MEASUREMENT INDICATORS AND LITERACY SKILLS AS PREDICTORS OF POVERTY PREVALENCE

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Abstract

The World Poverty Clock (2023) reported that over 42% of active and productive Nigerians numbering 74 million of her labour force are extremely poor and as a result live below the poverty line. Given rise in interest and exchange rates and multidimensional unemployment among others have predicted that Nigeria will experience an astronomical poverty rise by 2030. Two hypotheses were designed for this study as students; teachers and self employed persons formed the population of the study. Descriptive survey research design type was used for this study. A sample of 150 respondents through stratified technique was used to select needed respondents. A self structured tool titled, Measurement indicators and Literacy Skills as Predictors of Poverty Prevalence Questionnaire (MILSPPQ) on 4-Likert scale of Strongly Agree, Agree, Disagree and Strongly Disagree containing 20 items was used for data collection. The instrument was validated and with a cronbach alpha form of reliability, 0.863 index value was derived meaning that internal consistency was met. Correlation and regression analysis were used to analyse the data and tested at 0.05 significant level. The study revealed that literacy skills, quality education, unemployment rate, attitude towards self reliance among others are good predictors of poverty prevalence. The study then concluded that exposure to education at all levels (Preschool, primary, secondary and tertiary) will likely bring about a reduction in poverty rate.

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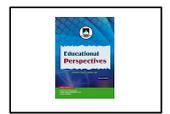
Introduction

The World Poverty Clock (2023) reported that 74 million Nigerians are extremely poor while 106 millions are poor. This statistics shows that given the rise in Nigeria's balance of payment, unstable price mechanism, multidimensional unemployment rate among others have predicted that Nigeria will experience an astronomical poverty rise by 2030. Although Nigeria's GDP per capita has been increasing through the course of time in nominal US dollar terms, yet many Nigerians are still living in poverty despite been regarded as the giant of Africa with an estimated population of over 200 million people. According to the World Resources Institute's environmental resource portal Earth Trends, about 71 percent of Nigerians live on less than $1 a day and about 92 percent live on less than $2 a day (Tevin-Anyali, Obi, Oladapo, 2023; Garcia, Richard, Ann and Julia, 2006).

Poverty is a multidimensional phenomenon. The World Development Report 2020/2021 summarizes its various dimensions to include lack of opportunity, lack of empowerment and a lack of security. The window of opportunity remains closed to the poor masses, and this makes them practically inactive in the society. Their lack of empowerment limits their choices in almost everything and their lack of security makes them vulnerable to diseases, violence, under-development and sometime death. Similarly, a United Nations statement says: Poverty is a denial of choices and opportunities, a violation of human dignity. It means lack of basic capacity to participate effectively in society. It means not having enough to feed and clothe a family, not having a school or clinic to go to; not having the land on which to grow one's food or a job to earn one's living, not having access to credit. It means insecurity, powerlessness and exclusion of individuals, households and communities. It means susceptibility to violence, and it often implies living on marginal or fragile environments, without access to clean water or sanitation (Collier and Paul, 2007).

According to Jegede (2020), the widespread of poverty and severe harsh hardship is a reality in Nigeria. It is a reality that depicts the lack of food, clothes, education and other basic amenities. Severely poor people lack the most basic necessities of life to a degree that it can be wondered how they manage to survive. There are several effects and deficiencies associated with poverty in Nigeria. One of the main effects of poverty is poor health, as is reflected in Nigeria's high infant mortality and low life expectancy. Poor people in Nigeria face several health issues as they lack basic health amenities and competent medical practitioners. Most children do not have the opportunity of being immunized and this leads to certain physical defects in some of the children. Their health has become low priority and as they have little or no choices, they live with whatever they are provided with, whether healthy or not.

However some of the key factors that contribute to incessant poverty in Nigeria include: rise in unemployment rate especially among young graduates; corruption, especially among political office holders and all sectors of our economy; non-diversification of the economy; income inequality; laziness, especially among those who come from wealthy households; and poor education system. Some of these could also be considered to be causes of poverty.

Jegede (2020) posited that quality education, employment opportunity and self-reliance are some of the most proactive and practical measures that can be adopted to address the rising rate of poverty in the country. The synergy that relates with these three variables are

inseparable due to the tripartite function they tend to execute both in the short and long run situation. Nwagwu (2014) and Chukuebuka (2022) noted that when government invests heavily in its educational system, such an institution will be characterised with the provision of quality education at all levels which in turn show in the quality of graduates produced annually from those institutions.

