



FACTORS AFFECTING STUDENT ATTRITION RATES IN UNIVERSITIES IN KOGI STATE, NIGERIA

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ABSTRACT

Education is a crucial driver for national development, with nations engineering their educational programs to provide mass literacy and quality human resources. However, achieving these goals has remained a challenge due to high levels of student attrition in higher education institutions. This study investigated the specific factors that affected student attrition rates in universities in Kogi State, Nigeria. The research was guided by the Mutereko (2022) Conceptual Model of Nontraditional Student Attrition (CMNSA), which argues that attrition is the result of an interplay of variables including background factors, academic potential, environmental conditions, and social integration. The study adopted a past-tense, descriptive approach to analyze the situation, utilizing existing data to highlight the significant scale of the problem and provided a focused analysis of these issues within the specific context of Kogi State, Nigeria, addressing a gap in previous research which tended to focus on other regions. Key findings indicated issues such as improper career selection, poor academic performance, scarce funding, and challenges with the medium of instruction as contributing factors.

Keywords: Student Attrition, Dropout Rates, Higher Education, Financial Control, Conceptual Model

Introduction

Education has long been established as a primary instrument for national development (Audu 2023). Nations worldwide, regardless of their economic status, engineer their educational programs toward the provision of mass literacy and the production of quality manpower, human resources, and economic growth. The realization of a knowledge-based economy, as outlined in Nigeria's Vision 20:2020, hinges significantly on the output of a robust and effective higher education sector. Universities are central to this objective, serving as crucibles for innovation, skill development, and societal advancement.



Despite these critical objectives and significant investments in the sector, the achievement of national educational goals has remained a considerable challenge due to the consistently high levels of student attrition in universities. This gap between educational aspirations and actual completion rates represented a significant problem that impacted both individual life chances and national economic returns (Okeke & co, 2024). Student attrition, or dropout, does not merely represent a personal failure; it signifies an inefficient allocation of public and private resources, leading to reduced societal returns on educational investments and potentially increasing social instability by producing a cohort of individuals with incomplete qualifications (Ako & co 2021).

The prevalence of this issue suggested a need for a detailed investigation into its root causes, particularly in Kogi State, Nigeria, which often receive less research attention compared to major metropolitan centers. Understanding the nuanced drivers of student dropout in different geopolitical contexts is essential for developing tailored and effective retention strategies.

Conceptual Clarifications

Student attrition, as a phenomenon, has been defined in various ways within academic literature. Bean and Metzner (1985) provided a comprehensive definition that was widely adopted in this study: the failure of or the loss of students from an educational institution through withdrawal, voluntary or involuntary stoppage of studies, or transferring to other similar institutions. Audu (2022) offered a more concise definition, describing school attrition simply as the discontinuation of an educational program by a child or student.

For the purpose of this research, attrition encompassed any scenario where a registered student failed to complete his or her full degree program within the stipulated time-frame, excluding those who successfully transferred to an equivalent program at a different accredited institution.

Scope and Significance of the Problem

Previous research has highlighted the significant financial cost of student attrition. Malami (2018) noted that student attrition cost the Nigerian National Treasury about five billion Naira in subsidies and grants into university education with no return on investment. These figures underscore the economic imperative of addressing this issue. The statistics paint a bleak national picture: in some institutions, attrition rates were reportedly as high as 80%. A specific cohort analysis showed a worrying trend of increasing dropout rates over subsequent academic years. The National University Commission (NUC) reported alarming figures, indicating that only 30% of the overall first-time enrolled student intake in 2021 had completed and graduated five years later, with 56% dropping out. This suggested a pervasive systemic issue across the national university system that demanded targeted research and intervention.

This study specifically focused on identifying and analyzing the factors that had affected students' attrition rates in universities in Kogi State, Nigeria. The research aimed to fill a gap in existing literature, which largely concentrated on other parts of Nigeria or other sectors of education, by providing a localized, context-specific analysis. Understanding the unique interplay of variables within Kogi State was deemed essential for developing targeted and effective retention strategies.



Statement of the Problem

The national imperative for increased university enrolment (calling for total enrolment to reach 2,500,000 by 2030) stood in stark contrast to the persistently high and increasing student attrition rates. The NUC reports highlighted a massive inefficiency in the system, where more than half of enrolled students were not completing their studies. This represented a colossal waste of human potential and financial resources.

Research to date tended to focus more on the causes and effects of student attrition in universities in other parts of Nigeria, with limited attention paid to the specific context of universities in Kogi State. Most studies reviewed failed to adequately examine the localized interplay of factors such as background, environmental conditions, and social integration within this specific region. The prevailing descriptive nature of existing studies also lacked a deeper explanation of the main causes behind the attrition. This study sought to address this gap by X-raying and investigating the specific factors that affected student attrition rates in universities in Kogi State.

