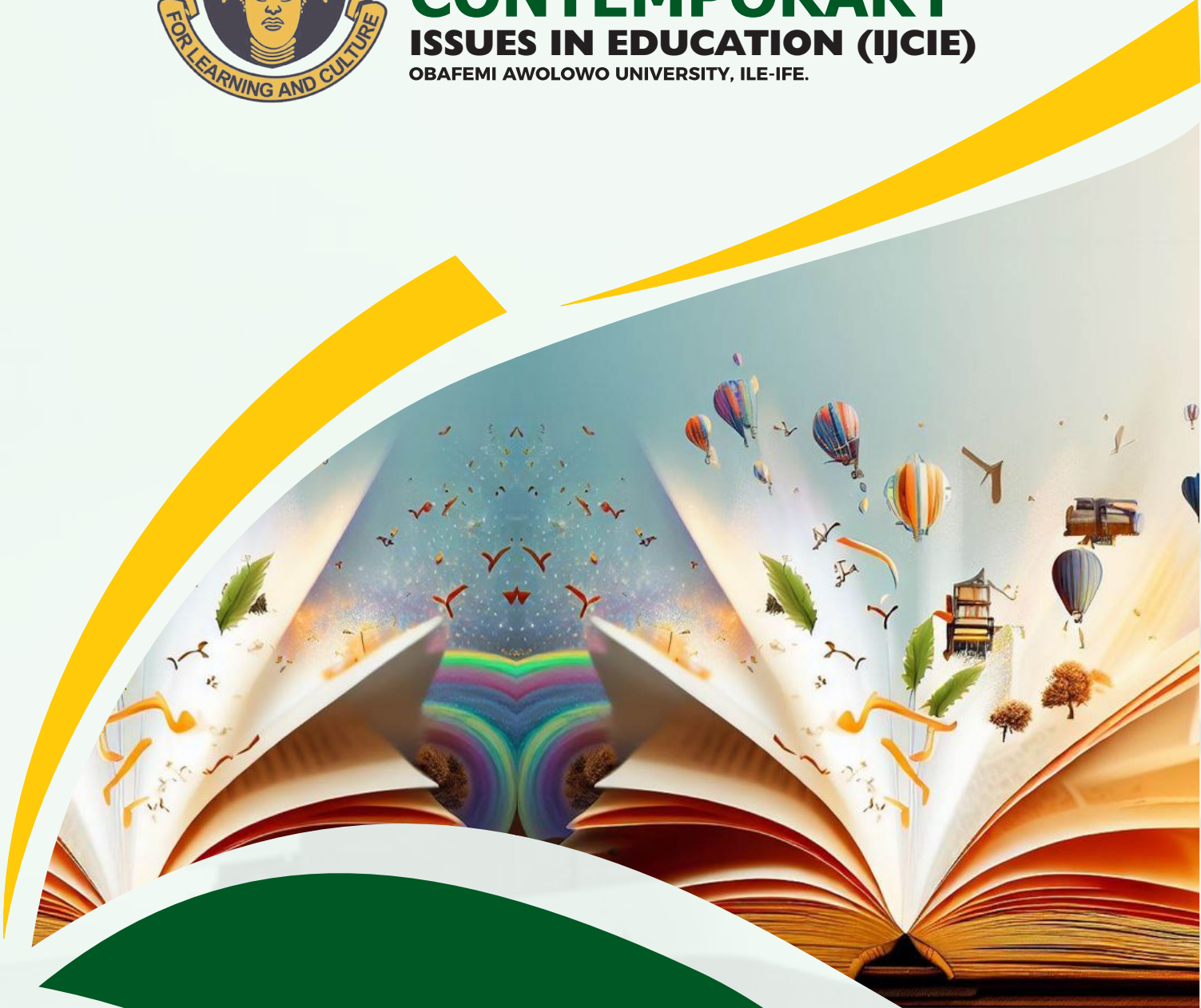




**INTERNATIONAL
JOURNAL OF
CONTEMPORARY
ISSUES IN EDUCATION (IJCIE)**
OBAFEMI AWOLOWO UNIVERSITY, ILE-IFE.



ISSN: 3115-5251
(Vol. 6, Nos. 1 & 2, 2025)



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INSECURITY AS A PREDICTOR OF POVERTY IN NIGERIAN EDUCATIONAL SYSTEM: IMPLICATIONS FOR STEM EDUCATION

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Abstract

The rate of poverty in Nigeria is alarming with over 90 million people wallowing in abject poverty while the few Nigerians above the poverty line are feeling insecure. The present study investigated preservice teachers' perception of insecurity as a predictor of poverty in Nigeria, with inferences for STEM education. Through a positive philosophy, the study used a quantitative approach within the blueprint of a descriptive survey of a correlational type. The sample of the study included 355 senior preservice science, technology, engineering, and mathematics (STEM) teachers in a first-generation Nigerian university on whom two valid and reliable instruments were administered. The instrument included: Perception of Insecurity Scale (Cronbach alpha, $\alpha=0.94$) and Poverty Measurement Scale (Cronbach alpha, $\alpha=0.92$). Data collected were analysed using the descriptive statistics of mean and standard deviation and inferential statistics of a linear regression analysis at a 5% level of significance. Results showed a high level of perception of insecurity and a high level of perceived poverty among the preservice STEM teachers. There was a statistically significant positive relationship between preservice STEM teachers' perceived insecurity and poverty in Nigeria ($r=0.79$, $p<0.05$). The perception of insecurity examined contributed as much as 62% (with $\beta=0.79$, $t=24.67$, $p<0.001$) to preservice STEM teachers' perceived poverty. Preservice STEM teachers maintained that poverty level in Nigeria was further aggravated by some major security threats such as ritual killings, armed robbery, kidnapping, banditry, herders-farmers conflicts, and Boko Haram insurgency. Implications of the findings for STEM education were discussed.

