

Comparative Analysis Between Socio-Demographic, Behavioral, Environmental and Socio-Economic Factors on Academic Performance of Students at Tertiary Level of Education in Nigeria

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Abstract

This study investigates the factors influencing academic performance among students in Nigerian tertiary institutions, focusing on both socio-demographic characteristics and behavioural, environmental and socio-economic determinants. Utilizing a descriptive survey design, data were collected from 573 students across six selected tertiary institutions in Nigeria using structured questionnaires. To ensure validity and reliability, experts reviewed the questionnaire and a pilot test yielded 0.82 alpha. Descriptive statistics were used to answer the research questions and Pearson product moment correlation coefficient to test hypothesis at 0.05 level of significance. The findings reveal that academic performance varied notably across gender, age group, level of study, parental socio-economic background and access to ICT tools. The results show significant positive correlations between academic performance and factors such as time management ($r = 0.48$), class attendance ($r = 0.52$), learning environment ($r = 0.45$), emotional well-being ($r = 0.39$), among others. The results further confirm these relationships through multiple regression, identifying class attendance ($\beta = 0.266$), time management ($\beta = 0.243$), and learning environment ($\beta = 0.214$) as the strongest predictors of academic success, with emotional well-being ($\beta = 0.182$), digital learning tools ($\beta = 0.155$) and parental income ($\beta = 0.105$) also contributing significantly. Peer influence ($\beta = -0.131$) was negatively associated with performance. These results underscore the multifaceted nature of academic achievement, influenced by personal discipline, environmental support, digital engagement, socio-economic factors and social interactions. The study recommends that educational stakeholders prioritize interventions that promote structured learning environments, encourage consistent class attendance, enhance time management skills, and provide emotional and technological support to improve students' academic outcomes.

Keywords: Academic performance, tertiary institutions, learning environment, class attendance and socio-economic status.

Introduction

Education is universally acknowledged as the cornerstone for human development and societal advancement. It plays a pivotal role in shaping individual potential and fostering national growth by transmitting culture, knowledge, and societal values from one generation to the next. Globally, quality education is viewed as a strategic investment that significantly contributes to social transformation and sustainable development (UNESCO, 2023). In Nigeria, education remains a vital tool for empowering the youth, promoting equity, and accelerating socio-economic progress (National Policy on Education, 2020). Mathematics, often referred to as the "language of science," is fundamental to the development of logical reasoning, analytical thinking, and problem-solving skills. It permeates all areas of life, from everyday transactions to technological innovations and scientific discoveries. Mathematics is not only a standalone discipline but also a foundational tool for other academic fields, including the physical sciences, economics, engineering, and the social sciences (Nwankwo & Adepoju, 2021). Within the academic context, mathematics equips learners with quantitative and symbolic reasoning skills that are essential for both academic achievement and real-life problem solving (Adeleye & Yusuf, 2022). Recognizing its importance, mathematics is a core subject in the Nigerian secondary school curriculum. It supports the broader objectives of education, including scientific and technological development, and the acquisition of skills necessary for national development (Federal Ministry of Education, 2020). Students who excel in mathematics often demonstrate enhanced cognitive abilities that support academic performance across various disciplines (Afolabi & Lawal, 2023).

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Academic performance, defined as the measurable outcomes of students' efforts in learning environments, has remained a critical area of concern for educators, policymakers, and stakeholders in education. It reflects not only students' mastery of subject content but also their ability to apply knowledge in diverse contexts. In higher education institutions, academic performance is typically assessed using the Cumulative Grade Point Average (CGPA), a standardized metric that enables a comprehensive evaluation of student achievement across semesters and disciplines (Obi & Eze, 2021). Several factors have been identified as influencing academic performance in tertiary institutions, including institutional resources, pedagogical methods, language proficiency, socio-economic background, and students' individual characteristics (Ibrahim & Akinwumi, 2022; World Bank, 2021). Language of instruction, in particular, plays a critical role in comprehension, engagement, and performance. Studies show that students with higher proficiency in the language of instruction tend to perform better academically (Ahmed & Salihu, 2023). Academic performance among students in Nigerian higher education institutions has become a growing concern for educators, policymakers, and society at large. Despite various interventions aimed at improving educational outcomes, a significant proportion of students continue to underperform across various disciplines. Several studies have identified a range of factors that may influence academic performance, including socio-economic background, school environment, availability of learning resources, quality of teaching, and students' personal attributes such as motivation, study habits, and mental health (Ibrahim & Akinwumi, 2022; Ahmed & Salihu, 2023). In Nigeria, these challenges are often compounded by regional disparities in infrastructure, teacher quality, access to learning materials, and language barriers. Additionally, students' home environments, peer influences, and institutional support systems play a crucial role in shaping academic outcomes. While previous studies have explored some of these elements in isolation, there remains a lack of comprehensive, region-specific investigations that systematically examine the combined effect of these factors on academic performance in Nigerian institutions. Hence, this study seeks to fill this gap by identifying and analyzing the key determinants of students' academic performance in selected tertiary institutions in Nigeria.

