Assessing the Impact of JAMB Scores, 'O' Level Results, and Communication Skills on Post-UTME Examinations in Nigerian Tertiary Education

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Abstract

— This empirical investigation, conducted at Bauchi State University Gadau, critically assesses the correlation between Joint Admissions and Matriculation Board (JAMB) scores, Secondary School Certificate ('O' Level) results, communication skills, and performance in the Post-Unified Tertiary Matriculation Examination (Post-UTME). Established in response to the inefficacies noted in admissions processes prior to the establishment of JAMB in 1978, Post-UTME was intended to refine the screening of candidates. Using Simple Linear Regression and Pearson correlation coefficient, this research analyzed data from 1,300 students admitted in 2023 to assess the effectiveness of these metrics as predictors of academic success. The findings reveal a weak positive correlation among the variables, showing that JAMB scores, 'O' Level results, and communication skills together explain only 18.4% of the variance in Post-UTME scores. This suggests a significant limitation in the current use of these metrics as reliable predictors of university performance, indicating the need for a broader evaluation framework that includes a variety of academic and personal factors. The study is constrained by its focus on a single institution, which may limit the generalization of the findings. Future research should extend to multiple universities and consider longitudinal designs to track the impact of admission policies over time. This study contributes to ongoing discussions about refining admissions processes in Nigeria, advocating for an evidence-based approach to enhance fairness and effectiveness in university selections.

Keywords—*Pearson correlation coefficient, Regression Analysis, Post-UTME, Nigerian higher education, Admissions process, JAMB scores, 'O' Level results, Communication Skills, University admission, Academic performance*

I. INTRODUCTION

The Nigerian educational landscape has witnessed significant changes over the years, particularly in the realm of university admissions. In 1978, prior to the establishment of the Joint Admissions and Matriculation Board (JAMB), Nigerian universities independently conducted their entrance examinations and admissions, which posed considerable limitations and inefficiencies. This prompted the government to create the National Committee on University Entrance Examination, leading to the birth of JAMB (Busayo, 2010).Fast forward to 1987, the Board successfully accomplished the significant task of producing examination materials within Nigeria (Busayo, 2010). However, over time, concerns began to emerge about the reliability and effectiveness of the JAMB admission process, leading to the implementation of Post-UME screening in 2005. This screening aimed to address the issues of high-scoring candidates performing poorly in university studies and the prevalence of examination malpractice. Despite these efforts, questions remained about the true purpose and impact of Post-UTME screening. (Idoko, 2008). The implementation of post-UME screening was initiated in 2005 by Mrs. Chinwe Nora Obaji, the former Minister of Education, in response to concerns raised by universities about the reliability of the examination administered by the Joint Admissions and Matriculation Board (JAMB) (Ikoghode, 2015).

This study delves into the ongoing debate surrounding Post-UTME, seeking to evaluate its relevance and effectiveness in the Nigerian educational context. Post-UTME, or Post Unified Matriculation Examination, is an examination conducted by Nigerian tertiary institutions to assess candidates seeking admission, typically following the UTME (Unified Tertiary Matriculation Examination). The examination's purpose and outcomes have been a subject of controversy, with some arguing for its abolishment, while others believe it serves as a crucial tool for maintaining the quality of admitted students. However, several related studies have explored different facets of Post-UTME, offering varying perspectives. Akoja and Owegbunu highlighted the poor academic performance of candidates admitted through UTME, leading to the introduction of Post-UTME screening as a means to enhance the quality of admitted candidates. However, the effectiveness of this screening process remained uncertain, and the study had its limitations (Otekunrin, Okon, & Otekunrin, 2017).

Patrick's thought-provoking exploration cast doubt on whether Post-UTME's true intent extends beyond academics, yet its assertions remained unsupported by concrete evidence (Patrick, 2010). Adebayo and Abdulhamid proposed a comprehensive system to tackle pervasive issues within the education sector, from fraud to exam leaks. Their focus on bolstering security and efficiency, however, left a lingering question mark regarding the practical effectiveness of their solution. (Adebayo & Abdulhamid, 2014). In contrast, Ikoghode passionately argued that Post-UTME has lost its luster in the era of UTME_CBT introduced by JAMB, which vows to combat cheating and impersonation. Yet, skepticism persists about potential bias influencing this stance and data interpretation (Ikoghode, 2015).