Keywords: Preservice teachers, insecurity, poverty, STEM education, Nigeria.

Introduction

No doubt, Nigeria is rich in both natural and human resources. However, the Africa's richest nation is grappling with many problems including economic, social, and political, which have negative consequences on the quality of life of her people. One major challenge in Nigeria since her returned to civil rule in 1999 is insecurity. Although, insecurity is a global challenge, it is more pronounced in the developing nations including Nigeria. Insecurity as a concept is multidimensional with varying definitions. Human insecurity is seen as repression and chronic threats to life including disease and hunger (Egunjobi, 2021). Humans are secure when they are not under any form of threats, danger, or risk of physical or moral aggression, accident, theft and impairment (Egunjobi, 2021). Insecurity is defined as an acute threat to institutions, properties, religious beliefs, states, territories, and human life (Oyibo, 2016). Two major sources of insecurity are identifiable and they include proximate factors and remote factors (Achumba, Ighomereho, & Akpor-Robaro, 2013). The proximate and immediate factors emanate from terrorism, poverty, unemployment, social irresponsibility of companies, rural/urban drift, and porous borders.

The remote factors emanate from deteriorating communal and weak socio-cultural value system, weak security system, conflict of perceptions between the government and the public, ethno-religious conflicts, prolonged material inequalities and unfairness, failed government, and lack of institutional capacity. In Nigeria, there is incessant bouts of insecurity in her nooks and crannies. While terrorism, conflicts, and insecurity are being witnessed globally in different degrees, the rate of insecurity in Nigeria is appalling with awful consequences. Insecurity in Nigeria ranges from terrorism in the northeast orchestrated by Boko Haram attacks,

kidnappings in the Niger Delta region resulting in the shutdown of oil exploration, wanton destruction of life and properties masterminded by Fulani herdsmen to ritual killings in the south for money and spiritual power. The southern part of Nigeria grapples with violent crimes in the form of ritual killings and kidnapping for ransom. The northern part of Nigeria grapples with utter terror in the form of bomb explosion, kidnappings of school children, and brutal murder of villagers. The bomb explosion near the Eagle Square in Abuja- the Federal Capital Territory on 1st of October, 2010 was a case of terrorism during the Nigeria's 50th independence anniversary. This terror act had also occurred in many cities and towns in northern Nigeria including Kano, Bauchi, Maiduguri, Kaduna, Jos, and Suleja and since then Nigeria had been tagged a terrorist's country. The insecurity has taken a regional dimension with political and non-political assassinations across Nigeria (Oyibo, 2016). It is observed that ritual killings are prevalent in the western and eastern parts of Nigeria; kidnapping in the east and south-south, insurgency and murder by herdsmen are prevalent in the northern part of Nigeria; and the militia groups dominate the southern part of Nigeria.

Every state in Nigeria is battling with the issue of insecurity with dire consequence on the economic, social, and political sustainability of Nigeria and the citizens' welfare. Nigerians cannot sleep in Nigeria with their two eyes closed. Many Nigerians are living in fear or insecurity, lost assets and property, killed, internally displaced and lost means of livelihood. Nigeria is tagged one of the dangerous countries to live in and ranked very low in the Global Peace Index. Security challenges in Nigeria manifest in the form of insurgency, ethnic conflicts, banditry, kidnapping, armed robbery, religious conflict, and herders-farmers conflict. Insecurity in Nigeria has led to the killing of many Nigerians and some foreign settlers with properties worth billions of Naira lost. The perception of insecurity in Nigeria has significant consequences, relating to education, economic, and social. The social consequence relates to the displacement of people and the breakdown of community relationships. The economic consequence relates to the negative impact on the economy where businesses are being forced to close and foreign

direct investment being discouraged. Insecurity had forced many schools to close in many parts of Nigeria because of the incessant kidnapping occasioned by the Boko Haram insurgency. At the eve of the general election in 2014, the activities of the Boko Haram led to the kidnapping of Chibok school girls. The indices of insecurity in Nigeria included environmental, psychological, economic, and physical indicators. The environmental indices could be likened to desertification, deforestation, pollution, and climate change.