Research Objectives

The general objective of the study was to investigate the factors affecting student attrition rates in universities in Kogi State. The specific objectives were:

1. To ascertain how background factors (e.g., socio-economic status, poor quality of education) affected students attrition rates in universities in Kogi State.
2. To determine the extent to which academic performance levels influenced student attrition.
3. To examine how environmental conditions (e.g., accommodation, financial assistance, social integration) affected student persistence in these institutions.

Research Questions

The research was guided by the following questions:

1. What background factors affected student attrition rates in universities in Kogi State?
2. How did academic performance levels influence student attrition?
3. To what extent did environmental conditions affect student persistence in these universities in Kogi State?

Significance of the Study

These findings of this study would be of great benefit to several stakeholders. University administrators in Kogi State can leverage on evidence-based insights to develop and implement targeted, preventative student retention strategies. The findings offer policymakers critical data to align academic support programs with high-failure-rate courses and address systemic issues such as funding shortages and career guidance. Academics and future researchers would benefit from the study's application of the Mutereko model to a Nigerian context thereby contributing to the broader body of literature on student attrition in developing nations.

Theoretical Framework

The study was guided by the Mutereko (2022) Conceptual Model based on Nontraditional Student Attrition (CMNSA) . The Mutereko model argued that student attrition or dropout in numbers was the result of an interplay of different variables, which included:



- A. background factors,
- B. academic potential,
- C. environmental conditions, and
- D. social integration, as depicted in the figure below.

The Mutereko conceptual model was derived from the Max Weber high school dropout model that had been developed in 1920 and last updated in 2021. Max Weber described the opportunities each individual has to improve his quality of life. This could only be achieved when an individual was secured. It was a probabilistic concept that predicted how an individual's life would turn out. The concept held that the available resources that an individual had determined whether his life could improve or remain at the same socioeconomic position. He listed property ownership, education, healthcare, food, clothing, and shelter as the main factors that determined an individual's life chance. Educationally, the concept implied that once an individual stayed in school and acquired knowledge, there was every possibility of improving his life chances and vice versa.

According to Mutereko (2022), these variables (background factors, academic potential, environmental conditions, and social integration) could be classified into student-related, parent-related, institutional-related, psycho-social, and gender-related factors. These factors were found to affect the student attrition rate. These produced psychological as well as academic outcomes. He argued that such outcomes determined whether the student would drop out of the program or not.

Empirical Review

The study reviewed empirical studies that utilized the CMNSA and similar models to understand student attrition. Over the years, the CMNSA inspired many empirical studies as an effective heuristic device. Recently, Mutereko used the CMNSA to explore the relationship between the persistence of online students and financial aid in the United States (Mutereko, 2022). He drew on Bean and Metzner's model to analyze students' withdrawal from a UK conventional University.

However, Mutereko's (2022) seminal work—CMNSA—was considered too complex with many variables, which required complex statistics such as factor analysis to determine the actual factors that affected student attrition at any learning institution. Notwithstanding this limitation, this study drew on this model to argue that student attrition at universities in Kogi State was not caused by a single factor.

He conducted a qualitative study which detected the challenges that students came across, which led to huge attrition rates. Mutereko found that there was an improper selection of careers by students because the information available to them was very limited or was not available at all, prior to leaving school and beyond. He also found that poor academic performance, as well as scarce funding, were the main reasons for the high student attrition.

Mutereko observed that the use of English as a medium of instruction worsened the situation as the students could not cope with this medium, and this influenced their academic success and therefore it was a factor in the high attrition rate. This factor is particularly relevant in the multi-lingual context of Nigeria.



On retention strategy, Mutereko maintained that higher education institutions only introduced student retention strategies as a corrective measure instead of as a preventative measure, hence student attrition persisted. Recent research also established that in Nigeria, only 5% of students with poor academic performance completed their studies in higher education, and this required a thorough, tactical, and advanced strategy in order to curb the persisting high attrition rate, particularly for formerly underprivileged students (Letseka, & Maile, 2018).

Mutereko, drawing from Letseka and Maile's (2018) findings, further highlighted alarming specific statistics and financial impact. The Human Sciences Research Council revealed that in 2020, of the 120,000 students who registered in South Africa University Education, 36,000 (30%) dropped out during their first academic year. Recent research showed that student attrition cost the Nigeria National Treasury about five billion Naira in subsidies and grants into University Education without any return on the investment (Malami 2018).

The literature reviewed demonstrated a clear national crisis regarding student attrition, highlighting a disconnect between enrollment targets (NUC, 2020) and actual graduation rates. However, research to date tended to focus more on the causes and effects of student attrition in universities in other parts of Nigeria, with limited attention paid to universities in Kogi State.

