



Structural effect of insecurity on students enrolment in rural secondary schools in Gusau Education Zone, Zamfara state

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Received 4 Jun 2026; Accepted 13 Jul 2026; Published 29 Jul 2026

DOI: <https://doi.org/10.64171/JAES.6.4.104-109>

Abstract

This study examined the effect of insecurity on students' enrolment in public secondary schools in rural areas of Gusau Education Zone, Zamfara State, Nigeria. A correlational survey research design was adopted to determine the effect and relationship between insecurity and students' enrolment. The study population comprised all school administrators (principals and vice principals) and teachers in government-owned public secondary schools in Gusau Education Zone. A sample of 143 respondents, consisting of 30 school administrators and 113 teachers drawn from ten purposively selected secondary schools, participated in the study. A multistage sampling technique was employed, while data were collected using a structured questionnaire titled Survey on Insecurity and Students' Enrolment, adapted from validated instruments with reported Cronbach's alpha coefficients of 0.88 and 0.78, respectively. The data was analysed through Structural Equation Modelling (SEM) with Partial Least Squares (PLS) and a bootstrapping procedure was employed to test the hypothesis. The findings revealed that insecurity had a significant direct effect on students' enrolment ($\beta = 0.710$, $SE = 0.071$, $t = 10.041$, $p < 0.001$), indicating that insecurity is a significant predictor of students' enrolment in the study area. The study concludes that insecurity remains a major challenge to educational access and participation in rural public secondary schools. The study recommends strengthening school safety management through adequate government funding, enhanced school security infrastructure, capacity building for school administrators, and collaborative partnerships among schools, communities, and relevant stakeholders to promote a safe learning environment and improve students' enrolment.

Keywords: Insecurity, Students' enrolment, Educational management, Rural secondary schools

Introduction

Education is built around the goal of improving the social life and other institutions that make up the society. According to Uba and Ngozi (2017) attested that education today must have the effect of making it possible for a country a steady supply of highly creative citizens who help to improve the living conditions of the general citizenry, and to solve the existential problems that are thrown from time to time. This is because education in all its ramifications aims at creating consciousness in the minds of the recipients and also equips them with skills for solving lifelong problems. It is in this regards that Ibrahim & Ojo (2023) affirmed that people and nations are what they are because of the nature and types of education they have been exposed to. It is a candid opinion that the level development of any nation depends to a large extent on the quality and level of education it attained. It is undisputable fact that in any education system, peace and tranquility is an antidote for a successful teaching and learning.

On this background, school security is vital to effective teaching and learning. School activities thrive in environments that support protection of lives and properties. A well secured learning environment that is devoid of security threats is perceived to enhance learning (Akintunde & Selzing - Musa, 2025) ^[14]. In recent times, however, hundreds of school children in the state are caught up in conflicts that result to insecurity not only of their school attendance but to their lives and property, and also economic activities: Schools burnt,

students and teachers attacked and many killed, business activities distracted, shops and malls burnt, social activities distracted. These acts have posed serious challenges to development and systems of education in the state. Insecurity is globally becoming a household word as there is no nation that is completely absolved from its effect.

Insecurity, defined by acts such as banditry, kidnapping, and attacks on schools, has emerged as a significant challenge to education in northern Nigeria, including Zamfara State. This issue disrupts the teaching and learning process, directly impacting student enrolment rates and overall access to quality education. Studies reveal that insecurity in rural areas, like Gusau metropolis, significantly reduces school attendance. Parents fear for their children's safety, leading to school withdrawals and a decline in enrolment. Nigeria as a country has witnessed a drastic and frantic insecurity challenges in the last few years. These are in various forms, communal, political, socioeconomic etc with varying degree of casualty, mostly affecting innocent citizens of the country. According to Dembo and Mustapha, (2012), the most worrisome fact is that this incessant violence apart from claiming millions of innocent souls has imprinted agony, tension, aggression and poverty in the minds of Nigerians. The Safe School Initiative and other policy interventions have been proposed to mitigate these challenges. However, the persistence of violent crimes in Zamfara and other states underscores the urgent need for a holistic approach that ensures security, infrastructure development, and community engagement.

Problem statement

In recent years, Zamfara State, particularly the Gusau metropolis, has witnessed a significant rise in insecurity due to violent conflicts, kidnappings, and insurgent activities. These security challenges have negatively affected the educational sector, especially in rural areas where Secondary Schools are located. Insecurity has disrupted normal school operations, forced school closures, and created an environment of fear that limits students' ability to attend school regularly. Consequently, school enrolment rates have dropped, with many students and their families relocating to safer areas or abandoning education altogether. The impact of insecurity on educational access and participation has become a pressing concern, yet there is limited empirical research exploring how these security issues specifically affect enrolment rates in rural Secondary Schools within Gusau education zone. The problem of declining enrolment may be linked to various factors such as fear of abductions, destruction of educational facilities, or the economic instability that often accompanies insecurity. This background demonstrates how insecurity undermines rural educational systems, particularly in Zamfara State, creating a gap in achieving universal secondary education. This study, therefore, seeks to examine the extent to which insecurity has influenced school enrolment rates in rural Secondary Schools in Gusau education zone, Zamfara State, and to identify the underlying factors contributing to the decrease in enrolment. The findings of this research will provide valuable insights into the socio-political factors affecting education in the region, informing policy decisions aimed at improving access to education despite the challenges posed by insecurity.