The incessant cutting of trees majorly in the southern part of Nigeria has caused serious environmental damage coupled with desertification in the northern region of the country occasioned by drought and wind erosion. Pollution in urban areas is very high as a result of the activities of industrialization and climate change (Oladipo, Awofala, & Osokoya, 2020) is more prevalent in the rural areas of Nigeria occasioned by the depletion of the ozone layers that affect farming activities. Fear of crime, anxiety and stress, trauma, and lack of trust are some psychological indicators of insecurity in Nigeria. Many Nigerians do not trust the security architecture in the country due to their inability to curb insecurity which has claimed many lives and property. Crime rates are high in urban areas and these have created palpable fears and anxiety in the minds of the people. Many Nigerians have experienced trauma as a result of terrorism, communal clashes, and kidnapping. The physical indicators of insecurity include high crime rate, terrorism, ethnic and communal conflicts, banditry, and kidnapping. High crime rate through incessant murder, kidnapping, and armed robbery is recorded daily in Nigeria. The incessant activities of the Boko Haram in northeastern region of Nigeria have caused widespread insecurity leading to the loss of lives and property. Banditry has become a major security concern in Nigeria, particularly in the northwestern region. Kidnapping for ransom has become a lucrative business in Nigeria, with many cases reported across the country. The economic security indicators include food insecurity, high inflation rate, unemployment rate, and poverty rate. Many Nigerians face food insecurity, particularly in rural areas where farming is the main source of livelihood. Nigeria

has experienced high inflation rates in recent years, making it difficult for people to afford basic necessities. The unemployment rate in Nigeria is high, particularly among young people. Nigeria has a high poverty rate, with over 90 million people living below the poverty line. The wanton destruction of lives and properties across the nation has created a scene of insecurity thereby increasing the rate of poverty in Nigeria.

The multidimensional nature of poverty has made its definition unclear. World Bank (2000) described poverty as powerlessness, voicelessness, exposure to vulnerability and risk, low levels of education and health, and material deprivation. The poor are those who cannot maintain healthy living conditions, lack adequate income and education, unable to find a stable job, lack ability to own property, and possess low life expectancy. The poor have restricted access to basic necessities of life such as food, shelter, clothing, and find it extremely difficult to meet social and economic obligations. The poor possess little or no economic assets, live in squalor, are low-income earners, lack skills, and are majorly unemployed because they lack quality education. Poor people pass over opportunities repeatedly. Poverty breeds deprivations, distress, fear, isolation, and social exclusion and affects the sensibility of nations, communities, and individuals (Danaan, 2018). Poverty may lead to withdrawal from cultural heritage and values, lack of good orientation, and loss of self-fulfilment, self-actualisation, self-confidence, and self-esteem. According to the National Poverty Eradication Programme in Nigeria (Federal Government of Nigeria, 2001), poverty has the following features namely: lack of productive assets; low level of economic infrastructures; low life expectancy; poor nutrition; inadequate health care and services; high rate of infant mortality; unfit housing; and not having enough food to eat. Studies have pointed out factors that have worsened the poverty situation in Nigeria (Orokpo, Ogwu, Asmau, & Machen, 2018) to include: poor infrastructures, ethnic and religious conflicts, poor revenue allocation and distribution, and mono economy. Others include non-involvement of the poor masses, poor policy formulation, implementation and evaluation, corruption and mismanagement of resources, low level of

accountability among government officials, and unstable political system. The problem of poverty in Nigeria manifests in human hopelessness, ignorance and poor access to credit facilities, disease and malnutrition, low life expectancy, unemployment, and hunger (Ibrahim & Musa, 2022). Thus, poverty has continued to be a fundamental obstruction to Nigeria's socioeconomic buoyancy, needing policies that efficiently reduce both immediate poverty and enhance long-time socioeconomic stableness (Usifoh&Baghebo, 2024). Many Nigerians are living below \$2.15 per day which represents the international poverty line often used by the World Bank and other organisations to assess the level of extreme poverty worldwide. Thus, poor people in Nigeria experience over one-quarter of all possible deprivations based on the National Multidisciplinary Poverty Index of 0.257 (National Bureau of Statistics, 2022). One major enhancer of poverty in Nigeria is the limited access to job options. Joblessness exists at high levels, particularly among the youths, who make up significant demographic in the country. The high rate of unemployment has aggravated economic gaps, preventing millions of Nigerians from achieving optimal upward economic mobility (Okoye &Nwakobi, 2020). The mono economy nature of Nigeria with her heavy reliance on oil exports as a means of generating foreign exchange has made it susceptible to volatility in global oil price and this has substantial impact on revenues accrue to the government for funding social programmes that could reduce poverty. The structural economic reliance on oil promotes systemic poverty in Nigeria.

Evidently, there is no clear-cut understanding of the relationship between insecurity and poverty in Nigeria. This is so because findings on the association between insecurity and poverty in Nigeria are mixed. Many studies have found that insecurity is unrelated to poverty (Okunola, Umar, & Mohammed, 2020; Okolie, Onyema, &Basey, 2019; Sakanko, 2018). Some studies have claimed that poverty is related to insecurity (Idris & Salisu, 2020; Osunyikanmi, 2014). It is noted that in Nigeria, the major causes of rising insecurity are poverty and inequality (Awojobi, 2014; Oduwole, 2014). More so, insecurity and

inequality are the major drivers of poverty in northern Nigeria (Adedeji & Oluwalogbon, 2020; Ajodo-Adebanjoke & Walter, 2014). There is a link between high unemployment, poverty and insecurity; unemployment exacerbates poverty and public expenditure on insecurity; poverty increases unemployment and insecurity; and public expenditure on insecurity increases poverty rate (Egunjobi, 2021). The drivers of insecurity have been identified as bad governance, corruption, unemployment, inequality, and poverty (Evans & Kelikume, 2019). It is noted that poverty and unemployment increase insecurity in Nigeria and unemployment is the conduit by which insecurity and poverty spread in the country (Usman, 2015; Mukhtar, Mohammed, & Sani, 2016). A reduction in income disparity and poverty will lessen the rate of insecurity (Tade, 2021) as inequality and social divides contribute to conflicts and poverty (Kanbur, 2007). A high level of unemployment contributes significantly to a high level of poverty, whose effects and consequences contribute to a high level of insecurity in Nigeria (Egunjobi, 2021). This is to say that there is a direct relationship between insecurity and poverty.