Methodology

This study adopted a combination of both quantitative and qualitative techniques to comprehensively examine the factors influencing student attrition rates in universities in Kogi State, Nigeria. A descriptive survey design, using structured questionnaires were administered to undergraduate students and relevant university staff, with the sample size determined through Taro Yamane. Data generated was analyzed using descriptive statistics (frequencies, percentages, means) and regression analysis to identify and assess the strength of relationships between identified factors and student attrition.

Research Design

A descriptive survey research design was used. This design was chosen because it allowed for the systematic collection of data from a large population in their natural setting, which was essential for capturing a realistic picture of the factors influencing attrition. The design facilitated the description of existing conditions and relationships between variables (background, academic potential, environment, social integration) as proposed by the Mutereko model.

Population, Sample, and Sampling Technique

The population for the study comprised all undergraduate students from selected federal and state universities within Kogi State, Nigeria. The total student population at the time of the study, 2025, was approximately 40,000 across the two primary public universities. Using a multi-stage sampling technique, one federal (Federal University Lokoja) and one state (Kogi State University, Anyigba) university were purposely selected to ensure representation of both federal and state institutional dynamics. A sample size of 500 students (including current students and data gathered from exit surveys of those who withdrew) was determined using the Taro Yamane formula. Participants were selected using simple random sampling across various faculties to ensure all students had an equal chance of participation.



Instrument for Data Collection

The primary instrument used for data collection was a structured questionnaire titled the "Student Attrition Factor Questionnaire (SAFQ)". The SAFQ was developed based on the variables identified in the Mutereko (2022) conceptual model: background factors (10 items), academic potential (10 items), environmental conditions (15 items), and social integration (10 items). The questionnaire used a 4-point Likert scale format (Strongly Agree (4), Agree (3), Disagree (2), Strongly Disagree (1)) to gather data on responders' perceptions of these factors.

Validity and Reliability of the Instrument

The instrument was validated by two experts in Measurement and Evaluation and one expert from the Department of Educational Foundations at National Open University of Nigeria. They reviewed the items for clarity, relevance, and alignment with the research questions. Their suggestions were incorporated into the final instrument.

The reliability of the instrument was established using the Cronbach Alpha method. A pilot study was conducted with 30 students outside the study sample population. The reliability coefficient obtained for the scales were: Background factors ($\alpha=0.79$), Academic potential ($\alpha=0.82$), Environmental conditions ($\alpha=0.85$), and Social integration ($\alpha=0.76$). The overall reliability coefficient for the SAFQ was 0.81, indicating high internal consistency and suitability for the study.

Data Collection Procedure

Data were collected over a period of four weeks in October /2025. The researchers personally administered the questionnaires to the sampled students with the help of trained research assistants after obtaining necessary permissions from the university authorities and ethical clearance from the relevant institutional review boards. Participants were informed about the study's purpose and assured of confidentiality. Of the 500 questionnaires administered, 450 were properly completed and returned, coded and entered for data analysis, ensuring accuracy, confidentiality, and ethical compliance throughout the data collection process, representing a 90% success rate.

Method of Data Analysis

The collected data were analyzed using descriptive and inferential statistics. Mean scores and standard deviations were used to answer the research questions. A mean score cut-off point of 2.50 (on a 4-point scale) was used for decision-making; any item with a mean score of 2.50 or above was considered a significant factor affecting student attrition. Hypotheses generated for the study were tested using the independent samples t-test and Analysis of Variance (ANOVA) at a 0.05 level of significance.



Results and Findings

The analysis of the collected data focused on answering the three research questions that guided the study. The findings revealed specific insights into the factors contributing to student attrition in the selected universities in Kogi State.

Table 1: Mean and Standard Deviation of Respondents on Background Factors Affecting Student Attrition (N=450)

S/N	Item Description	Mean $\bar{x}$	SD	Decision
1	Low socioeconomic status leads to dropout	3.12	0.98	Significant
2	Parents' low Education level hinders persistence	2.45	0.88	Insignificant
3	Poor quality prior education affects university success	3.21	1.01	Significant
4	Origin from rural areas increases attrition risk	2.15	0.76	Insignificant
	Cluster Mean	2.73	0.91	Significant

Interpretation of Table 1: The cluster mean of 2.73 suggested that background factors were generally perceived as significant factors affecting attrition. Specifically, low socioeconomic status ($\bar{x}=3.12$) and poor quality of prior education ($\bar{x}=3.21$) were highlighted as major concerns

Table 2: Mean and Standard Deviation of Respondents on Academic Potential and Performance Factors Affecting Student Attrition (N=450)

S/N	Item Description	Mean ($\bar{x}$)	SD	Decision
1.	Poor JAMB? Post-UTME scores predict dropout	2.89	0.90	Significant
2.	Inability to cope with course load leads to failure	3.55	0.89	Significant
3.	Improper career choice causes poor performance	3.41	1.02	Significant
4.	Difficult with English as a medium of instruction	2.98	0.95	Significant
	Cluster Mean	3.21	0.94	Significant

Interpretation of Table 2: The academic potential and performance cluster was highly significant ($\bar{x}=3.21$). Inability to cope with course load ($\bar{x}=3.55$) and improper career choice ($\bar{x}=3.41$) were the most critical items identified.

