective and efficient use of public education and health spending so that the nation would have high-quality healthcare and educational systems. Oluwatoyin (2013) investigated Nigeria's economic development and human capital investment. According to the study, which employed Augmented Dickey Fuller (ADF) tests, there is a positive correlation between government spending on education and economic growth, but a negative correlation between spending on health care and economic growth. The report consequently advised the government to boost not only the amount spent on the health and education sectors, but also the share of its overall spending that is given to these sectors.

Using time series data from 1982 to 2011, Jaiyeoba (2015) investigated the connection between human capital investment and economic growth in Nigeria. Trend analysis, Johansen co-integration, and the ordinary least squares method were all used in the study. However, empirical results suggest a long-term connection between government spending on health, education, and economic expansion. The variables gross fixed capital creation, secondary and tertiary enrollment rates, and health and education spending all show the anticipated positive trends and are statistically significant (except government expenditure on education and primary enrolment rate). The results of this study have significant consequences for health and education policies, which are hotly contested throughout the nation. Therefore, this study suggests that the government implement policies focused on significant investment in health and education in order to speed up growth and free Nigerians from the cycle of poverty.

Using time series data ranging from 1980 to 2013, Adeyemi and Ogunsola (2016) investigated the effect of human capital development on economic growth in Nigeria. To determine the link between the variables included in the investigation, ARDL Co-integration analysis was performed in the study. The research discovered that the variables had long-run co-integration. The study's results also showed a long-term positive association between secondary school enrollment, public education spending, life expectancy rate, gross capital formation, and economic growth; however this relationship was statistically insignificant. A negative long-term association between enrollment in primary and secondary schools, public health spending, and economic growth was also demonstrated by the results. The study so advised that the government implement the necessary education and training policies that would provide high-quality primary and tertiary education, and that it should also allocate more resources to the health sector to improve human capital development.

The impact of human capital on economic growth in Nigeria is examined by Bachama, Hassan, and Ibrahim (2021) using time series data spanning the years 1970–2019. Their research demonstrated a positive and significant relationship between economic growth and spending on health and education, both in the short- and long-term. However, it was shown that labor had a major negative impact on economic growth. They advise the Nigerian government to concentrate on enhancing the health and education sectors. Meaning that a significant portion of government spending should go toward the health and education sectors, and that more job possibilities should be created (via skill development/vocational training) in order to lower the unemployment rate in the nation. A conclusion that can be drawn from the aforementioned empirical works under review is that some of the methodological approaches used in the works were utterly insufficient for addressing the problems related to the relationship between the development of human capital and economic growth in Nigeria. In other words, using the ordinary least square technique or the Auto-Regressive Distributed Lag (ARDL) approach in situations where public spending on health and education is not truly exogenous to an economic growth model, or using the Johansen co-integration test in combination with the ordinary least square technique, was a grave misuse of the correct methodology (s). This is due to the fact that employing ordinary least squares to estimate an equation system frequently results in simultaneous equation bias. Therefore, the need for a suitable method to investigate the connection between the increase of human capital and Nigerian economic growth is an empirical verification activity whose necessity cannot be contested.

## **Research Methods**

To better understand the effect of human capital development on economic growth in Nigeria, this study uses a qualitative research design. The development of human capital and economic expansion are examined using descriptive analysis and observation approaches. The claims made in this theoretical study were supported by secondary data from books, journal articles, and other publications. To lower the chance of mistake and increase the study's validity and reliability, many secondary sources were used.

## **Conclusion**

Numerous scholars have examined the link between human capital and economic growth in the field of economics, with varying degrees of success. In an effort to examine how human capital affects economic growth, this paper draws the conclusion that, there is a clear and obvious link between the two in Nigeria and that the development of human capital has had a positive and significant impact on economic growth of country. The researcher suggests the following actions to encourage the building of human capital and achieve long-term growth:

The Nigerian government should continue to enhance its investment in education and health in order to achieve economic growth and generally the sustainable goals by 2030. This is a surefire strategy to advance the nation's growth of human capital. This would then have an impact on the nation's economic development.

To increase their involvement in providing human capital services to the general public, businesses should be urged to invest more in health and education. Therefore, healthcare is a unique good. This is founded on the idea that without involvement from the private sector, government spending on the health sector is useless in treating health issues. The study recommended an improvement in welfare programs for health care workers in order to stop the mass exodus of doctors and other health professionals from the country's shores and raise the standard of living for Nigerians in light of the study's finding that health spending had little impact on the country's misery index.