The present study delved into investigating preservice science, technology, engineering, and mathematics (STEM) teachers' perception of insecurity as a predictor of poverty in Nigeria. Notwithstanding the conflicting research findings regarding insecurity as a predictor of poverty in Nigeria, no study had taken cognisance of how preservice STEM teachers see the relationship between insecurity and poverty in Nigeria. This study looked into the perception of preservice teachers for the following reasons: 1. The findings from this study can inform policy and practice in teacher education, Science, Technology, Engineering, and Mathematics (STEM) education, and poverty reduction initiatives in Nigeria. 2. There is no doubt that teachers are nation builders that help in shaping the minds and attitudes of their learners. Preservice teachers' conceptualisation of insecurity and poverty could have a lasting influence on how they teach and promote learning in their students, possibly preserving or lessening these issues. 3. STEM education is very important in Nigeria's quest for economic growth and

development. Thus, it is important that we comprehend the nature of the preservice teachers' perception of insecurity and poverty as relates to their teaching of STEM subjects so as to invent techniques that could boost STEM education in the country. 4. Early understanding of the relationship between insecurity and poverty among preservice teachers could help in building strategies that would conform to positive teaching practices. 5. In as much as the preservice teachers are young adults who represent the youth population in country, their perceptions can provide valuable insights into the attitudes and concerns of young Nigerians regarding insecurity and poverty. 6. Preservice teachers are the future educators of Nigeria. Understanding their perceptions and attitudes towards insecurity and poverty can provide insights into how they may address these issues in their future teaching practices.

Statement of the Problem

The Nigerian educational system faces significant challenges, including insecurity and poverty, which hinder access to quality education, particularly in STEM fields. Insecurity, characterized by conflicts, violence, and kidnappings, has led to school closures, displacement of students and teachers, and disruption of learning. Poverty exacerbates these issues, limiting access to resources, technology, and opportunities for students from low-income backgrounds. The interplay between insecurity and poverty creates a vicious cycle, where students from disadvantaged backgrounds are disproportionately affected, leading to limited access to quality STEM education, poor academic performance and low achievement, increased dropout rates and decreased educational attainment, and reduced opportunities for socio-economic mobility. This situation has severe implications for Nigeria's economic development, as a lack of skilled STEM professional hinders innovation and global competitiveness. Therefore, this study investigated preservice science, technology, engineering, and mathematics (STEM) teachers' perception of insecurity as a predictor of poverty in Nigeria.

Specific Objectives of the Study

Specifically, the objectives of this study included to (1) determine the level of preservice STEM teachers' perception of insecurity in Nigeria; (2) examine the relationship between preservice STEM teachers' perception of insecurity and poverty in Nigeria; and (3) investigate the predictive influence of perception of insecurity on preservice STEM teachers' perceived poverty in Nigeria.

Research Questions

The following research question was raised and answered in the course of this study:

RQ1. What is the level of preservice STEM teachers' perception of insecurity in Nigeria?

RQ2. What is the level of preservice STEM teachers' perception of poverty in Nigeria?

Hypotheses

The following hypothesis was postulated and tested in this study:

H₀₁: There is no statistically significant predictive influence of perception of insecurity on preservice STEM teachers' perceived poverty in Nigeria.

Methods

This study adopted a positivism philosophy within the scheme of quantitative research approach of a descriptive survey of a correlational type. The participants were selected from a research frame of preservice science, technology, engineering, and mathematics (STEM) teachers at the Faculty of Education, University of Lagos, Nigeria. The target population of the preservice STEM teachers was 444 cutting across the senior level for all the six programmes (biology education-130, chemistry education-69, integrated science education-48, mathematics education-97, physics education-35, and technology and engineering education-65). A simple random sampling technique was used to select 80% of the 444 preservice STEM teachers and this amounted to 355 participants. 53% of the respondents were females while the remaining 47% were males. Their ages ranged between 16 and 31 years years ($x_{age}=21.3$ years; $SD=2.2$ years).

Two instruments were used in this study

and they included: Perception of Insecurity Scale (PIS) and Poverty Measurement Scale (PMS). The PIS consisted of two parts. The first part contained demographic information such as age and gender. The second part consisted of 30 items anchored on a five-point Likert scale of strongly agree-5, agree-4, undecided-3, disagree-2, and strongly disagree-1. The five-point Likert scale was used in this study because it provided valuable insights into participants' attitudes and opinions, by offering a balanced set of options with sufficient granularity to capture participants' opinions, thus helping the researchers in the identification of trends, patterns, and correlations. The 30 items on the PIS were crafted from the literature review and validated by two experts in economics education. Cronbach alpha (α) was used to determine the reliability coefficient of the PIS and a reliability coefficient alpha (α) of 0.94 was computed. The PMS contained 10 items crafted from the literature and on a five-point Likert scale of 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Almost Always and its reliability coefficient was determined through Cronbach alpha (α) and a value of 0.92 was computed. The two valid and reliable surveys were administered to the preservice STEM teachers in regularly scheduled classes with the help of 6 research assistants. The primary data were collected within one week and it took 25 minutes to complete the two scales. Prior to the administration of the two instruments, all the respondents had filled and returned informed consent form to partake in the research. The anonymity and confidentiality of the respondents were maintained. All ethical considerations were taken care of before, during and after the administration of the instruments. The IBM SPSS version 25 was used in coding the raw data from the field. The descriptive statistics of frequency, percentage, mean and standard deviation were used to answer research questions one and two while the inferential statistics of a linear regression was used to test the only hypothesis for the study. All statistical tests were carried out at a 5% level of significance.