Objective of the study

The main objective of this study aimed at examining the structural effect of insecurity on students' enrolment in rural secondary schools in Gusau Education zone, Zamfara State, Nigeria,

Research hypothesis

This study was guided by the following hypothesis-
H¹ Insecurity has a significant effect on students' enrolment in rural secondary schools in Gusau Education zone.

Review of related literature

Concept of Insecurity

Insecurity is a complex and multifaceted concept that can manifest in various domains of life, including personal relationships, professional settings, and even within one self. The term insecurity has been defined in so many ways depending on the perspective one looks at it. Insecurity can be seen as a feeling of uncertainty, a lack of confidence- or anxiety about oneself. It can also be described as the state of being open to danger or threat. Insecurity is a threat to human existence in all ramifications. In the context of this study, insecurity refers to a lack of confidence, uncertainty, or vulnerability in oneself or a particular situation. Oyeleke & Chukwu (2023) defined

insecurity as "the state of fear or anxiety stemming from a concrete or alleged lack of protection." It refers to lack or inadequate freedom from danger-. This definition reflects physical insecurity which is the most visible form of insecurity, and it feeds into many other forms of insecurity such as economic security and social security. Eze & Nwachukwu (2018). Defines insecurity as a condition; characterized by the absence or breakdown of protection against threats to core values. He argues that insecurities can arise from various sources, such as military threats, political instability, economic crises, and environmental challenges.

Concept of students' enrolment

The term enrolment meaning is the process of officially registering individuals, typically students, to become members or participants of a particular organization, institution, program, course, or activity. Specifically, in the context of educational management, Saidu *et al.* (2018) ^[19] defined enrolment as the total number of students admitted in a class. According to Nwile *et al* (2023) ^[16], the enrolment of students refers to the formal procedure of gaining admission to an educational institution. As per the information provided by Wikipedia (2022), student enrolment refers to the comprehensive count of students who are duly registered and/or actively participating in educational activities inside a given educational institution. Student enrolment means the process of ensuring attendance in an educational institute and also in specific classes. It also refers to the act of registering for school, particular classes, or co-curricular activities of any specific school (Teachmint, n.d). Student enrolment is a term used to describe the process of students being registered in schools or universities. Student enrolment is a term that refers to the number of students who are enrolled in a certain institution. It may also refer to student attendance, or how many days students have been present at an educational institute (QuadC, 2026) ^[18].

Theoretical framework

This study is anchored on Human Security Theory. The Human Security Theory was propounded by Mahbub ul Haq in 1994 through the United Nations Development Programme (UNDP) Human Development Report. The theory emphasizes the protection of individuals rather than the protection of the state alone. It focuses on ensuring free*dom from fear, freedom from want, and protection from threats such as violence, fear, poverty, and social instability. In the context of educational management, the theory therefore posits that educational development can only thrive in an environment where human lives and properties are adequately protected. In the context of this study, persistent insecurity such as banditry, kidnapping, and attacks on schools creates fear among parents and students, thereby negatively affecting students' enrolment in rural secondary schools. The theory therefore provides an appropriate framework for explaining how insecurity influences educational participation and school enrolment.

Research methodology

This study adopted correlational-survey research design. It is correlational because it seeks to determine the relationship between insecurity and student enrolment. Correlational research is a type of research method that evaluates the relationship between the variables to establish the magnitude and degree of relationship between them (Nwankwo, 2016) ^[15]. The population of the study comprises all school administrators (Principals and vice principals) and teachers of government-owned public secondary schools in rural areas in Gusau education zone. A sample size of 143 respondents comprising 30 school administrators (principals and vice principals), and 113 teachers from the 10 selected secondary schools who participated in the study. The study employed a multistage sampling technique. At the first stage, ten (10) secondary schools were selected using purposive sampling technique based on their geographical locations. At the second stage, the sample size for teachers was determined using the Taro Yamane formula from a population of 158 teachers, a sample size of 113 teachers was obtained. The 113 teachers were then distributed proportionately across the selected schools based on their respective teachers' populations. Thereafter, simple random sampling technique was used to select individual teachers within each school. At the third stage, purposive sampling technique was used to select all 30 school administrators comprising principals and vice principals who were included in this study because of their administrative roles and their relevance as key informants in Educational Management, providing informed and reliable data for the study. The instrument for data collection was a structured questionnaire titled "Survey on Insecurity and Students Enrolment". The instrument which was designed on a five-point Likert's Scale consisted three sections with a total number of 24 items. Section A contained 4 items on the demographic information of the respondents; Section B contained 10 items on the level of insecurity, while Section C contained 10 items on the level of students' enrolment. The instrument was adapted from Ojukwu's (2017) ^[17] questionnaire on the level of insecurity in Nigerian schools with Cronbach alpha's reliability value of 0.88 indicating that the instrument is acceptable internal consistency. Furthermore, the study adapted Emmanuel (2021) ^[4] Student Enrolment and Retention Assessment Scale with Cronbach alpha's reliability value of 0.78 indicating that the instrument is acceptable internal consistency. The data analysis was computed through