A nation that takes its educational system serious will end up producing employable graduates who are equipped with solving societal, industrial and community needs. Thereby making themselves self-reliant such that they becomes employers of labour and problem solvers. All these actions will automatically lead to poverty reduction since the each functional microcosm of the society is productive enough (Chukuebuka, 2022).

In a sharp contrast one can claim to be educated but lacks literacy skills even though they look intricately related (Osalor, 2020). Traditionally, the word literacy is associated with the ability to read and write. Still, in the contemporary world, its definitions have been extended to include acquisition of skills relevant for survival in society. According to Encyclopedia of African American Culture and History (2006), literacy refers to the process by which an individual expands his knowledge of reading and writing to enhance his thinking and learning for the sole aim of understanding himself and the world. Generally, literacy tends to be defined within the context of personal, social and cultural values of individual and society. UNESCO (2008) defines literacy as the ability to identify, understand, interpret, create, communicate and compute using printed and written text associated with varying contexts. It further emphasized that literacy involves a variety of learning activities that enable individuals to achieve their goals, develop their knowledge and the potential to participate in community activities and broader society actively. In other words, any learning opportunity that empowers learners with necessary skills and expertise to cope with daily challenges and difficulties in their respective endeavour could be seen as literacy (Itasanmi, Ojedeji and Adelore, 2019).

According to Itsanmi, Oyedeji and Adelore (2019), literacy skill is an off-shoot of education, another sub-tool that can be used to manage the negative tide of poverty prevalence in nations. Literacy skills in this study centres primarily on ability to read, write and interpret materials and information effectively and efficiently. Foundational skills such as literacy skills equip its beneficiary with critical scaffolding, which is prerequisite for numeracy, problem-solving, and socio-economic skills and as such, helping people to acquire these skills makes a good economic sense as those who lack them are forced into unemployment or are restricted to unstable low-wage jobs that offer little career mobility or growth. Also, as those who don't have these skills grow older, they may become increasingly susceptible to job losses and different labour market shocks Itsanmi (Itsanmi, Oyedeji and Adelore 2019).

The post pandemic era has revealed to the whole world and Nigeria inclusive that acquisition of literacy skills, quality education, gainful employment opportunity and self reliance (measurement indicators) are such that propels a nation towards self-development and actualisation of Sustainable Development Goals in which poverty eradication is one of the core objectives to achieve (World Bank Group, 2021).
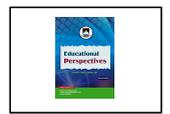
Statement of Problem

While other developing countries are busy experiencing expansion and development in areas of skills related, Nigeria's literacy skills rating keeps falling as more of her citizens fall below the threshold expected globally. Nigeria's is presently confronted with challenges ranging from failure to diversify its economy from oil and gas sector towards more labour intensive sectors, poor health facilities, non self-reliant and poor education. The oil has increased economic volatility and inflation while those living in poverty being most vulnerable to volatility and inflation. To add to it, instability of government revenues and a crowding out of agriculture (which provides the source of income to the poor) have made the situation worsen. The oil industry does not employ a sizeable number of unskilled workers, thereby contributes little to reducing poverty (Ford and Neil 2007). Failure to address these numerous challenges will not only lead to an increase in poverty rate but will also lead to another phase of economic depression. In order to manage and prevent an escalation of poverty prevalence, this study seeks to investigate measurement indicators and literacy skills as Predictors of Poverty Prevalence.

Objectives of the study

- Investigate the nature of relationship that exists between Measurement indicators and Poverty Prevalence in Nigeria.
- Justify how Literacy skills relate with Poverty Prevalence in Nigeria.
- Assess how Measurement indicators and literacy skills can predict poverty prevalence in Nigeria.

Hypotheses

- $H0_1$: Measurement indicators (Quality education, Unemployment rate and attitude towards self reliance) do not have any significant relationship with Poverty Prevalence in Nigeria.
- $H0_2$: Literacy skills do not have any Significant relationship with Poverty Prevalence in Nigeria.
- $H0_3$: Measurement indicator and literacy skills cannot significantly predict poverty prevalence in Nigeria

Significance of the Study

The findings of this study will be of immense benefit to learners, teachers, researchers, government and educational policy makers.