Results

Research Question One: What is the level of preservice STEM teachers' perception of insecurity in Nigeria?

The 5-point Likert scale used in the study was classified into three namely: 1.0-2.9 as Low; 3.0-3.9 as moderate; and 4.0-5.0 as high. Of the 355 preservice STEM teachers, 55 (16%) had scores in the range 1.0-2.9 ($x=2.24$, $SD=0.97$, score range: 1.30-2.93, 95%CI= 2.14–2.34), 101 (28%) had scores in the range 3.0-3.9 ($x=3.68$, $SD=1.43$, score range: 3.00-3.93, 95%CI=

3.35–3.65) and 199 (56%) had scores in the range 4.0-5.0 ($x=4.44$, $SD=1.56$, score range: 4.00-5.00, 95%CI= 4.34–4.64). A large proportion of these preservice STEM teachers showed high perception of insecurity. In short, the overall ($x=4.38$, $SD=1.26$, score range: 1.30-5.00, and 95%CI= 4.13–4.54) for the entire sample showed high perception of insecurity by the preservice

Table 1. Descriptive statistics of preservice STEM teachers' perception of insecurity

Insecurity	F	(%)	Mean	S.D	Remarks
High (4.0-5.0 score)	199	56	4.44	1.56	High
Moderate (3.0-3.9 score)	101	28			
Low (1.0-2.9score)	55	16			
Total	355	100			

Research Question Two: What is the level of preservice STEM teachers' perception of poverty in Nigeria?

The 5-point Likert scale used in the study was classified into three namely: 1.0-2.9 as Low; 3.0-3.9 as moderate; and 4.0-5.0 as high. Of the 355 preservice STEM teachers, 77 (22%) had scores in the range 1.0-2.9 ($x=2.20$, $SD=0.94$, score range: 1.31-2.95, 95%CI= 2.15–2.33), 75 (21%)

had scores in the range 3.0-3.9 ($x=3.71$, $SD=1.51$, score range: 3.00-3.93, 95%CI= 3.34–3.64) and 203 (57%) had scores in the range 4.0-5.0 ($x=4.45$, $SD=1.47$, score range: 4.00-5.00, 95%CI= 4.24–4.74). A large proportion of these preservice STEM teachers showed high perception of poverty. In short, the overall ($x=4.41$, $SD=1.32$, score range: 1.31-5.00, and 95%CI= 4.23–4.64) for the entire sample showed high perception of poverty by the preservice STEM teachers.

Table 2. Descriptive statistics of preservice STEM teachers' perception of poverty

Poverty	F	(%)	Mean	S.D	Remarks
High (4.0-5.0 score)	203	57	4.45	1.47	High
Moderate (3.0-3.9 score)	75	21			
Low (1.0-2.9 score)	77	22			
Total	355	100			

Hypothesis Testing

Hypothesis One (H_{01}): There is no statistically significant predictive influence of perception of insecurity on preservice STEM teachers' perceived poverty in Nigeria.

Table 3. Linear regression results of the predictive influence of perception of insecurity on preservice STEM teachers' perceived poverty in Nigeria

R =.79	$R^2=.62$	Adjusted $R^2=.62$	Stand. Error Estimate=1.32	$F_{(1, 353)}=685.25$	P < 0.001
Variable	Unstandardized B	coefficients Std. Error	Standardized coeff. Beta	t	Sig.
Constant	0.88	0.64		1.33	0.29
Insecurity	1.23	0.42	0.79	24.67	.000

Table 3 shows the predictive influence of perception of insecurity on preservice STEM teachers' perceived poverty. The ANOVA regression analysis (Table 3) shows a significant influence of perception of insecurity on preservice STEM teachers' perceived poverty ($F_{(1, 353)} = 685.25, p = 0.00$). The perception of insecurity examined contributed as much as 62% (with $\beta = 0.79, t = 24.67, p < 0.001$) to preservice STEM teachers' perceived poverty. The regression analysis equation is as follows: $\text{poverty}_{\text{predicted}} = 0.88 + 1.23 \text{ perception of insecurity}$. So, one unit increase in perception of insecurity results in a 1.23 increase in perception of poverty.