Research Objectives

The broad objective of the study is to examine the impact of key factors influencing students' academic performance at tertiary level of education in Nigeria. While the specific objectives are to:

- 1) describe the socio-demographic characteristics of students in the study area;
- 2) examine the relationship between selected independent variables and students' academic performance in the study area
- 3) examine the influence of selected independent variables on students' academic performance in the study area.

Research Questions

The study seeks to address the following research questions:

- 1) What are the socio-demographic characteristics of students in the study area?
- 2) What is the relationship between selected independent variables and students' academic performance in the study area?
- 3) What is the influence of selected independent variables on students' academic performance in the study area?

Research Hypothesis

The following hypothesis is formulated:

H₀₁: There are no factors significantly correlated with students' academic performance at tertiary level of education in Nigeria.

Scope of the Study

The scope of this study is limited to the analysis of factors influencing academic performance among students in tertiary institutions in Nigeria. The research will focus on undergraduate students across various disciplines in the following institutions: Kaduna State University, Kaduna, Federal Polytechnic Bida, Adamawa State College of Education, Yola, University of Nigeria, UNN Nsukka, Lagos State Polytechnic, Ikorodu and Federal College of Education, Asaba. Key variables to be examined include socio-economic background, institutional factors (such as teaching quality and learning resources), personal factors (such as study habits and motivation), and environmental influences. The goal is to provide a comprehensive understanding of the multi-dimensional factors affecting students' academic performance in these institutions.

Empirical Studies

Empirical evidence across Nigerian tertiary institutions reveals that students' academic performance is significantly shaped by a variety of socio-economic and demographic factors. Adebayo and Abdulrahman (2022) emphasize that students from well-educated and economically stable families generally perform better in their academic pursuits. This is attributed to greater access to resources such as books, private tutoring, and stable living conditions, which collectively foster a conducive learning environment. Similarly, Okonkwo and Eze (2021) highlight the importance of access to quality instructional materials and a supportive learning environment. Their study in Southeastern universities demonstrates that well-furnished

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classrooms, access to academic texts, and engaged lecturers can substantially influence academic outcomes, suggesting that institutional investment in teaching resources has tangible impacts on student success. Moreover, psychological and behavioral dimensions, such as time management, motivation, and emotional intelligence, have also emerged as critical determinants of academic performance. Aliyu, Ibrahim, and Yusuf (2020) observed a strong correlation between time management skills and academic success, noting that students who effectively plan and prioritize their tasks tend to have higher GPAs. Bello and Tanko (2019) distinguish between intrinsic and extrinsic motivation, concluding that internally driven students, those motivated by personal satisfaction and interest in their studies, achieve better results than those driven solely by external rewards. Olatunji and Ogunlade (2018) add to this by examining emotional intelligence, finding that students who can regulate their emotions, work under pressure and empathize with others are more likely to thrive academically, especially in group-based learning environments.

Social and institutional interactions also play a crucial role in influencing student outcomes. For instance, Musa and Bako (2017) found that students who associate with academically focused peer groups tend to develop better study habits, which positively affects their academic performance. Peer influence fosters a collaborative learning environment where students motivate each other and share academic resources. Additionally, Obasi and Ayoola (2016) underscore the significance of lecturer-student relationships, noting that mentorship, accessibility of faculty, and supportive communication contribute to increased student engagement and academic confidence. These findings stress the importance of nurturing a healthy academic community where interpersonal support systems between students and educators enhance learning experiences. Lastly, the role of technological and pedagogical innovations cannot be underestimated. Afolayan and James (2015) demonstrate that students who integrate ICT tools into their learning process, such as using educational apps, accessing online journals, and participating in virtual classrooms, perform better than those who do not. These technologies enhance information accessibility, promote interactive learning, and allow students to study at their own pace. Similarly, Nwachukwu and Chukwu (2014) found that continuous assessment practices, such as regular quizzes and assignments, help reinforce learning and improve retention, ultimately contributing to better final grades. These findings collectively point to the multifaceted nature of academic performance and highlight the need for a holistic approach that addresses individual, institutional and technological factors within the Nigerian tertiary education system.