Munkaila and Sikiru accentuated the crucial role of Post-UTME in identifying deserving candidates for university admission. However, their omission of potential drawbacks raises important questions about the broader implications of this selection process (Munkaila & Sikiru, 2017). Aromasodun's recent comparative study pitted Post-UTME against JAMB, ultimately endorsing the retention of the former. Nonetheless, the study's narrow scope leaves us pondering the extent to which its findings can be universally applied. In a landscape teeming with contrasting viewpoints, these studies collectively beckon us to explore the multifaceted debate surrounding Post-UTME's role in Nigerian education (Aromasodun, 2022).

This study, conducted at Bauchi State University Gadau, aims to assess the relationship between JAMB scores, Post-UTME performance, 'O' Level results, and Communication Skills of the 2023 students admitted into the university. The research uses a Simple Linear Regression Normal Equations and Pearson correlation coefficient, to analyze the data of 1300 candidates. The results and discussions of this study will shed light on the relevance and effectiveness of Post-UTME in the Nigerian educational system.

Aim:

The primary aim of this study is to evaluate the relevance and effectiveness of the Post-UTME (Post Unified Matriculation Examination) in the Nigerian educational context, specifically at Bauchi State University Gadau.

Objectives:

1. To determine the relationship between JAMB scores and Post-UTME performance.
2. To assess whether 'O' Level results have a significant impact on candidates' performance in the Post-UTME examination.
3. To investigate whether Communication Skills, as rated by the candidates, are correlated with their Post-UTME scores.

These objectives align with the study's central goal of shedding light on the relevance and effectiveness of Post-UTME in the Nigerian educational system. By examining the correlations between JAMB scores, 'O' Level results, Communication Skills, and Post-UTME performance, the study aims to contribute to the ongoing debate surrounding Post-UTME's role in university admissions. The study's findings will provide insights into the relevance and effectiveness of Post-UTME in the Nigerian educational system and could potentially inform future policies and practices in university admissions.

II. RELATED STUDIES

Several studies have explored the relevance of Post-UTME in the Nigerian tertiary education system, each offering a different perspective. The study by Akoja and Owegbunu pointed to a concerning issue – the abysmal performance of candidates admitted into Nigerian universities through the

UTME process. This problem led to the introduction of Post-UTME screening as a means to improve the quality of candidates admitted into the universities in the country. However, the effectiveness of the Post-UTME screening process in achieving this goal was found to be questionable. Despite these findings, the study has its limitations, as it does not provide concrete data to support the effectiveness of Post-UTME in enhancing the quality of admitted candidates. Furthermore, it fails to address the potential drawbacks or limitations of the Post-UTME screening process itself and does not explore the specific factors contributing to the poor performance of candidates admitted through UTME (Bakare & Ajibade, 2010).

Patrick's study raised doubts about the purpose of the Post-UTME screening tests conducted by Nigerian universities over the past three years. It questioned whether these tests were advocated solely for academic excellence or whether other non-academic reasons were at play. However, this study had limitations as well, as it did not provide concrete evidence or data to support the doubt it raised regarding the purpose of Post-UTME screening tests. It did not substantiate the non-academic reasons that might be associated with these tests and also failed to address the potential benefits or drawbacks of the Post-UTME screening process (Patrick, 2010).

Adebayo and Abdulhamid (2014) introduced a proposed system to address critical issues in the education sector, including human interference, impersonation, bribery, paperwork, and exam leaks. This system features biometric fingerprint authentication, picture capture, and data encryption for enhanced security, as well as online and real-time candidate screening. It aims to improve security, accessibility, and efficiency in the education system (Adebayo & Abdulhamid, 2014). While the proposed system appears promising, the study may lack real-world data on its effectiveness and practicality. Implementing the system and assessing its impact in actual educational settings could be a limitation.