- The outcome of this study will be beneficial to learners such that it would motivate them to develop interest, maintain mental alertness towards acquisition of education and participate actively in classroom related activities because negligence could lead to failure, drop out and ultimately cascade further increase in poverty rate.
- For government, the outcome of this work will provide an update for them to understand how failure to invest massively in its educational system will drastically lead to an increase in poverty rate in the country, vice versa.

- The teachers will benefit from the findings of the study as it will provide feedback mechanism for them to see education as an important tool that can be used to minimise or eradicate poverty in the society.
- For educational planners and policy makers, this study will be of benefit to them too since it will equip them with basic and fundamental information needed to modify the curriculum and make the contents practical such that they can lead to solving practical solutions to societal problems.
- For researchers, the outcome of this work will benefit them in that it will aid in the addition to empirical findings and update of literatures on contemporary materials using measurement indicators and literacy skills to reduce or prevent the spread of poverty rate in the country.

Research methodology

The research design for this work is descriptive survey research design type using a correlational approach. This design type is interested in investigating existing relationship or association between the dependent and independent variables. This design was appropriate because it allows the researcher to determine the relationship between measurement indicators and literacy skills on poverty alleviation in Nigeria. Undergraduate, lecturers and self employed persons formed the population of the study. A sample of 150 respondents through stratified technique was used to select needed respondents. From the stratification, 50 undergraduates from LASUED, 50 lecturers from University of Benin, Edo state and another 50 self employed individuals in Kano state. A self structured tool titled, Measurement indicators and Literacy Skills as Predictors of Poverty Prevalence Questionnaire (MILSPPQ) on 4-Likert scale of Strongly Agree, Agree, Disagree and Strongly Disagree containing 20 items was used for data collection. A copy of the instrument was sent online to respondents in Edo state and Kano state respectively. The instrument was validated by two experts in the field of test and measurement, Lagos State University of Education, Ijanikin, Lagos and adjudged to meet both content and construct validity. With Cronbach alpha, a form of reliability, 0.863 index value was derived meaning that internal consistency was met. Correlation and regression analysis was used to analyse the data and tested at 0.05 significant level.

Testing of hypotheses and result interpretation

Hypothesis 1: Measurement indicator does not have any significant relationship with Poverty Prevalence in Nigeria.

Table 1: Correlation between Measurement indicator and Poverty Prevalence in Nigeria
Descriptive Statistics(a) of

	Mean	Std. Deviation	N
Measurement Indicator	2.1400	.61166	150
Poverty prevalence	2.8400	.80303	150
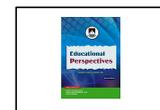
Correlations(b)

		Measurement Indicator	poverty prevalence
Measurement Indicator	Pearson Correlation	1	.724**
	Sig. (2-tailed)		.002
	N	150	150
Poverty prevalence	Pearson Correlation	.724**	1
	Sig. (2-tailed)	.002	
	N	150	150

**. Correlation is significant at the 0.02 level (2-tailed).

From table 1 above of descriptive statistics, it shows that with a sample size of 150 respondents, poverty prevalence has a higher mean and standard deviation values than measurement indicators. While at correlation (b) analysis, it shows that at r-value of 0.724, a positively strong correlation between measurement indicator and poverty prevalence is established. Hence at sig-value of 0.002, it shows significance. Hence, the null hypothesis is rejected and alternative hypothesis which states that measurement indicator do have significant relationship with Poverty Prevalence in Nigeria is retained.

Hypothesis 2: Literacy skills do not have any significant relationship with Poverty Prevalence in Nigeria.

Table 2: Correlation between Literacy skills and Poverty Prevalence in Nigeria
Descriptive Statistics (a)

	Mean	Std. Deviation	N
Literacy skills	2.5300	.79487	150
Poverty prevalence	2.8400	.80303	150

Correlations (b)

		Literacy skills	poverty prevalence
Literacy skills	Pearson Correlation	1	.816
	Sig. (2-tailed)		.009
	N	150	150
Poverty prevalence	Pearson Correlation	.816	1
	Sig. (2-tailed)	.009	
	N	150	150
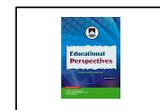
Source: Research work, 2023

From table 2 above of descriptive statistics, it shows that with a sample size of 150 respondents, poverty prevalence has a higher mean and standard deviation values than literacy skills. While at correlation (b) analysis, it shows that at r-value of 0.816, a positively strong correlation between literacy skills and poverty prevalence is established. Hence at sig-value of 0.009, it shows significance. Hence, the null hypothesis is rejected and alternative hypothesis which states that literacy skills do have significant relationship with Poverty Prevalence in Nigeria is retained.