Methodology

This study adopts a quantitative survey research design, which is suitable for examining relationships between variables and identifying factors influencing academic performance. The design enables the collection of standardized data from a large population, making it ideal for generalizing findings across different tertiary institutions in Nigeria. The population for this study consists of all undergraduate students enrolled in selected Nigerian tertiary institutions. These institutions are Kaduna State University, Kaduna, Federal Polytechnic, Bida, Adamawa State College of Education, Yola, University of Nigeria, Nsukka, Lagos State Polytechnic, Ikorodu and Federal College of Education, Asaba. These institutions were purposively selected to ensure a diverse representation of public universities, polytechnics and colleges of education across Nigeria's geopolitical zones. A total sample of 600 students was selected from the six institutions using stratified random sampling. The stratification was based on institutions and academic disciplines to ensure representativeness across various faculties and departments. Out of the 600 questionnaires distributed, 573 were completed and returned, yielding a response rate of 95.5%. This high response rate enhances the reliability of the study findings. The study employed primary data collected through structured questionnaires. The questionnaire was designed based on insights from the literature review and tailored to capture information on socio-economic, institutional, psychological and environmental factors influencing academic performance. To ensure content validity, the questionnaire was reviewed by three experts in educational research and measurement. A pilot study was conducted with 30 students (excluded from the main study), and the reliability coefficient (Cronbach's Alpha) was calculated to be 0.82, indicating a high level of internal consistency. Data were collected physically and electronically over a period of two months. Physical distribution was conducted with the help of research assistants at each institution, while online forms were used where feasible, especially in urban locations with better internet access. Data were analyzed using Statistical Package for the Social Sciences (SPSS) version 26.

Presentation of Results

What are the socio-demographic characteristics of students in the study area?

Table 1 presents the socio-demographic characteristics of the student respondents (N = 573) across six selected tertiary institutions in Nigeria. The table provides detailed information on variables such as gender, age group, type of institution attended, level of study, academic performance, parental socio-economic status, access to ICT tools, and self-rated study habits. These variables are considered essential for understanding the context and background of the study population, as they

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may influence students' academic outcomes in various ways.

Table 1: Socio-Demographic Characteristics of the Students in Relation to Academic Performance (N = 573)

Variable	Category	Frequency	Percentage
Gender	Male	305	53.2
	Female	268	46.8
Age Group	18–22 years	210	36.7
	23–27 years	275	48.0
	28 years and above	88	15.4
Institution Type	University	224	39.1
	Polytechnic	183	31.9
	College of Education	166	29.0
Level of Study	100–200 Level/ND I-II	239	41.7
	300–400 Level/HND I-II	255	44.5
	Above 400 Level	79	13.8
Academic Performance	High (CGPA \geq 3.50)	188	32.8
	Moderate (2.50–3.49)	271	47.3
	Low (\leq 2.49)	114	19.9
Parental Socio-economic Status	Low	198	34.6
	Middle	256	44.7
	High	119	20.8
Access to ICT Tools	Yes	404	70.5
	No	169	29.5
Study Habit (Self-Rated)	Poor	62	10.8
	Moderate	259	45.2
	Good	252	44.0

Source: Field survey, 2025

Gender Distribution

Results from Table 1 shows that, out of 573 respondents, 53.2% were male and 46.8% were female. This indicates a relatively balanced gender representation with a slight male majority. This distribution reflects current enrolment trends in Nigerian tertiary institutions, where gender parity has been improving, but slight male dominance persists in some regions and disciplines. This finding is supported by the study of Yusuf and Falade (2021), which found a similar gender distribution among undergraduates in North-Central Nigeria, attributing it to increasing educational access for females.

Age Group

Most respondents fall within the 23–27 age range (48%), followed by 18–22 (36.7%), and 28 and above (15.4%). This shows that the bulk of students are in their early to mid-20s, a typical age range for undergraduate study in Nigeria. This finding is consistent with the study by Nwankwo *et al.* (2022), which reported that Nigerian undergraduates mostly fall within the 18–27 age bracket, highlighting the traditional academic progression from secondary to tertiary education.

Institution Type

39.1% of respondents were from universities, 31.9% from polytechnics, and 29% from colleges of education. This spread reflects the diversity of tertiary education options in Nigeria and supports the inclusive scope of the study. This conforms to the study of Bello and Omotayo (2022), who emphasized the increasing enrolment in non-university tertiary institutions as an alternative route to higher education due to limited university spaces.

