

An Investigation into the Impact of Poverty on Students' Academic Performance

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ABSTRACT

This study examines the impact of poverty on student's academic performance in Nigeria, focusing on Oyo and Ogun States. Poverty, as a multi-dimensional phenomenon, significantly affects access to basic needs, including education. The study is grounded in the Signaling Theory and the Modern Human Capital, which explain the correlation between education, skills, and wages. Through a quantitative approach, data were collected from undergraduate students across various institutions. The analysis, using Chi-Square statistical tools, reveals that poverty adversely affects educational outcomes, attendance, and academic performance. The study also identifies several contributing factors to poverty and proposes strategies to alleviate its effects on education. These include increased funding for schools, expanding access to quality early childhood education, providing free tutorial services, and implementing mentorship and vocational training programs. The findings underscore the need for comprehensive interventions to improve educational opportunities for impoverished students and promote overall national development.

Keywords: Poverty, Academic performance, Human Capital Theory, Signaling Theory

INTRODUCTION

Poverty is a multi-dimensional phenomenon that lacks a universally accepted definition. It refers to the nature and level of material deprivations that affect the poor and distinguishes them from the non-poor. Partha R (2018). Poverty can be observed when individuals lack access to basic needs. Of life like food, shelter, health care, and education. Overtime, systematic inequalities have enabled the exploitation and domination of available resources by wealthy individuals and corporations, exacerbating the hardships faced by underprivileged. This includes the utilization of others; labor to accumulate wealth (Silva et al., 2017).

Education, in particular, plays a critical role in breaking the cycle of poverty. Its significance cannot be overstated; it is universally acknowledged as a powerful tool for empowering individuals, fostering economic growth, and reducing inequality, Weale (2019). To achieve this, the Nigerian Constitution guarantees every citizen the right to live with dignity and honor. To uphold this fundamental right, the state has implemented various measures, including the universalization of compulsory and free primary education for all children of school age under State Universal Basic Education Programme (SUBEP). Additionally, it ensures the right to freely follow and propagate one's faith and religion, which is essential in maintain harmony in a multi-religious, secular country like Nigeria (Silvakumar.M., 2016).

For a country to achieve development and rapid economic growth, education play an important role. It increases labor productivity across both urban and rural sectors and yields significant economic returns on investment. As the level of education increases, economic output increases, and poverty is alleviated, and overall national development is promoted.

According to Chechi (2018), poverty reduces individual's ability to meet basic needs of life and access education. Similarly, Cooper and Miralay (2022) argue that improving educational attainment is one of the most effective strategies for reducing poverty. This study aims to investigate the impacts of poverty on academic performance in Nigeria.

LITERATURE REVIEW

Introduction

The literature on the relationship between poverty and academic performance is both extensive and multifaceted. It encompasses a variety of theories, models, and empirical studies that shed light on the complex dynamics at play. This review is grounded in the Signaling Theory and the Modern Human Capital Theory, which provide a theoretical framework for understanding how education and skills acquisition relate to poverty alleviation and economic outcomes. By examining previous research, this literature review aims to elucidate the ways in which poverty impacts educational attainment.

Signaling Theory

An extension of the human capital theory is represented by signaling theory that offers a complementary explanation as to why better-educated workers receive higher wages, and vice versa, why less-educated workers receive lower wages. According to signaling theory, the achievement of education represents a signal that workers give to employers, to reveal their innate levels of productivity, which cannot be observed by firms. The main underlying mechanism consists in the fact that the individuals with higher skills acquire more education knowing that this investment translates to a better signal for them. Similar to human capital theory, individuals are rational and they invest in education as long as the marginal benefit exceeds the marginal cost. While the marginal benefit it is the same for each individual, regardless of their type of skill (high or low), in the case of signaling theory, the marginal cost is higher for low-skilled than for high-skilled individuals. Despite this difference, both models predict that high-skilled individuals will earn higher wages, whereas low-skilled workers will earn less (Tyler et al., 2000)

The implication of the above theory on academic performance is that, parent with better education and skills will receive better wages and salary enabling them to send their children to better schools to acquire quality education, unlike parents with less education and lower wages or salaries.

The Modern Human Capital Theory

The early literature on human capital (Becker, 1964), as well as the signaling literature, focused on cognitive skills (Heckman & Rubinstein, 2001). However, recent research in the field of economics highlights the role of non-cognitive skills in shaping socio-economic outcomes. (Otto 2013) According to this literature, poorly educated individual are not only deficient in cognitive skills but also, to a greater extent, in non-cognitive skills. Those lacking motivation, willpower, and self-control are at higher risk of dropping out of school, becoming unemployed or experiencing social isolation (Carneito et al., 2006).