Discussion of Findings

The present study has revealed that the preservice STEM teachers showed a high level of insecurity and a high level of poverty. Results from extant literature have shown that some researchers (Idris & Salisu, 2020; Adedeji & Oluwalogbon, 2020; Evans & Kelikume, 2019; Mukhtar, Mohammed, & Sani, 2016) had found high perception of insecurity and poverty among the Nigerian population. Consequently, this agreed with the finding of the present study with preservice STEM teachers. Many factors could be attributed to the high level of perceived insecurity and poverty in Nigeria among the preservice STEM teachers. Preservice STEM teachers might have doubted their ability to effectively teach and manage classrooms, and this could have led to their feelings of insecurity, poor productive disposition (Awofala, Lawal, Arigbabu, & Fatade, 2022), low self-efficacy (Lano-Maduagu, Awofala, & Arigbabu, 2022), and poor learning engagement (Ajao, Akinoso & Awofala, 2023). More so, the preservice STEM teachers' fear of the unknown regarding the uncertainty of their future careers or the challenges they might face in the classroom could have created a feeling of insecurity among them. The demands of teacher education programmes and the pressure to perform well could have created anxiety and stress, contributing to feelings of insecurity among the preservice STEM teachers. Preservice STEM teachers' exposure to social media and new reports about insecurity, poverty, and violence in Nigeria could have contributed to their perceptions of insecurity and poverty. Additionally, cultural norms and values, such as

the emphasis on respect for authority and tradition, could have influenced preservice STEM teachers' perceptions of insecurity. Preservice STEM teachers could have been influenced by their peers' perceptions and attitudes towards insecurity, which could have shaped their own perceptions. Additionally, Nigeria has a high rate of poverty and unemployment (Idris & Salisu, 2020), and these could lead to feelings of insecurity and uncertainty among the preservice STEM teachers. The preservice STEM teachers' exposure to violence in the form of terrorism, kidnapping, and armed robbery, could have contributed to a high perception of insecurity leading to poverty among them. The inadequate infrastructure, such as poor roads, inadequate lighting, and lack of access to basic services, could have contributed to feelings of insecurity among the preservice STEM teacher in Nigeria. The high-stakes testing environment in Nigeria (Awofala, 2020) could have created pressure, anxiety, and stress for preservice STEM teachers, thereby contributing to feelings of insecurity among them.

In the present study, it was found that preservice STEM teachers' perception of insecurity had a predictive influence on poverty in Nigeria. Numerous reasons could be ascribed to this significant predictive influence. Cultural and social norms in Nigeria, such as the emphasis on community and family, could influence preservice STEM teachers' perceptions of insecurity and poverty, and shape their responses to these challenges. Perception of insecurity could lead to increased anxiety and stress (Awofala & Esealuka, 2021), which can negatively impact preservice STEM teachers' mental and physical well-being, ultimately contributing to poverty. Additionally, the Nigerian context, characterized by high levels of insecurity and poverty, could exacerbate the predictive influence of perception of insecurity on preservice STEM teachers' poverty. Moreover, fear of insecurity could create uncertainty about the future, leading preservice STEM teachers to make risk-averse decisions that may limit their economic opportunities and increase their likelihood of poverty. Perception of insecurity can increase preservice STEM teachers' vulnerability to poverty, making them more

susceptible to economic shocks and stresses. Perception of insecurity can decrease preservice STEM teachers' motivation (Lawal & Awofala, 2021), self-efficacy (Akinsola & Awofala, 2009), and achievement goals (Awofala, Arigbabu, Fatade, & Awofala, 2013) making it harder for them to pursue economic opportunities and escape poverty. More so, fear of insecurity can decrease preservice STEM teachers' social mobility, making it harder for them to move up the socioeconomic ladder and escape poverty. In the same vein, perception of insecurity could lead preservice STEM teachers to avoid taking risks, such as starting a business or pursuing a new career opportunity, which can limit their economic potential and increase their likelihood of poverty. Moreover, perception of insecurity could limit preservice STEM teachers' access to economic opportunities, such as jobs or business opportunities, which can increase their likelihood of poverty. Perception of insecurity could lead preservice STEM teachers to increase their expenditure on security measures, such as alarms or security guards, which can divert resources away from more productive uses and increase their likelihood of poverty (Egunjobi, 2021). Additionally, fear of insecurity can lead preservice STEM teachers to decrease their investment in human capital, such as pursuing additional education or training, which can limit their economic opportunities and increase their likelihood of poverty.

Conclusion

The present study revealed three outcomes. First, the perceptions of insecurity and poverty among the preservice STEM teachers were very high. Second, there was a significant, positive and strong correlation between preservice STEM teachers' perception of insecurity and poverty. Lastly, insecurity was a good predictor of poverty among the preservice STEM teachers in Nigeria. The positive and significant relationship between perception of insecurity and poverty among the preservice STEM teachers showed that a reduction in insecurity would lead to a reduction in poverty. This is because money that could have been spent on ensuring adequate security would be readily available for more productive venture that could better the lots of people and increase their

welfare. While the relationship between perception of insecurity and poverty exists among the preservice STEM teachers, the perception of insecurity was a good predictor of perceived poverty among the preservice STEM teachers in Nigeria. Solutions to insecurity and poverty in Nigeria should be prioritised. Providing job opportunities and addressing poverty would help to reduce frustration and insecurity among the people, the preservice STEM teachers inclusive. Government should prioritise community policing where the communities would be involved in identifying and addressing security concerns. The Nigerian police force should be decentralised as this would allow for more effective policing at the local level.