The government should launch major initiatives that create job possibilities for Nigerian graduates. This is due to the fact that many young people today participate in various social vices like prostitution, armed robbery, and kidnapping because they are jobless.

## **Reference**

1. Acemoglu, D. (2013). Human capital theory. Enugu: MIT Bilkent.
2. Adawo, M.A. (2011). Has education contributed to the economic growth in Nigeria? *Journal of Economics & International Finance*, 3(1), 46- 58.
3. Adelakun, O. J. (2011). Human capital development and economic growth in Nigeria. *European Journal of Business and Management*, 3(9), 29-38.
4. Adeyemi, P. A., & Ogunsola, A. J. (2016). The impact of human capital development on economic growth in Nigeria: ARDL approach. *IOSR Journal of Humanities and Social Science*, 21(3), 1-7.
5. Afridi, A. H. (2016). Human capital and economic growth of Pakistan. *Business & Economic Review*, 8(1), 77-86. <http://www.bereview.pk/index.php/BER/article/view/109>
6. Akaakohol, B. M., & Ijirshar, V. U. (2018). Human capital development and economic growth in Nigeria. *Lafia Journal of Economics and Management Sciences*, 3 (1), 95 – 116.
7. Allege, P.O., & Ogunrinola I.O. (2005). Human capital development and economic growth in Nigeria. *Proceedings of the international Conference on Human Development*, Covenant University, Ota Ogun State, Nigeria, pp. 12 – 23.
8. Amadeo, K. (2016). What is economic growth? Retrieved on 20th March, 2022 from <https://www.thebalance.com/what-is-economic-growth>
9. Amassoma, D., & Nwosa, P.I. (2011). Investment in human capital and economic growth in Nigeria: A causality approach. *Canadian Social Science*, 7(4), 114-120.
10. Bachama Y.N., Hassan A. A., & Ibrahim B. (2021). The impact of human capital on Nigeria's economic growth. *European Scientific Journal*, 17(15), 393 – 408. <https://doi.org/10.19044/esj.2021.v17n15p393>



11. Barro, R. (1991). Economic growth in a cross section of countries. *Quarterly Journal of Economics*, 106(1), 407-443. <https://doi.org/10.2307/2937943>
12. Becker, G. (1964). *Human capital* (2nd Edition). New York: Columbia University Press.
13. Becker, G. S. (1967). *Human capital and the personal distribution of income: An analytical approach*. New York: Institute of Public Administration.
14. Bloom, D. E., & Canning, D. (2003). The health and poverty of nations: From theory to practice. *Journal of Human Development*, 4(1), 47-71. <https://doi.org/10.1080/1464988032000051487>
15. Bowles, S., & Gintis, H. (1993). *The democratic firm: an agency-theoretic evaluation*. Cambridge: Cambridge University Press.
16. CBN (2015). *Investment in human capital*. Abuja: Central Bank of Nigeria Bulletin.
17. Daly, H., Czech, B., Blackwelder, B., Magnus-Johnston, J., and Zencey, E. (2010). *Two meanings of economic growth*. New York: Centre for the Advancement of Steady State Economy.
18. Denison, E. F. (1962). *The sources of economic growth in the United States and the alternatives*. New York: Committee for Economic Development.
19. Eigbiremolen, G. O., & Anaduaka, U. S. (2014). Human capital development and economic growth: the Nigeria experience. *International Journal of Academic Research in Business and Social Science*, 4(4), 25-35. <http://dx.doi.org/10.6007/IJARBS/v4-i4/749>
20. Guru (2016). *Economic growth: its meaning and concept*. New York: The McGraw- Hill Companies.
21. Harbison, F. (1973). *Human resources are the wealth of nations*. New York: Oxford University Press.
22. Isola W. A., & Alani, R. A. (2012). Human capital development and economic growth: Empirical evidence from Nigeria. *Asian Economic and Financial Review*, 2(7), 813-827. <https://archive.aessweb.com/index.php/5002/article/view/933>
23. Jaiyeoba, S. V. (2015). Human capital investment and economic growth in Nigeria. *African Research Review*, 9(1), 30-46. <https://doi.org/10.4314/afrr.v9i1.4>
24. Johnson, A. O. (2011). Human capital development and economic growth in Nigeria. *European Journal of Business and Management*, 3(9), 29-40.
25. Kessier, J. (2012). *Economic growth, business and public policy*. New York: The Wharton High School.
26. Mba, I. C., Mba, E. I., Ogbuabor, J. E., & Ikpegbu, C. H. (2013). Human capital development and economic growth in Nigeria. *Journal of Economics and Sustainable Development*, 4(18), 48-52.
27. Nelson, R. R., & Phelps, E. S. (1966). Investment in humans, technological diffusion and economic growth. *American Economic Association Papers and Proceedings*, 56(1-2), 69-75.
28. Obeidat, Z. M. (2016). Human capital investment and training in Islamic banking industry In Jordan. *European Scientific Journal*, 12(10), 57 – 63. <http://dx.doi.org/10.19044/esj.2016.v12n10p90>
29. Odo S. I., Eze, O. R. & Onyeisi, S. O. (2016). Analysis of the relationship between human capital development and economic growth in Nigeria. *European Journal of Accounting, Auditing and Finance Research*, 4 (3), 56 -71. <http://eprints.gouni.edu.ng/id/eprint/1582>
30. Ogujiuba, K. (2013). The impact of human capital formation on economic growth in Nigeria. *Journal of Economics*, 4(2), 121-132. <https://doi.org/10.1080/09765239.2013.11884972>
31. Ogunleye, O. O., Owolabi, O. A., Sanyaolu, O. A., & Lawal, O. O. (2017). Human capital development and economic growth in Nigeria. *Journal of Business Management*, 3(8), 17-37.
32. Okojie C.E.E. (1995). Human capital formation for productivity growth in Nigeria. *The Nigerian Economic and Financial Review*, 44(1), 1-10.
33. Oluwatobi, S.O., & Ogunrinola, I.O. (2011). Government expenditure on human capital development: Implication for economic growth in Nigeria. *Journal of Sustainable Development*, 4(3), 1-8.
34. Oluwatoyin, M.A. (2013). Human capital investment and economic growth in Nigeria: The role of education and health. *Knowledge Management, Information Management, Learning Management*, 14, 266-277.
35. Pangeran, P. (2015). Entrepreneurs' social and human capital on their knowledge of finance alternatives: Evidence from Indonesia. *European Scientific Journal*, 11(10), 79 – 86.
36. Raymond M., & Ekponaanuadum N. (2021), Human capital development and economic development in Nigeria. *African Journal of Economics and Sustainable Development*, 4(1), 32-44. <https://doi.org/10.52589/AJESD SZ87BDFR>