Empirical Review of some related Studies

Buheji (2019) considers the various methodologies in India in accelerating the training range to reduce poverty. The study focuses on shifting the poverty education equation from supply versus demand. This approach emphasizes improving the quality of education delivered to the poor, even with minimal resources. The research involves a comprehensive analysis of India's poverty-eradication schools and educational strategies, using observations as a key tool. The study also reviews current Indian approaches to overcoming unique barriers associated with low- quality education.

The examination centers around imply for changing the poverty schooling equation towards 'capacity Vs demand' instead of 'supply Vs demand' which would assist with improving the nature of the instruction conveyed to the poor with insignificant assets. The examination includes a careful unmistakable investigation of India's poverty-end schools or its instructive methodology utilizing perceptions as a device. The specialist audits the current Indian methodologies that could conquer the one-of-a-kind boundaries of low-quality instruction.

Amerikaner and Morgan (2018) stated that one of the greatest achievements for everyone is to be educated as

children because staying in school is crucial. Having an education is the first step towards finding a job earning money, and leading a successful and fulfilling life. Statistics reveal that for children living below the poverty line, the likelihood of academic success is significantly lower compared to their peers. Children in poverty are often exposed to prolonged and more intense stress, which negatively affects their attention span, physical fitness, cognitive abilities, intelligence quotients, and social skills.'

In line with Chinyoka (2013) on the psychological effects of poverty on academic performance, the outcomes of the research shows that most families cannot enjoy the basic needs of man which are more important to sustain human existence. Her study recommends government action to make education accessible to all children.

Sahidul (2024) investigate the link between poverty and education in India. He emphasized that poverty is a defining characteristic of marginalized groups, who are often affected by hunger, illiteracy and malnutrition. These groups are excluded from the necessities of life, making the right to quality education unrealistic for them. He concluded that, poverty significantly affects an individual's development and family stability.

According to Ikebude et al (2013), the impact of poverty on senior secondary school girls' progress in higher institutions of learning was examined. Using time series from 1992 to 2011, their empirical study revealed that unemployment and poverty are significant factors determining the success of female students in schools.

Nnamani et al (2014) conducted a case study on the impact of finance on students' academic performance at Kaduna Polytechnics. The results revealed that students' financial status depends on their source of finance. The study found that self-sponsored students are more satisfied than those who rely on family members

Greever (2014), in her paper on Elementary Education highlighted the significant impact of poverty on education. She noted that long-term poverty adversely affects students in terms of physical, psychological, and educational health.

The Facana Child Foundation (FCF, 2024) discussed the impacts of poverty on education, emphasizing that for children to access to quality education and reduce poverty levels, quality education must be prioritized. However, they observed that there is a complex relationship between education and poverty, where vulnerable children face disadvantages due to negative effects on learning experiences and academic performances."

Literature Gaps

1. Most existing studies are cross-sectional, examining the relationship between poverty and academic performance at a single point in time. There is a need for longitudinal studies to understand how these relationships evolve over time.
2. While there is a growing recognition of the importance of non-cognitive skills (such as motivation, resilience, and self-control), more research is needed to explore how poverty affects these skills and, in turn, how these skills impact academic performance.
3. While some studies examine the impact of specific policies on educational outcomes, there is a lack of comprehensive research on how broader policy changes (e.g., economic policies, social safety nets) indirectly affect students' academic performance through their impact on poverty levels.

METHODOLOGY

The research was based on a quantitative approach, as variables were measured numerically, and the population of the study consisted of schools. With the population of students in the country, the research was narrowed to Oyo and Ogun States. The respondents were undergraduate students, and the purpose was to investigate how poverty influences students' academic performance. The respondents were selected from the Federal College of Education Abeokuta, College of Health Science Ibadan, Federal Polytechnic Ilaro, Ibadan

Polytechnics and Federal University of Agriculture Abeokuta. Simple random sampling was used to avoid bias

and to ensure that each undergraduate student had an equal chance of being selected. Off-line administration of the questionnaires was adopted to minimize bias associated with online responses and to ensure efficiency in the process. A Likert scale was adopted in the questionnaire design. The importance of the responses and the guarantee of confidentiality were highlighted in the questionnaire.

The researcher administered questionnaires to a total sample of 150 students. To ensure the reliability of the field survey, two research assistants from the state were enlisted to help distribute the questionnaires in selected schools within the chosen localities. Once all questionnaires were retrieved, the data was analyzed using the Chi-Square statistical tool.

ANALYSIS OF RESULTS

Of the one hundred and fifty (150) questionnaires administered to selected schools, all were returned, amounting to a 100% response rate. The results of the Chi-Square statistical analysis are presented in the tables below to address four research questions.