inferential statistics using Structural Equation Modelling (SEM) to examine the relationships and effects among the study variables. SEM was used because it allows for the simultaneous estimation of multiple dependent relationships and provides a comprehensive analysis of both measurement and structural models.

Result

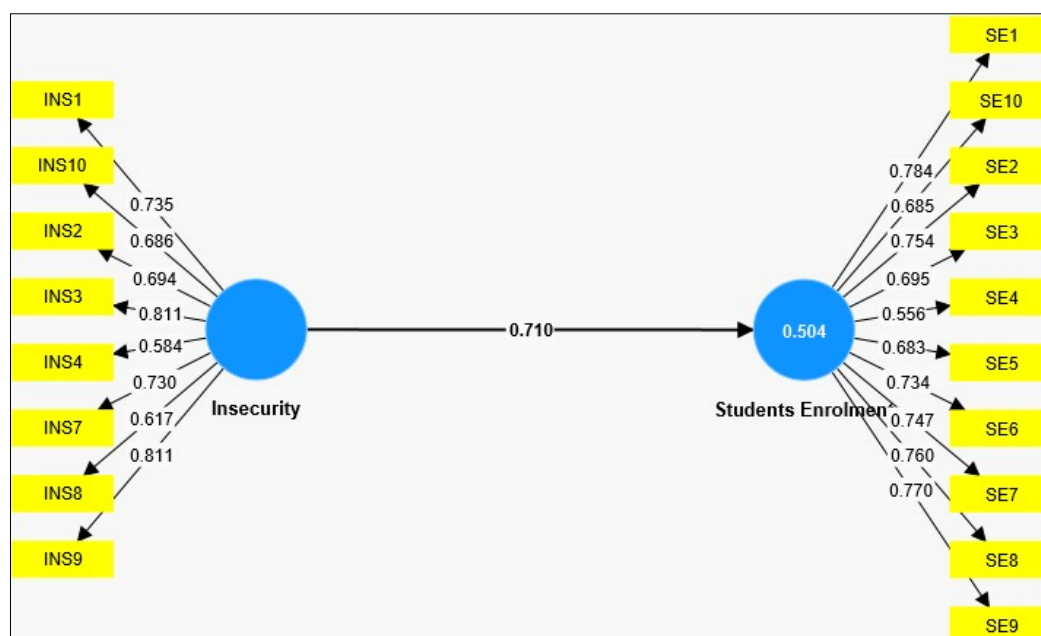
Structural model

The assessment of the structural model is the next stage after establishing the measurement model and the basic recommended criteria are conducted and satisfied the required result. This study assesses the structural model which involved evaluating of the coefficient of determination (R² value), the model's predictive capabilities determination of the latent variables' path coefficients, individual independent variables, and the effect size (Anderson & Gerbing, 1988; Barclay *et al.*, 1995; Hair, *et al.*, 2013; Hair, *et al.*, 2010) ^[2, 3, 9, 5].

Assessment of the structural model direct relationship

The structural model assessment was conducted using applied bootstrapping method with 5000 bootstrap samples to measure the significance of the path coefficients for the twelve hypotheses (Hair, *et al.*, 2014; Hair, *et al.*, 2012b; Hair, *et al.*, 2016; Henseler, *et al.*, 2009) ^[6, 12, 15, 13]. The path coefficients consist standardized values approximately between -1 and +1, the significant of coefficient depends on its standard error that is found by means of bootstrapping. Similarly, bootstrap confidence interval was also employed in this study in testing whether a path coefficient is significantly different from zero. "This offers information on the stability of the *estimated coefficient by offering a range of plausible population values for the parameter dependent on the variation in the sample size and the data. the bootstrap confidence interval is based on standard errors derived from bootstrapping and specifies the range into which the true population parameter fall assuming a certain level of confidence (e.g., 95%). If a confidence interval for an estimated path coefficient does not include zero, the hypothesis that the path equals zero is rejected, and we assume a significant effect. While research has brought forward a range of different bootstrap confidence intervals, we recommend using the BCa approach in line with prior research (Hair *et al.*, 2017) ^[11].