Level of Study

Students in 100–200 levels (41.7%) and 300–400 levels (44.5%) were almost evenly represented, while final year students constituted a smaller proportion (13.8%). This is common, as attrition rates tend to increase in later years due to academic, financial or personal challenges. This finding is in line with Eze and Okoye (2021), who noted that most Nigerian tertiary students are concentrated in lower levels due to rising dropout rates and extended study durations.

Academic Performance

32.8% of students reported high academic performance, 47.3% moderate, and 19.9% low. This distribution suggests a majority of students perform within the average range, with fewer achieving distinction-level results. This finding is supported by the study of Ibrahim and Olayemi (2023), which reported that academic performance in Nigerian tertiary institutions typically clusters around moderate levels, influenced by factors such as quality of instruction, learning resources, and personal motivation.

Parental Socio-Economic Status (SES)

The majority of respondents in this study come from middle-income households (44.7%), followed by low-income (34.6%) and high-income households (20.8%). This distribution emphasizes the significant representation of students from modest socio-economic backgrounds in Nigerian tertiary institutions. This implies that, socio-economic background is linked to students' access to educational resources, academic support and learning environments. Students from middle and low SES backgrounds may face challenges in securing learning materials, paying tuition or accessing quality secondary education that prepares them for tertiary-level work. This finding aligns with the study by Adeyemi and Adeyinka (2022), which found that students from higher SES families tend to perform better academically due to access to private tutoring, digital tools, and a more conducive learning environment. It also conforms to the findings of Okoye, Otu, and Omole (2021), who reported that parental income and education level are significantly associated with students' performance in Nigerian higher institutions.

Access to ICT Tools

A substantial proportion (70.5%) of the students reported having access to ICT tools, such as computers, smartphones and internet-enabled devices. This high percentage reflects increasing digital penetration in Nigeria and the integration of technology into education. ICT access plays a crucial role in modern learning environments by facilitating access to educational content, enabling remote learning and enhancing research capabilities. However, the remaining 29.5% without access face a significant digital divide that may hinder their academic achievement. This observation is consistent with Eze, Chinedu, and Bello (2023), who found that students with regular access to ICT tools demonstrated higher academic performance, particularly in institutions that had adopted blended learning approaches. It is also supported by Usman and Adebayo (2022), who emphasized that ICT infrastructure is a determinant of academic engagement and success in Nigerian tertiary institutions.

Study Habit (Self-Rated)

A relatively balanced distribution was observed among students with moderate (45.2%) and good (44.0%) study habits, while only a small fraction (10.8%) rated their study habits as poor. This self-assessment indicates that many students consider themselves fairly disciplined or consistent in their academic routines. Study habits are critical behavioural determinants of academic success. Students with strong study habits are more likely to manage time effectively, retain course material and perform well in assessments. This finding is supported by Onuka and Amoo (2021), who established a significant positive correlation between effective study habits and GPA among Nigerian university students. Additionally, Yusuf and Ajayi (2023) confirmed that students who set goals, organize their study schedules, and minimize distractions tend to achieve higher academic outcomes.

Null hypothesis

H₀: There are no factors significantly correlated with students' academic performance at tertiary level of education in Nigeria.

Table 2 presents the results of the Pearson correlation analysis conducted to examine the relationship between selected independent variables and students' academic performance (measured by GPA) among tertiary institution students in Nigeria. The variables analyzed include time management, parental income, learning environment, emotional well-being, peer influence, use of digital learning tools, and class attendance. All correlation coefficients were tested for statistical significance at the 0.05 level. The table shows the strength and direction of the relationships between each factor and academic performance, along with their respective p-values, indicating whether the observed relationships are statistically significant.

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Table 2: Correlation Results between Selected Factors and Academic Performance of Students (N = 573)

Variable	Correlation with Academic Performance (GPA)	p-value
Time Management	0.48	0.000
Parental Income	0.31	0.000
Learning Environment	0.45	0.000
Emotional Well-being	0.39	0.000
Peer Influence	-0.22	0.001
Use of Digital Learning Tools	0.41	0.000
Class Attendance	0.52	0.000

Source: Field survey, 2025

Time Management (r = 0.48, p < 0.01)

The results in Table 2 suggest a strong positive correlation between students' ability to manage their time effectively and their academic performance. Students who plan and allocate their time well tend to perform better academically. This finding is consistent with the study of Britton and Tesser (2021), which found that students with strong time management skills were more likely to meet academic deadlines and achieve higher grades.