Research Question I

What are the causes of poverty in education?

Table I The mean on the respondents' views on the causes of poverty on education.

S/N	ITEMS	SA	A	D	SD	Mean	Decision
1.	Lack of basic social amenities	71 47.3%	66 44%	9 6%	4 2.7%	3.48	Accepted
2.	Poor educational infrastructures	64 42.6%	69 46%	10 6.7%	7 4.7%	3.44	Accepted
3.	Physical disabilities of parent	44 29.3%	48 32%	37 24.7%	21 4%	2.63	Accepted
4.	Unemployment or little to no access to livelihoods	71 47.3%	54 36%	18 12%	7 2.3%	3.24	Accepted
5.	Poor governance	82 54.6%	56 37.3%	6 4%	4 2.7%	3.51	Accepted

Source: Field Survey, 2024.

The first research question of this study identified the causes of poverty in education. The data used to answer this research question is presented in Table I. All items received positive decisions because the calculated mean scores were above 2.50. The items have mean scores of 3.48, 3.44, 2.63, 3.24 and 3.51, respectively, indicating that the respondents accept the identified causes of poverty on education.

Research Question II

What factors contribute to poverty?

Table II The mean scores based on the respondents' views regarding the effects of poverty on school attendance and academic performance.

S/N	ITEMS	SA	A	D	SD	Mean	Decision
6.	Lack of education contribute to poverty	65 43.3%	52 34.6%	22 14.6%	11 7.3%	3.14	Rejected
7.	Unemployment contribute to poverty	81 54%	53 35.3%	9 6%	7 4.7%	3.51	Accepted

8.	Inadequate housing is factor that contribute to poverty	57 38%	51 34%	32 21.3%	10 6.6%	2.86	Accepted
9.	Health issues are factors of poverty	53 35.3%	51 34%	28 18.7%	18 12%	2.97	Accepted
10.	Discrimination is also a factor that contribute to poverty	53 35.3%	57 38%	25 16.7%	15 10%	3.06	Accepted

Source: Field Survey, 2024.

The second research question of this study tends to investigate the factors that contribute to poverty. Table II shows the result of the mean of the perception of the respondents on the factors that contribute to poverty. The mean scores are 3.14, 3.51, 2.86, 2.97, and 3.06 indicating that all the respondents agree with the decisions, as all items received a mean score higher than 2.50.

Research Question III

How does poverty affect the education system in Nigeria?

Table III Mean and decision-making based on the respondents' views on how poverty affects student academic performance.

S/N	ITEMS	SA	A	D	SD	Mean	Decision
11	Lack of access to resources affect student performance	79 52.7%	56 37.3%	9 6%	6 4%	3.39	Accepted
12.	Poor nutritious meal affect student performance	68 45.3%	56 37.3%	18 1.2 %	8 5.3%	3.23	Accepted
13	Lack of extracurricular activities affect students' performance	49 32.7%	57 57%	35 23.3 %	9 6%	2.97	Accepted
14	Limited access to technology affects student performance	54 36%	60 40%	25 16.7 %	11 7.3%	3.05	Accepted
15.	Peer pressure affects student performance	78 52%	62 41.3%	7 4.7 %	3 2%	3.43	Accepted

Source: Field Survey, 2024.

The third research question analyzes how poverty affects academic performance. The data for this analysis is presented in Table III and shows the number of respondents for each item as well as the mean scores. The mean scores are 3.39, 3.23, 2.97, 3.05, and 3.43. All the mean scores are accepted because each is higher than 2.50.

Research Question IV

What are the strategies to alleviate the effects of poverty on education in Nigeria?

Table IV The Mean and decision-making based on the respondents' view regarding strategies to alleviate the effects of poverty on student academic performance.

S/N	ITEMS	SA	A	D	SD	Mean	Decision
16.	Government should increase funding for schools in low-income areas	88 58.7%	56 37.3%	5 3.3%	1 0.67%	3.54	Accepted

17.	Government should Expand access to high quality early childhood education	88 58.7%	57 38%	3 2%	2 1.33%	3.54	Accepted
18.	Providing free tutoring services	74 49.3%	50 33.3%	20 13.3%	6 4%	3.28	Accepted
19.	School should Implement mentorship programs	73 48.7%	54 36%	15 10%	8 5.33%	3.28	Accepted
20.	Implementation of vocational training	86 55.3%	53 35.3%	7 4.7%	4 2.7%	3.47	Accepted

Source: Field Survey, 2024.