In contrast, Ikoghode (2015) argued that Post-UTME screening in Nigerian universities significantly differs from JAMB UTME_CBT, raising concerns about its necessity and fairness in comparison. The study recommends that with the introduction of UTME_CBT by JAMB, Post-UTME is no longer relevant. In light of these results, the study recommends that, with the introduction of UTME_CBT by JAMB to combat issues like cheating and impersonation, Post-UTME is no longer relevant (Ikoghode, 2015). Although, the study may be subject to bias as it argues for the discontinuation of Post-UTME. This bias could potentially impact the interpretation of the data and recommendations.

Munkaila and Sikiru (2017) emphasized the critical role of Post-UTME as a primary mechanism for selecting suitable candidates for university admission. They suggested caution when using the commonly employed arithmetic mean and raised concerns about its credibility. The study underscored the significance of Post-UTME in ensuring the admission of qualified candidates and encouraged a reconsideration of evaluation methods (Munkaila & Sikiru, 2017). Limited Scope: The study emphasizes the significance of Post-UTME but does not delve into the potential drawbacks or challenges associated with its implementation. It may not provide a comprehensive view of the subject.

Aromasodun (2022) conducted a study in six Kwara State tertiary institutions and found a positive but low correlation (correlation coefficient of 0.078) between Post-UTME and UTME performance. The study suggests retaining Post-UTME as it is significantly different from UTME according to a t-test conducted (Aromasodun, 2022). However, it is important to note that the study's focus on comparing Post-UTME solely with JAMB limiting the study's ability to provide a comprehensive understanding and make accurate predictions, potentially leading to incomplete or context-specific findings.

These studies present varying viewpoints on the importance and relevance of Post-UTME in the Nigerian educational landscape, highlighting the need for ongoing debate and consideration of the system's role in university admissions.
In summary, while the studies offer varying viewpoints on Post-UTME, future research should aim for a more extensive and up-to-date analysis to provide a comprehensive understanding of its relevance and effectiveness. Additionally, assessing the feasibility and benefits of implementing advanced systems to address challenges in the education sector could be a promising avenue for further investigation.

III. RESEARCH METHODOLOGY

This research design to assess the relationship between, JAMB Score, Post-UTME, 'O' Level results and Comm. Skill of all the 2023 students admitted into the university and cumulative grade point average as student's academic performance. The research was carried out at Bauchi State University Gadau. The main purpose of research is to determine the cause and effect relationship between the variables.

The computational methods for Simple Linear Regression Normal Equations (Based on Minimizing *SSE* by Calculus)
Let consider of summing simple linear regression model as in equation (1)

$$\sum_{i=1}^{n} \mathrm{Y_i} = nB_0 + B_1 \sum_{i=1}^{n} \mathrm{X_i} \quad (1)$$

Above equation is the same as

$$\sum_{i=1}^{n} \mathrm{Y_i X_i} = B_0 \sum_{i=1}^{n} \mathrm{X_i} + B_1 \sum_{i=1}^{n} \mathrm{X_i^2} \quad (2)$$

Computational Formula for the Slope, B_1

$$B_1 = \frac{S_{XY}}{S_{XX}} \quad (3)$$

Where

$$S_{XY} = \sum_{i=1}^{n} (\mathrm{Y_i} - \bar{Y})(\mathrm{X_i} - \overline{X}) \quad (4)$$

$$S_{XY} = \sum_{i=1}^{n} \mathrm{Y_i X_i} - \frac{\left(\sum_{i=1}^{n} \mathrm{Y_i}\right)\left(\sum_{i=1}^{n} \mathrm{X_i}\right)}{\mathrm{n}} \quad (5)$$

$$S_{XX} = \sum_{i=1}^{n} (\mathrm{X_i} - \overline{X})^2 \quad (6)$$

$$S_{XX} = \sum_{i=1}^{n} X_i^2 - \frac{\sum_{i=1}^{n} X_i^2}{n} \quad (7)$$

Y-intercept, B_0

$$B_0 = \bar{Y} - B_1\bar{X} \quad (8)$$

for the Total Sum of Squares, SST

$$SST = \sum_{i=1}^{n}(Y_i - \bar{Y})^2 \quad (9)$$

$$SST = \sum_{i=1}^{n} Y_i^2 - \frac{\left(\sum_{i=1}^{n} Y_i\right)^2}{n} \quad (10)$$