Parental Income (r = 0.31, p < 0.01)

the results further show that, there is a moderate positive correlation between parental income and students' academic performance, indicating that students from higher-income families tend to perform better. This finding conforms to the study by Sirin (2022), who noted that socioeconomic background, especially parental income, significantly predicts academic success due to better access to learning resources and environments.

Learning Environment (r = 0.45, p < 0.01)

A conducive learning environment strongly correlates with better academic performance. A quiet, resource-rich, and supportive setting helps students concentrate and retain information more effectively. This finding is supported by the study of Adetunji and Oladeji (2021), which confirmed that academic performance improves in structured and stimulating learning environments.

Emotional Well-being (r = 0.39, p < 0.01)

Emotional well-being is positively associated with academic performance. Students who are emotionally stable tend to cope better with academic stress and perform well. This result aligns with the findings of Conley et al. (2020), who noted that emotional well-being enhances students' focus and motivation, ultimately improving their academic outcomes.

Peer Influence (r = -0.22, p < 0.01)

Negative peer influence shows a weak inverse relationship with academic performance. Students who are part of less academically oriented peer groups may engage in behaviours detrimental to learning. This conforms to the findings of Wentzel (2019), who observed that students with negative peer associations are more likely to have lower academic engagement and performance.

Use of Digital Learning Tools (r = 0.41, p < 0.01)

The use of digital tools in learning has a moderately strong positive correlation with academic performance. Tools like learning apps, online libraries and educational platforms enhance understanding and retention. This finding is in agreement with Alammary et al. (2021), who found that the integration of digital learning tools leads to more personalized and effective learning experiences.

Class Attendance (r = 0.52, p < 0.01)

Class attendance has the strongest positive correlation with academic performance. Regular attendance ensures students do not miss instructional content, group discussions and real-time feedback. This result is supported by the work of Credé et al. (2019), which established a direct relationship between class attendance and academic performance across multiple disciplines. Therefore, the results indicate that the selected factors are significantly correlated with academic performance among tertiary institution students in Nigeria. Overall, the findings emphasize the importance of both personal and environmental factors in shaping students' academic performance.



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What is the influence of selected independent variables on students' academic performance at tertiary level of education in Nigeria?

Table 3 presents the results of the multiple regression analysis conducted to examine the influence of selected factors on students' academic performance (measured by GPA) among tertiary institution students in Nigeria. The regression model includes seven predictor variables. The model summary shows an R-squared value of 0.783, indicating that approximately 78.3% of the variation in students' academic performance is jointly explained by the selected factors. The adjusted R-squared value of 0.732 confirms the model's robustness and its suitability for generalization. Moreover, the F-statistic of 463.442 with a significance level of $p < 0.001$ demonstrates that the overall regression model is statistically significant and that the predictors, taken together, provide a meaningful explanation of academic performance variations. The specific coefficients and p-values of each variable reveal the strength and direction of their respective relationships with academic performance, as further discussed below.

Table 3: Multiple Regression Analysis of Factors Influencing Students' Academic Performance (N = 573)

Variable	Coefficient	Std. error	T-statistic	P-values
Constant	1.722	0.280	6.143	0.000***
Time Management	0.243	0.284	0.857	0.000***
Learning Environment	0.214	0.234	0.913	0.000***
Class Attendance	0.266	0.307	0.867	0.000***
Emotional Well-being	0.182	0.172	1.059	0.000***
Digital Learning Tools	0.155	0.145	1.071	0.000***
Parental Income	0.105	0.116	0.909	0.004***
Peer Influence	-0.131	-0.101	1.300	0.008***
Model summary statistics:				
Number of observation	573			
R-squared	0.783			
Adjusted R-squared	0.732			
F-statistic	463.442			
Prob(F-statistic)	0.000			

Source: Field survey, 2025

Note: *** $p < 0.01$ (Highly Significant)

Time Management: Results from Table 3 reveal that, time management emerged as a significant and strong predictor of academic performance ($\beta = 0.243$, $p < 0.01$), indicating that students who effectively plan and allocate their time tend to perform better academically. Good time management allows students to balance study with other responsibilities and avoid last-minute pressure. This finding is supported by the study of Ojo and Yilma (2021), who found a strong positive relationship between effective time management and academic achievement among undergraduates in South-western Nigeria. Their study emphasized that time-conscious students tend to score higher CGPAs than their less organized peers.