The fourth research question aims to analyze the solutions to alleviate the effect of poverty on academic performance. The data for this analysis is presented in Table IV. It shows the number of respondents for each item and their mean scores. The mean scores are 3.54, 3.54, 3.28, 3.28 and 3.47 respectively. All the mean scores are accepted because they are higher than 2.50. This indicates that the respondents agree with the solutions to alleviate the effect of poverty on academic performance.

Presentation of Hypothesis

Presentation of Hypothesis One

H₀: There is no significant impact of poverty on education.

H₁: There is a significant impact of poverty on education.

To test the hypothesis, we constructed a Chi-square based on questions 1-5 from the questionnaire.

Table V Chi-Square computation on the impact of poverty on education

Variables	N	Chi-Sq Calculated	Critical Value	Df	Alpha Level	Remark
Impacts of poverty on education.	150	81.73	22.36	12	0.05	Accepted

Source: Field Survey, 2024.

Table V revealed the summary result of the respondents' opinions on the impacts of poverty on education. The calculated Chi-Square calculated of 81.73 significantly exceeds the critical value of 22.36. This indicates that poverty has a significant impact on education, leading to the rejection of the null hypothesis.

Presentation of Hypothesis Two

H₀: There are no factors that have contributed to poverty.

H₁: Some factors have contributed to poverty.

To test the hypothesis, we constructed a Chi-square based on questions 6-10 from the questionnaire.

Table VI Chi-square computation on factors that contribute to poverty

Variables	N	Chi-Sq Calculated	Critical Value	Df	Alpha Level	Remark
There are no factors that contribute to poverty.	150	68.04	22.36	12	0.05	Accepted

Source: Field Survey, 2024.

Based on the obtained value, Table VI reveals the summary result of the opinions of respondents on the factors that contribute to poverty. Since the calculated chi-square value (68.04) is much greater than the critical value (22.06), the null hypothesis is rejected. This indicates that the identified factors significantly contribute to poverty. The analysis suggests a strong relationship between the factors listed in the table and their impact on poverty.

Presentation of Hypothesis Three

H₀: Poverty has not affected academic performance.

H₁: Poverty has affected academic performance.

To test the hypothesis, we constructed a Chi-square based on questions 6-10 from the questionnaire.

Table VII Chi-square computation on how poverty affects academic performance.

Variables	N	Chi-Sq alculated	Critical Value	Df	Alpha Level	Remark
How does poverty affect academic performance.	150	46.01	22.36	12	0.05	Accepted

Source: Field Survey, 2024.

Table VII revealed the summary results of the opinions of respondents on how poverty affects academic performance. The calculated Chi-Square calculated of 46.01 is far greater than critical value of 22.36. Based on this, we therefore reject the null hypothesis. This suggests that there is a statistically significant effect of poverty on academic performance. The findings reveal that poverty has a meaningful and measurable impact on academic outcomes.

Presentation of Hypothesis Four

H₀: There are no strategies that have alleviated poverty's effects on education.

H₁: Some strategies have alleviated poverty's effects on education.

To test the hypothesis, we construct a Chi-square based on the questions 15-20 from the questionnaire.

Table VIII Chi-Square computation on strategies to alleviate poverty effects on education.

Variables	N	Chi-Sq Calculated	Critical Value	Df	Alpha Level	Remark
Strategies to alleviate poverty effects on education	150	32.06	22.36	12	0.05	Accepted

Source: Field Survey, 2024.

Table VIII revealed the summary results of the opinion of respondents' on strategies to alleviate the effects of poverty on education. The calculated Chi-Square value of 32.06 is much greater than critical values 22.36. Based on this, we therefore reject the null hypothesis which states that there are no strategies that have alleviated poverty effects on education. Currently, there is a feeding program for younger pupils in primary education. The aim is to reduce hunger among school children in Nigeria.

CONCLUSION

Poverty is a significant factor affecting education in the sample population. Its influence extends to academic performance, student's awareness, and access to learning opportunities. The rejection of the null hypothesis

across all analysis underscores the importance of addressing poverty to improve educational outcomes. Awareness of poverty's effects plays a critical role and can be leveraged in intervention programs.

RECOMMENDATIONS

Recommendations are based on the conclusions derived from the study.

1. The Nigerian government should continue making adequate provisions for primary education programs through the States Universal Programme (SUBEB) ensuring that both the poor and the rich have access to basic education. The program extension should include tertiary education to bridge the education gaps between the rich and the poor in the country.
2. Subsidized education and scholarships can be implemented to reduce financial barriers for students from low-income families.
3. The school curriculum for secondary schools should incorporate technical education and entrepreneurial activities.
4. Local organizations should be encouraged to provide support systems such as after-school programs or financial assistance.

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