This study is not without limitations. The limitations may be in respect of data analysis, conceptual, and methodological. The study did not control for confounding variables such as age, socioeconomic status, and family background that could influence the relationship between preservice teachers' perception of insecurity and poverty in Nigeria. The heavy reliance of the study on self-report measures may introduce bias and limit the accuracy of the findings. The study used the correlational design and this may not allow for causal inferences to be made about the relationship between preservice teachers' perception of insecurity and poverty in Nigeria. The study did not consider other potential predictors of poverty among preservice teachers in Nigeria, such as socioeconomic status or family background. Additionally, the correlational analysis adopted in the study may not allow for the identification of causal relationships between preservice teachers' perception of insecurity and poverty. The study was focused on STEM education and this may not capture the broader implications of preservice teachers' perception of insecurity on education and poverty in Nigeria. This study had a sample of 355 preservice STEM teachers which may not be representative of all preservice teachers in Nigeria, limiting the generalizability of the findings.

Implications for STEM Education; Nigerian Education System; and Poverty Reduction and Economic Development in Nigeria

The perception of insecurity may

influence the STEM curriculum and pedagogy, with teachers potentially focusing more on basic skills and less on critical thinking and problem-solving. The perception of insecurity among preservice STEM teachers underscores the importance of investing in human capital development, including education and teacher training, to drive economic growth and poverty reduction. The stress and anxiety caused by perception of insecurity can compromise preservice STEM teachers' ability to deliver high-quality instruction and effectively engage students. Addressing the perception of insecurity and poverty among preservice STEM teachers requires creating economic empowerment and opportunities, such as job creation, entrepreneurship support, and social safety nets. Preservice STEM teachers' perception of insecurity can negatively impact their motivation and morale, leading to decreased job satisfaction and performance. The perception of insecurity among preservice STEM teachers highlights the need for social cohesion and stability, which can be fostered through inclusive education, community engagement, and social protection programmes. The perception of insecurity may deter talented individuals from pursuing STEM teaching careers, exacerbating teacher shortages and limiting the quality of STEM education. The perception of insecurity among preservice STEM teachers highlights the need for education policy and reform efforts to prioritize teacher welfare, safety, and security. Preservice STEM teachers' perception of insecurity can limit their opportunities for professional development and growth, hindering their ability to stay current with best practices in STEM education. The Nigerian education system may need to reassess resource allocation and management to ensure that schools and teachers have the necessary support and resources to provide quality STEM education. The perception of insecurity may influence preservice STEM teachers' career aspirations and choices, with some opting for more secure or lucrative careers outside of education. Preservice STEM teachers' perception of insecurity can negatively impact their mental health and well-being, increasing stress, anxiety, and burnout. Building partnerships between schools, communities, and local organizations can help address the root causes of insecurity and poverty,

creating a more supportive environment for STEM education in Nigeria.

Contributions to Knowledge and Recommendations

One major contribution to knowledge in this study is that the study established that there was a high prevalence of perceptions of insecurity and poverty among preservice STEM teachers in Nigeria. Also, the study established that poverty and insecurity are related and that insecurity is a predictor of poverty in the Nigerian educational system using preservice STEM teachers as the study baseline. The following five recommendations were made. First, there should be creation of policy reforms that prioritize education funding, security, and poverty reduction, ensuring that STEM education is accessible and equitable for all students. Second, educators should be provided with training on trauma-informed practices, innovative teaching methods, and STEM education strategies to effectively support students in challenging environments. Third, citadel of learning should foster partnerships with local communities, NGOS, and government agencies to provide support services, counseling, and resources to students affected by insecurity and poverty. Fourth, stakeholders in education in Nigeria should develop programmes to support economically disadvantaged students, such as scholarships, vocational training, and mentorship initiatives, to help them access STEM education. Fifth, there should be implementation of secure infrastructure and emergency response plans in schools to ensure students' safety and reduce disruptions to learning which could be caused by insecurity.

References

- Achumba, I. C., Ighomereho, L., & Akpor-
Robaro, M. O. (2013). Security, challenges in Nigeria and the implication for business activities and sustainable development. *Journal of Economics and Sustainable Development*, 4(2).
- Adedeji, A. O., & Oluwalogbon, L. (2020). Resolving the inequality–insecurity nexus in Nigeria: A critical analysis. *AIPGG Journal of Humanities and Peace Studies*, 1(1.2020).