To compute Regression Sum of Squares, SSR

$$SSR = \sum_{i=1}^{n}(\acute{Y}_i - \bar{Y})^2 \quad (11)$$

$$SSR = \frac{S_{XY}^2}{S_{XX}} \quad (12)$$

$$SSR = B_0\sum_{i=1}^{n} Y_i + B_1\sum_{i=1}^{n} Y_i X_i - \frac{\left(\sum_{i=1}^{n} Y_i\right)^2}{n} \quad (13)$$

Error Sum of Squares, SSE

$$SSE = \sum_{i=1}^{n}(Y_i - \acute{Y})^2 \quad (14)$$

$$SSR = SST - SSR \quad (15)$$

$$SSE = \sum_{i=1}^{n} Y_i^2 - B_0\sum_{i=1}^{n} Y_i - B_1\sum_{i=1}^{n} Y_i X_i \quad (16)$$

To get the Standard Error of the Slope, S_{B_1}

$$S_{B_1} = \frac{S_{XY}}{\sqrt{S_{XX}}} \quad (17)$$

$$S_{B_1} = \frac{S_{XY}}{\sqrt{\sum_{i=1}^{n}(X_i - \bar{X})^2}} \quad (18)$$

Multiple Regression Model with k Independent Variables

This method is just a basic extension of what we have previously discussed above. The main difference is that there are more two or more explanatory variables (k) that are used to predict Y, the response (dependent variable). The k independent variables are labeled X_1, X_2,...,X_k.

The general model to be used is

$$Y = B_0 + B_1X_1 + B_2X_2 \ldots\ldots B_kX_k + \varepsilon \quad (19)$$

Where B_j is the change in mean for Y when variable X_j increases by 1 unit, while holding the k-1 remaining independent variables constant (partial regression coefficient). This is also referred to as the slope of Y with variable X_j holding the other predictors constant. (20) Least Squares Equation obtained by minimizing SSE

$$Y = B_0 + \sum_{j=1}^{k} B_jX_j + \varepsilon \quad (20)$$

Estimated Y is given in (21) below.

$$\acute{Y} = B_0 + B_1X_1 + \beta_2X_2 \ldots\ldots \beta_kX_k \quad (21)$$

To determine Coefficient of Multiple Determination that explains proportion of variation in Y by the regression model on the k independent variables represented by R^2

$$. R^2 = \frac{SSR}{SST} = \frac{\sum_{i=1}^{n}(\acute{Y}_i - \bar{Y})^2}{\sum_{i=1}^{n}(Y_i - \bar{Y})^2} \quad (22)$$

Also (22) can be compute using (23)

$$R^2 = 1 - \frac{SSE}{SST} \quad (23)$$

Overall Model **F-Test** use to test whether any of the independent variables are linearly associated with Y using the hypothesis.

Table 6: ANOVA Table

Analysis of Variance				
SOURCE	**Df**	**SS**	**MS**	**F**
Regression	K	SSR	MSR	F_{obs}
Error	n-k-1	SSE	MSE	---
Total	n-1	SST	---	---

For this work K=3, in (19) above and the variables defined as follows

X_1= candidate jamb score

X_2=candidate o-level credits

X_3 = candidate Communication Skills performance

And Y= candidate post-utme examination performance

Correlation

When we want to find the correlation between Y and X_1 controlling X_2 and X_3. The correlation formula for computing the relationship between two variables is Pearson correlation coefficient r.

$$r = \frac{n\sum XY - (\sum Y)(\sum Y)}{\sqrt{((n\sum X^2 - (\sum X)^2)((n\sum Y^2 - (\sum Y)^2)}} \quad (24)$$

Where n is the number of paired samples.

IV. RESULTS

A. Results

The Multiple Linear regression is a realistic model used in determining the contribution of explanatory variables that count on a respond variable of interest. In order to find out this, we checked the correlation between the variable see Table 7, we found there is weak positive correlations between the variable, and some have negligible correlations. We found that the average post-UTME score for the university is 49% which is close to 50% to the nearest tenth. The general candidate communication skill is 3 which appear to be good, the average number of credits is 4, this is because we have large number of candidates awaiting results and the average JAMB score is 196 which is also good number.

The population of this study consisted of sample 2023 admission applicants into Bauchi State University Gadau (BASUG). Total Sample of 1300 students were used, bearing in mind that it includes one mode of entry into university (Jamb) which is the concern of this study. Below is a table showing the sample of faculties and the number of applicants used for this study.