Hypothesis 3: Measurement indicator and literacy skills cannot significantly predict poverty prevalence in Nigeria

Table 3: Showing a Regression analysis of measurement indicator and literacy skills on poverty prevalence in Nigeria

Model	sum of squares	df	mean square	F	Sig (2-tailed)	Decision
Regression	388.435	2	577.687			
Residual	37.265	147	324.115	56.434	0.004	Significant
Total	425.700	149				

$\alpha = 0.05$, $r = .981$ $r^2 = .941$

a. Dependent Variable: poverty prevalence

b. Predictors: (Constant), Measurement indicators (Quality education, unemployment rate, self reliance); Literacy skills (read, write).

Table 3 shows that r-value is .981 and r^2 value is .941 respectively. The r value of .981 indicates that there is positively strong correlation between the dependent variable (poverty prevalence in Nigeria) and the independent variable (Measurement indicator and Literacy skills). The r^2 value of 0.941 shows that 94.1% variation in the dependent variable (Poverty prevalence) can be explained by measurement indicators and literacy skills (Independent variable); Also, testing at alpha level of 0.05, the *P*- value is lower than the alpha level. Therefore, the null hypothesis is rejected and alternative which states that measurement indicators and literacy skills do significantly predict poverty prevalence in Nigeria is retained.

Discussion of Findings

From hypothesis one, the study revealed that measurement indicator do have significant relationship with Poverty Prevalence in Nigeria. These indicators include quality education, unemployment rate, self reliance among others. The outcome of this work conforms with that of Nwagwu (2014) and Chukuebuka (2022) noted that when government invests heavily in its educational system, such an institution will be characterised with the provision of quality education at all levels which in turn show in the quality of graduates produced annually from those institutions. A nation that takes its educational system serious will end up producing employable graduates who are equipped with solving societal, industrial and community needs. Thereby making themselves self-reliant such that they becomes employers of labour and problem solvers. All these actions will automatically lead to poverty reduction since the each functional microcosm of the society is productive enough (Nwagwu 2014; and Chukuebuka, 2022).
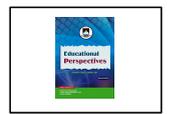
From hypothesis two, the study revealed that literacy skills do have significant relationship with Poverty Prevalence in Nigeria. These literacy skills include ability to read, write, and speak rationally among others. Literacy is another component in this 21st century that helps to understand phenomenon and effectively interpret economic issues. The outcome of this finding in consonance with that of Itasanmi, Ojedeji and Adelore, (2019) who claimed that poverty prevalence becomes minimised as literacy skills empowers learners with necessary skills and expertise to cope with daily challenges and difficulties in their respective endeavour. Literacy skills involve a variety of learning activities that enable individuals to achieve their goals, develop their knowledge and the potential to participate in community activities and broader society actively.

From hypothesis three, the study revealed that measurement indicators and literacy skills are good predictors of poverty prevalence in Nigeria. Since both variables have stated the positive relationship that exists between them, it becomes imperative that they also predict poverty prevalence as well. The outcome of this work is in agreement with that of World Bank Group, (2021) that noted acquisition of literacy skills (read, write and interprete situations), quality education, gainful employment opportunity and self reliance (measurement indicators) are such that propels a nation towards self-development and actualisation of Sustainable Development Goals in which poverty eradication is one of the core objectives to achieve.

Conclusion

From this study, the researchers concluded the following:

- The study then concluded that exposure to education at all levels (Preschool, primary, secondary and tertiary) will likely bring about a reduction in poverty rate.
- Quality education remains an important tool for a nation's advancement and reduction of poverty rate in any economy.
- Investment in education will lead to improvement of the masses through literacy skills which will lead to reduction of poverty.
- Skills acquisition and training lead to self-reliance a functional prerequisite to the management of poverty prevalence in the society and community at large.

Recommendation

Among other recommendations, the study asserts that:

- Government should reinvest more in her educational sector since it's the only fortified apparatus to combating poverty rate.
- The spirit of self reliance and self sufficiency should be instituted in children and youths so as to prevent over-dependence on government or individuals for survival.
- Contents in the curriculum should be reviewed periodically in line with trends and issue based curriculum.
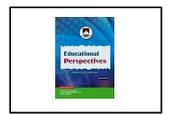
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