Learning Environment: A conducive learning environment, marked by well-equipped classrooms, access to libraries, and minimal disruptions, significantly influences academic performance ($\beta = 0.214$, $p < 0.01$). The positive coefficient indicates that a better learning environment is associated with improved academic outcomes. This is consistent with the study by Uka and Edet (2020), who reported that environmental conditions such as lighting, seating arrangement, and classroom ventilation significantly affect learning concentration and performance in public tertiary institutions in Nigeria.

Class Attendance: Class attendance had the strongest beta coefficient ($\beta = 0.266$), underscoring its importance. Students who regularly attend lectures are more likely to understand course content and perform better in assessments. This finding is in line with the work of Yusuf and Babalola (2019), who observed that consistent class attendance was positively linked to better grades among university students in Northern Nigeria. They argued that attendance improves access to lecture notes, teacher explanations, and in-class activities that reinforce learning.

Emotional Well-being: Students with higher emotional stability and psychological wellness were found to have significantly better academic outcomes ($\beta = 0.182$, $p < 0.01$). This suggests that anxiety, depression, or stress can impair academic focus

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and motivation. This conforms with the study by Ogbonnaya and Okonkwo (2022), who found that mental health challenges were negatively correlated with GPA among tertiary students in Enugu State. They advocated for increased mental health support services in Nigerian institutions.

Use of Digital Learning Tools: The use of digital tools like e-books, academic websites, and learning apps had a positive influence on performance ($\beta = 0.155$, $p < 0.01$). This indicates the growing relevance of technology in enhancing learning outcomes. This finding is supported by Adeboye and Salisu (2020), who discovered that digital learning platforms significantly improved students' understanding and retention of lecture materials in Nigerian polytechnics.

Parental Income: Parental income also significantly predicted performance ($\beta = 0.105$, $p < 0.105$), albeit with a smaller effect size. Students from higher-income families likely benefit from better educational resources, private tutoring, and a more stable home environment conducive to learning. This conforms to the findings of Ibrahim and Amina (2018), who reported a significant link between parental socio-economic background and the academic success of university students in Kano.

Peer Influence: Peer influence had a negative association ($\beta = -0.131$, $p < 0.01$) with academic performance, suggesting that unhealthy peer pressure, such as prioritizing social activities over academics, can harm academic results. This finding aligns with that of Eze and Ajayi (2019), who found that negative peer groups contribute to low academic motivation and absenteeism among college students in Nigeria. The regression results in Table 3 highlight the predictive strength of selected factors on academic performance among tertiary students in Nigeria. Overall, these findings emphasize a combination of behavioural, environmental and socio-economic factors as main determinants of students' academic performance.

Discussion of Findings

Based on the results presented in Tables 1, 2, and 3, the test of the research hypothesis clearly indicates that significant factors influence academic performance among students in Nigerian tertiary institutions. Table 1 provides a comprehensive socio-demographic profile of the students, showing diversity in parental socio-economic status, access to ICT tools, and study habits, all of which are important contextual factors. The correlation analysis in Table 2 reveals significant positive relationships between academic performance and variables such as time management, class attendance, learning environment, emotional well-being, parental income, and the use of digital learning tools, while peer influence shows a significant negative correlation. Furthermore, the multiple regression analysis in Table 3 confirms that these factors collectively explain a substantial portion of the variance in academic performance ($R^2 = 0.783$, $p < 0.001$), with each predictor, except peer influence, positively and significantly impacting performance.

Conclusion

Therefore, it can be concluded that, the null hypothesis (H_0) that states no significant factors influencing academic performance is rejected, in favour of alternative hypothesis, confirming that multiple factors significantly affect students' academic outcomes in Nigerian tertiary institutions.

Recommendations

Based on the findings of this study, the following recommendations are proposed:

1. Academic staff and administrators need to emphasize the importance of consistent attendance by implementing attendance policies and engaging teaching methods that encourage participation.
2. Counselling centres and support services should be strengthened to address students' emotional and psychological needs, which significantly influence academic success.
3. Given the positive impact of digital tools, institutions should expand access to ICT resources, including internet connectivity and educational software, ensuring that all students can benefit from digital learning.
4. Awareness programs and financial support schemes (e.g., scholarships, grants) should be developed to assist students from lower socio-economic backgrounds, helping to mitigate the impact of parental income on academic outcomes.
5. Institutions should encourage positive peer interactions through mentorship programs and student groups that promote academic motivation and discourage detrimental behaviours.

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