Figure 1 and Table 1 shows estimation for the direct relationship the structural construct of study.



Source: SmartPLS 4 Output (2026)

Fig 1: PLS-SEM structural model on the effect of insecurity on students' enrolment

Figure 1 presents the structural model of the study, illustrating the hypothesized relationship between insecurity and students' enrolment. The figure displays the standardized path coefficient ($\beta = 0.710$), the coefficient of determination ($R^2 = 0.504$), and the outer loadings of the measurement indicators. The R^2 value indicates that insecurity explains 50.4% of the variance in students' enrolment, suggesting moderate explanatory power of the structural model.

Table 1: Path coefficients and hypothesis testing

Hypothesis	Relationship	Beta	SE	t-stats	p-value	Findings
H ¹	INS->SE	0.710	0.071	10.041	0.000	Supported

Source: Researcher's computation SmartPLS 4 output (2026)

Hypothesis 1 (H¹) posited that Insecurity has a positive effect on students' enrolment. The bootstrapping results revealed a significant direct effect ($\beta = 0.710$, $t = 10.041$, $p < 0.001$), thereby supporting H1. Furthermore, the standardized path coefficient indicates a strong relationship between insecurity and students' enrolment. The t -value exceeds the critical value of 1.96, while the p -value is less than 0.05, indicating that the relationship is statistically significant. Consequently, Hypothesis 1 is supported. These findings suggest that insecurity is a significant predictor of students' enrolment in the government-owned rural public secondary schools in Gusau Education Zone, Zamfara State.

Discussion of findings

The current study established that insecurity has a direct significant positive effect on students' enrolment ($\beta = 0.710$, $t = 10.041$, $p < 0.001$), indicating that insecurity is a significant predictor of students' enrolment in Gusau education zone. This fundamental finding implies that insecurity substantially influences educational participation and enrolment patterns in secondary schools and further suggesting that worsening

security situations undermine access to education through school closures, disruption of teaching activities, and heightened parental fear. This finding is in line with that of Adetunji (2025) ^[1] who conducted a study on the impact of insecurity on secondary school students' attendance, enrolment and test administration in selected states in Nigeria and reported that insecurity has effects on students' enrollment and attendance in schools which resulted a low rate of students' enrolment in secondary schools. Yabo *et al.* (2025) ^[14] observed in their study that insecurity has a direct effect on student's enrolment in tertiary institutions in Sokoto state. In the same vein, Yohana *et al.* 2023 ^[23] in a study conducted on the effect of insecurity on educational activities in Niger State, Nigeria, proclaimed that insecurity in a school environment has a direct negative influence on the general school attendance and enrolment and it has led to a drastic reduction in the rate of enrolment of students. Furthermore, the findings in this study are also in agreement with that of Uwakwe *et al.* (2025) ^[22] who investigated the insecurity and challenges of sustainable quality secondary school education in North-central, Nigeria wherein it was revealed that insecurity has resulted in drop in school enrolment and low school attendance even among those who enrolled.

Conclusion

This study examined the effect of insecurity in rural secondary schools in Gusau education zone, Zamfara State, Nigeria. Based on the structural model analysis, the study concludes that insecurity significantly influences students' enrolment. The acceptance of the hypothesis confirms that insecurity is one of the major factors affecting educational participation within the study area. The finding highlights that improving security conditions is essential for increasing school enrolment, promoting regular attendance, and ensuring uninterrupted teaching and learning. Therefore, addressing insecurity should form part of broader educational policies aimed at improving access to education.

Recommendations

Based on the findings of the study, the following recommendations are made:

- The government should prioritize adequate funding for the provision of adequate security-related infrastructure and resources for schools located in insecurity-prone areas in order to ensure uninterrupted teaching and learning.
- School administrators should ensure an effective and timely implementation of the comprehensive school safety management policies and emergency preparedness plans to create a secure learning environment that promotes students' enrolment and ensure continuous improvement in strategic school security management practices.
- The government through the State Ministry of Education should partner with relevant educational policymakers, civil society organizations to strengthen school safety initiatives by providing regular training for school administrators on crisis management, risk assessment, and educational continuity planning to enhance their capacity to manage insecurity-related challenges.
- School administrators and school-based local communities should strengthen collaboration with Parent-Teacher Associations (PTAs), School-Based Management Committees (SBMCs), community leaders, and relevant security agencies to improve school security and encourage sustained students' enrolment.

Acknowledgements

This research work was funded by the Tertiary Education Trust Fund (TETFund) through Institution Based Research (IBR) Grant scheme. The funding was administered through the Centre for Research and Development, Federal University Gusau, Zamfara State, Nigeria, as the hosting research institution.

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