Table1: BASUG sampled applications.

Faculty	**Number of Candidates**
Science	261
Social and Management Sciences	743
Art and Education	115
Law	181
Total	1300

The above table (Table 1) shows the distribution of samples from Bauchi State University Gadau, based on faculty. This

study is designed to assess the relationship between JAMB Score, Post-UTME, 'O' Level results and Communication Skill of applicants into the university. The study was carried out at Bauchi State University Gadau, Nigeria as a case study. The main purpose of research is to determine whether Post-UTME Examination should be continued or not.

Table 1, 2, 3,4 and 5 summarized the data obtained. The Pictorial representations of some characteristics of the data obtain can showed in Figure 1 to 3 and the detail is in discussion unit of this paper.

Table 2: Candidates' O-Level Credits

O-Level Credits		
S/N	**X**	**Number of Candidates**
1	AR	396
2	1 CREDIT	15
3	2 CREDITS	4
4	3 CREDITS	14
5	4 CREDITS	90
6	5 CREDITS	369
7	6 CREDITS	121
8	7 CREDITS	99
9	8 CREDITS	82
10	9 CREDITS	85
TOTAL		1300

Table 3: Candidate' communication skills

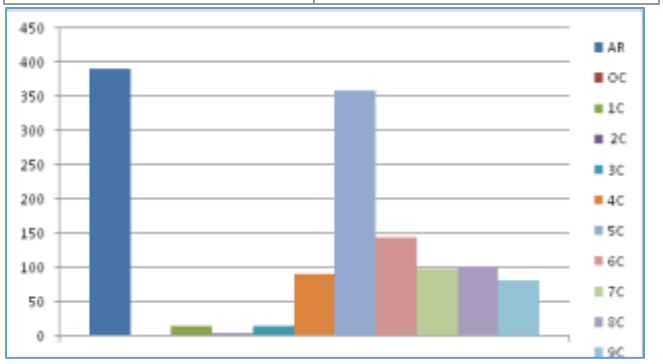
Communication skills		
S/N	**Rating**	**Number of Candidates**
1	V.GOOD	238
2	GOOD	816
3	POOR	136
4	FAIR	171
5	EXCELLENT	2

Table 4: Candidates' JAMB

JAMB Score		
S/N	**JAMB Score Intervals**	**Number of Candidates**
1	180-189	580
2	199-209	435
3	219-229	159
4	239-249	42
5	259-269	5
6	279-289	4
7	299-309	1
8	319-329	0
9	339-349	1
TOTAL		1300

Table 5: Candidates' BASUG Post UTME Examination Scores

Post-UTME Examination Scores		
S/N	**Post-UTME Exams**	**Number of Candidates**
1	5-10	9
2	15-20	34
3	25-30	104
4	35-40	227
5	45-50	315
6	55-60	343
7	65-70	129
8	75-80	44
9	85-90	20
10	95-100	2
TOTAL		1300



BASUG 2023 POST UTME APPLICANT NO. OF CREDITS

Fig 1: Histogram representing POST-UTME applicants number of o-level credits

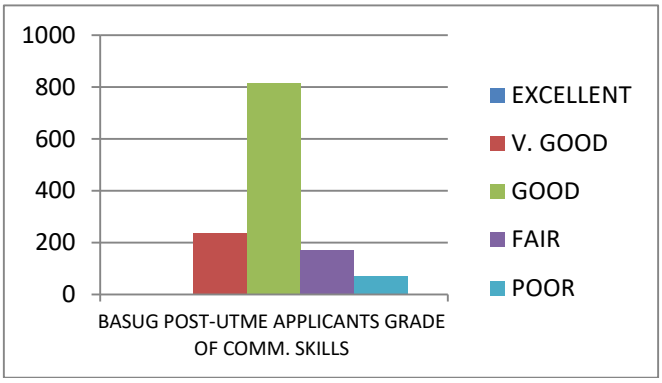


Fig 2: Histogram representing rating of communication skills of BASUG POST-UTME applicants.