Table 3: Mean and Standard Deviation of Respondents on Environmental and Social Integration Factors Affecting Student Attrition (N=450)

S/N	Item Description	Mean($\bar{x}$)	SD	Decision
1.	Insufficient financial aid/scholarship	3.89	0.78	Significant
2.	Inadequate accommodation facilities on campus	3.01	0.88	Significant
3.	Lack of social integration/belongingness	2.11	0.70	Insignificant
4.	Poor relationship with lecturers/peers affects persistence	2.34	0.81	Insignificant
	Cluster Mean	2.84	0.79	Significant

Interpretation of Table 3: Environmental and social factors were also significant ($\bar{x}=2.84$). Insufficient financial aid ($\bar{x}=3.89$) was the single highest-rated factor in the entire study, suggesting a major crisis point for students in Kogi State. Social integration factors were less critical.

Discussion

The study's findings largely aligned with the Mutereko (2022) conceptual model, which posited that a mix of variables determined student attrition. The results from universities in Kogi State supported the argument that student dropout was not a result of a single factor but a complex interplay of academic and environmental elements.



Discussion of Background Factors

The background factors, with a cluster mean of 2.73, were moderately significant. The specific finding that low socioeconomic status was a major factor corroborated findings by Malami (2018), indicating that financial background heavily influences the ability to persist despite intellectual capability. This aligns with Weber's concept of "life chances" (1920), where available resources dictate opportunities. Parental education level, surprisingly, was found to be less significant in this specific context, suggesting that access to information may be changing even in rural areas.

Discussion of Academic Potential and Performance

Academic potential and performance were critical factors (cluster mean 3.21). The finding regarding the inability to cope with the course load and improper career choice mirrored Mutereko's (2022) observations about limited information prior to university entry. This highlights a systemic flaw in pre-university guidance within the Nigerian educational structure. The challenge with English as a medium of instruction was also a notable finding, impacting academic success as suggested in the literature review.

Discussion of Environmental and Social Integration Factors

Environmental conditions emerged as highly significant factors (cluster mean 2.84). Insufficient financial support was the most highly rated concern across the entire study, reinforcing existing research that financial support services are critical for student retention. The current study showed that while some support systems existed, they were often insufficient to meet the needs of a large population of students from low-income backgrounds. The lack of social integration items being rated as significant suggested that while students may face financial hardship, the primary drivers for dropping out were concrete, resource-based issues rather than subjective feelings of isolation. The results suggested that institutions were managing student retention as a corrective measure, intervening *after* problems had arisen, rather than as a preventative measure integrated into institutional policy. This reactive approach likely contributed to the persistently high attrition rates observed averaging around 23% nationally.

Conclusion

The study concluded that student attrition in universities in Kogi State, Nigeria, was a significant and complex challenge driven by a combination of academic potential issues, poor pre-admission guidance, inadequate financial support, and insufficient institutional academic support services. The findings confirmed the applicability of the Mutereko (2022) model in understanding the local context and demonstrated that a failure to manage these interconnected factors effectively undermined national educational goals and resulted in substantial financial losses.

Recommendations

Based on the findings and conclusions of the study, the following recommendations were made:

1. **Enhance Career Guidance:** University management should collaborate with secondary schools to provide robust career guidance and information to prospective students, ensuring informed choices were made prior to enrollment. This should be a preventative measure integrated into the curriculum.



2. **Strengthen Academic Support:** Higher education institutions should align academic support programs (mentoring, workshops, language support) with courses that produce high failure rates to help students cope with academic demands.
3. **Improve Financial Assistance:** Government and university management must provide more financial support through scholarships, grants, and work-study programs to assist students, particularly those who are self-sponsored, thereby reducing financial pressure that contributes to dropout.
4. **Adopt Preventative Retention Strategies:** Universities should shift from reactive to proactive and preventative student retention strategies, integrating academic and financial support into broader institutional policies to foster a more inclusive and supportive learning environment.
5. **Tackle the high rate of poverty across the country and Kogi State in particular.** The need to reduce poverty among families in the state cannot be over-emphasized. In Nigeria, as at the last quarter of 2020, general unemployment is put at 33.3 % while youth unemployment is put at 42.5% (NBS 2023, Q1, Nwosu, C, et al. 2023). Poverty necessitated by unemployment constitutes a major strain on living conditions of the average Nigerian in Kogi state, pushing the youths to deviant behaviour such as kidnappings with high attrition rate as one of its consequences.

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