- Ajao, E. A., Akinoso, S. O., & Awofala, A. O. A. (2023). Academic engagement as a correlate of students' achievement in senior secondary school mathematics in Nigeria. *International Journal of Educational Research*, 12(2), 115-125.
- Ajodo-Adebanjoko, A. & Walter, U. O. (2014). Poverty and the challenges of insecurity to development. *European Scientific Journal*, 10(14), 361-372.
- Akinsola, M. K., & Awofala, A. O. A. (2009). Effects of personalization of instruction on students' achievement and self-efficacy in mathematics word problems. *International Journal of Mathematical Education in Science and Technology*, 40(3), 389-404.
- Awofala, A. O. A. (2020). Are the keyboards weightier than the biros? The effect of computer-based testing on students' achievement and anxiety in mathematics. *Indonesian Journal of Informatics Education*, 4(1), 1-8.
- Awofala, A. O. A., & Esealuka, A. R. (2021). Nomophobia, smartphone addiction, depression, and anxiety as predictors of internet addiction among Nigerian preservice mathematics teachers. *Journal of Informatics and Vocational Education*, 4(3), 107-117.
- Awofala, A. O. A., Arigbabu, A. A., Fatade, A. A. & Awofala, A. A. (2013). Examining the psychometric properties of the achievement goal questionnaire among Nigerian preservice mathematics and science teachers. *Electronic Journal of Research in Educational Psychology*, 11(3), 740-733.
- Awofala, A. O., Lawal, R. F., Arigbabu, A. A., & Fatade, A. O. (2022). Mathematics productive disposition as a correlate of senior secondary school students' achievement in mathematics in Nigeria. *International Journal of Mathematical Education in Science and Technology*, 53(6), 1326-1342.
- Awojobi, O. N. (2014). Poverty and insecurity in Nigerian democratic dispensation. *International Journal of Innovative Research and Development*, 3(6), 357-365.
- Danaan, V. (2018). Analysing poverty in Nigeria through theoretical lenses. *Journal of Sustainable Development*, 11(1), 20-31.
- Egunjobi, T. A. (2021). Poverty, unemployment and insecurity challenges in Nigeria. *Tanzanian Economic Review*, 11(1), 115-136.
- Evans, O. & Kelikume, I. (2019). The impact of poverty, unemployment, inequality, corruption and poor governance on Niger Delta militancy, Boko Haram terrorism and Fulani herdsman attacks in Nigeria. *International Journal of Management, Economics and Social Sciences*, 8(2), 58-80.
- Federal Government of Nigeria (2001). Blueprint for the implementation of the National Poverty Eradication Programme of the Federal Government of Nigeria, Revised June 2001 (Abuja: Ministry of National Planning).
- Ibrahim, H., & Musa, B. (2022). Poverty and insurgency in northeastern Nigeria: A cross-sectional study. *Nigerian Journal of Conflict Studies*, 9(1), 25-40.
- Idris, M., & Salisu, S. J. (2020). Poverty and Insecurity in Nigeria. In *Proceedings of Administration and Public Management International Conference* (Vol. 16, No. 1, pp. 112-120). Research Centre in Public Administration and Public Services, Bucharest, Romania.
- Kanbur, R. (2007). Poverty and conflict: The inequality link. WPS, International Peace Academy.
- Lano-Maduagu, A. T., Awofala, A. O. A., & Arigbabu, A. A. (2022). Assessment of psychometric properties of teachers' sense of efficacy beliefs by pre-service home economics teachers in southwest, Nigeria. *Nigerian Online Journal of Educational Sciences and Technology*, 4(2), 89-99.
- Lawal, R. F., & Awofala, A. O. A. (2021). Effect of team assisted individualisation strategy on senior secondary school students' motivation to learn mathematics. *Nigerian Online Journal of Educational Sciences and Technology*, 3(1), 36-46.
- Mukhtar, J. I., Mohammed, S. I., & Sani, I. (2016). Poverty, unemployment and the challenges of security in Nigeria-The

- nexus. *Journal of Political Inquiry*, 2(1), 232–244.
- National Bureau of Statistics (NBS, 2022). Nigeria launches its most extensive national measure of multidimensional poverty. <https://www.nigerianstat.gov.ng>.
- Oduwole, T. A. (2015). Youth unemployment and poverty in Nigeria. *International Journal of Sociology and Anthropology Research*, 1(2), 23–39.
- Okolie, U. C., Onyema, A. O., & Basey, U. S. (2019). Poverty and insecurity in Nigeria: An empirical study. *International Journal of Legal Studies*, 6(2), 247–261.
- Okoye, P., & Nwakobi, G. (2020). Youth Unemployment and economic inequality in Nigeria. *African Journal of Economic Development*, 12(3), 45–58.
- Okunola, M. O., Umar, A., & Mohammed, M. (2020). Governance, Poverty and Insecurity in Nigeria: Exploring the Synergy. *FUDMA Journal of Politics and International Affairs*, 3(1), 26–34.
- Oladipo, A., Awofala, A. O. A., & Osokoya, M. M. (2020). Investigating preservice science, technology, and mathematics teachers' attitudes toward climate change in Nigeria. *Journal of Educational Sciences*, 4(2), 220–238.
- Orokpo, O., Ogwu, H., Asmau, P. & Machen, S. (2018). Nigeria's raising poverty profile amidst poverty alleviation programmes: Interrogating the paradox. *International Journal of Innovative Development and Policy Studies*, 6(2), 109–116.
- Osunyikanmi, A. F. (2014). Interrogating the influence of poverty on insecurity in Nigeria. *International Journal of Humanities and Social Science*, 4(12), 221–227.
- Oyibo, O. P. (2016). The education issues: A national security crises in Nigeria. *International Journal of Education and Research*, 6(12), 189–198.
- Sakanko, M. A. (2018). An econometric analysis of causality between poverty and crises in Northern Nigeria. *SEISENSE Journal of Management*, 1(2), 79–95.
- Tade, O. (2021, July 21). Poverty and widening inequality in Nigeria. *Vanguard News Nigeria*. www.vanguardnewsng.org
- Usifoh, K.S., & Baghebo, M. (2024). Poverty and security situation in Nigeria. *International Journal of Economics and Financial Management*, 9(5), 97–120
- Usman, S. (2015). Unemployment and poverty as sources and consequence of insecurity in Nigeria: The Boko Haram insurgency revisited. *African Journal of Political Science and International Relations*, 9(3), 90–99.
- World Bank (2000). World development report 2000/2001. Attacking poverty. <https://documents1.worldbank.org/curated/en/230351468332946759/pdf/World-development-report-2000-2001-attacking-poverty.pdf>.