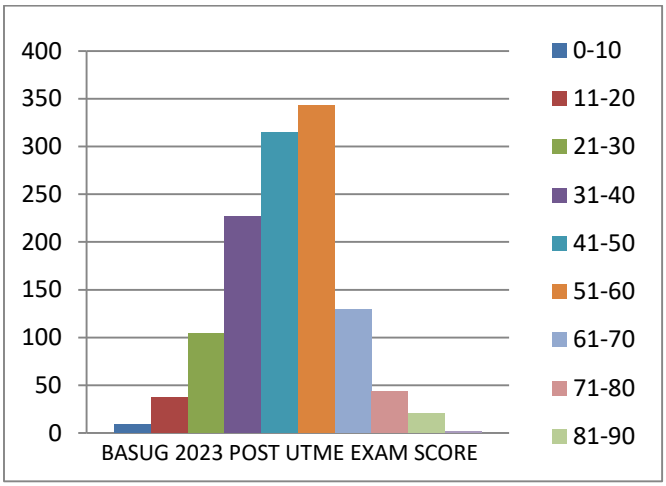


Fig 3: Histogram representing examination scores of BASUG POST-UTME applicants.

B. Analysis

We fitted the model using the above statistical method taking care by SPSS software the result generated is in Table 7, 8 and 9. Table 7 was generated using equation (24) based on the table we observed that the general correlation is weak positive correlation. Among the correlations the strongest positive is the one existed the Post-UTME Examination scores (Y) and the candidates JAMB Scores (X_1).

This study employs a theoretical framework that emphasizes the predictive validity of academic metrics in university admissions. It operates under the assumption that standardized tests, such as JAMB and 'O' Level examinations, provide a reliable measure of student capabilities. The research views these metrics not only as tools for academic prediction but also as instruments that must be scrutinized for their equity and accessibility within the Nigerian educational context.

The findings are interpreted through a lens that considers both the efficacy of these metrics in selecting capable students and their broader implications for educational fairness. This perspective is particularly relevant given ongoing debates about the role of standardized testing in perpetuating or mitigating educational disparities. By correlating these admission scores with Post-UTME performance, the study seeks to contribute to a more nuanced understanding of how well current practices serve the dual goals of fairness and excellence in Nigerian university admissions. This approach will help ensure that your analysis is not just a presentation of data but a thoughtful examination of what the data means in the context of your theoretical perspective and research assumptions.

C. Implications

The results of this study have important implications for the admission process at Bauchi State University Gadau. The weak positive correlations suggest that while these factors are related, none of them are exceptionally strong predictors of admission success. The statistically significant variables underscore the importance of considering JAMB Scores, Post-UTME scores, 'O' Level results, and Communication Skills when making admission decisions.

Table 7: Correlation

Correlation				
Pearson Correlation	**Y**	**X_3**	**X_2**	**X_1**
Y	1.000	0.088	0.011	0.422
X_3	0.088	1.000	0.065	0.051
X_2	0.011	0.065	1.000	0.030
X_1	0.422	0.051	0.030	1.000

All other correlations are weak positive correlations and the are negligible or statistically insignificant.

Table 8: Descriptive Statistics

Descriptive Statistics			
Var.	**Mean**	**Std. Deviation**	**N**
Y	48.68	14.096	1300
X_3	2.95	.671	1300
X_2	4.05	2.574	1300
X_1	196.16	17.058	1300

Table 8 above indicated the Mean values of the variables, (Y, X_1, X_2, X_3) = (48.68, 196, 16.4.05, 2.95) with standard deviations (δ_Y, δ_1 ,δ_2, δ_3) = (14.096, 0.671, 2.574, 17.058) and the total candidates data considered for the analysis.
That means a candidate has average of 49% in his Post-UTME Examination. In other word all the candidate were rated as average candidates.

Table 9: Model Summary

Model	R	R Square	Adjusted R Square	Std Error of the estimate	Change Status				
					R Square Change	F Change	df1	df2	Sig F Change
1	0.428	0.184	0.179	12.772	0.184	40.855	3	1299	0.001

The above table obtained from the fitted multiple regression model (equation (19)) in order to test the following Hypotheses.