37. Sankay, O.J. Ismail, R., & Shaari, H. (2010). The impact of human capital development on the economic growth of Nigeria. *Prosiding Perkem*, 5(1), 63-72.
38. Savedoff, W. (2003). *How much should countries spend on health?* Geneva: World Health Organization.
39. Schultz, T. (1959). Human wealth and economic growth. *Humanist*, 2(1), 109–17.
40. Schultz, T. (1961). Investment in human capital. *American Economic Review*, 51(1), 1-17.
41. Schultz, T. (1971). *Investment in human capital: the role of education and research*. New York: MacMillan.
42. Skapska, E., & Samul, J. (2015). Human capital indicators in service industries: From workforce profile to output measures. *European Scientific Journal*, 11(10), 34 – 51.
43. Țigănașu, R., Simionov, L., & Lupu, D. (2022). European Governments' Responses to the COVID-19 Pandemic during the First Wave: Resetting Governance Systems to Cope More Effectively with Future Shocks. *Applied Spatial Analysis and Policy*, 1-39. <https://doi.org/10.1007/s12061-022-09481-z>
44. Tiganasu, R., Pascariu, G., & Lupu, D. (2022). Competitiveness, fiscal policy and corruption: evidence from Central and Eastern European countries. *Oeconomia Copernicana*, 13(3), 667-698. <https://doi.org/10.24136/oc.2022.020>
45. Todaro, M.P., & Smith, S.C. (2003). *Economic development*. India: Pearson Education.
46. Todaro, M.P. and Smith, S.C. (2011). *Economic Development* (11th Edition). India: Pearson Education.
47. Uduh, D.M., & Beredict, C. (2017). Human capital development and economic growth in Nigeria: The role at nomadic education. *International Journal of Asian Social Science*, 7(11), 931 – 941. <https://doi.org/10.18488/journal.1.2017.711.931.941>
48. Umoru, D., & Odjegba, O. P. (2013). Human Capital Development and the Nigerian economy: A dynamic specification. *Developing Countries Studies*, 3(3), 74-85.
49. Wilson, G. (2017). *Development economics: A concise text*. London: Pearl Publishers.



This article is an open access article distributed under the terms and conditions of the [Creative Commons Attribution - Non Commercial - No Derivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).