H_0: $B_1=B_2=B_3=0$
H_1: $B_j \neq 0$ for at least one j

From the above table the sig value is 0.001, which is less than 0.05. This shows that we reject the null hypothesis, meaning the variables are statistically significant.
The value of R-square is 0,184 which means that the explanatory variable explained 18.4% of the general model.

This is an indication of further research, there need of improvement in the Model.

V. DISCUSSION

The results of the multiple linear regression analysis conducted in this study provide valuable insights into the relationship between various factors and the performance of applicants in the Post-UTME examination at Bauchi State University Gadau (BASUG). This discussion section will provide an interpretation of the findings and their implications for the university's admission process.

In the initial phase of our analysis, we conducted a correlation study to understand the relationships between the key variables, which include Post-UTME scores (Y), JAMB scores (X1), the number of O-Level credits (X2), and communication skills (X3). The correlation matrix, presented in Table 7, revealed that there is a weak positive correlation between the variables. Notably, the strongest positive correlation was observed between Post-UTME examination scores (Y) and candidates' JAMB scores (X1), with a correlation coefficient of 0.422.

Table 8 provides the descriptive statistics for the variables. The mean values for Y, X1, X2, and X3 were 48.68, 196.16, 4.05, and 2.95, respectively. These statistics provided insights into the characteristics of the applicants, including their average Post-UTME score, communication skills, the number of 'O' Level credits, and JAMB scores. Notably, the average Post-UTME score was close to 50%, suggesting that the majority of applicants performed at an average level in this examination.

The regression analysis, as indicated in Table 9, tested the hypothesis that the variables have an impact on the admission process. The results showed that the variables were statistically significant, as indicated by the small p-value (0.001), suggesting that the null hypothesis was rejected. This implies that the variables (JAMB Score, Post-UTME, 'O' Level results, and Communication Skill) do influence the admission process.

The multiple regression model summary, presented in Table 9, offers insights into the overall performance of the regression model. The model's R-squared value, which stands at 0.184, indicates that the explanatory variables in the model collectively account for 18.4% of the variance in the Post-UTME scores. This suggests that there are other unaccounted factors influencing performance, pointing to the need for further research to identify and include them in the model.

VI. RECOMMENDATIONS

On the basis of the findings of this study, the following recommendations were made.

- **Comprehensive Examination of Post-UTME**: Conduct a thorough and comprehensive evaluation of the Post-UTME system, considering its goals, efficacy, and potential drawbacks. This should involve both quantitative and qualitative research to understand its impact on student quality, academic performance, and fairness in admissions.
- **Continued Research and Monitoring**: Encourage ongoing research to better assess and understand the role of Post-UTME in the Nigerian education landscape. This research should consider the evolving educational and societal context and aim for more extensive and up-to-date analyses.
- **Transparency and Accountability**: Ensure transparency and accountability in the administration of the Post-UTME system. This includes clear and consistent communication of the purpose and expectations of the examination, as well as stringent measures to prevent examination malpractice.
- **Alternative Evaluation Methods**: Explore alternative methods of evaluating candidates for university admission, such as holistic admissions criteria that consider a range of factors, including academic performance, personal achievements, and non-academic qualities.
- **Contextual Considerations**: Recognize the diverse cultural, economic, and regional contexts within Nigeria and tailor admission processes to address specific challenges and opportunities in different regions of the country.
- **Technology Integration**: Embrace technology to streamline and secure the admissions process. Online registration, computer-based testing, and enhanced security measures can help improve efficiency and reduce the risk of fraud and impersonation.
- **Standardization and Best Practices**: Promote standardization and best practices in the administration of Post-UTME across universities in Nigeria to ensure fairness, consistency, and quality in the evaluation of candidates.
- **Pilot Programs**: Consider piloting alternative admission methods and systems in select universities to assess their feasibility and effectiveness before implementing them nationwide.
- **Stakeholder Engagement**: Engage all stakeholders in discussions about the future of the Post-UTME system, including government officials, educators, parents, students, and the private sector. Seek consensus on the purpose and role of Post-UTME in the broader educational landscape.
- **Long-Term Planning**: Develop a long-term vision for higher education admissions in Nigeria, addressing issues such as access, quality, and equity. This vision should align with national development goals and ensure that the education system meets the needs of the nation.

By implementing these recommendations, Nigeria can work toward an admissions system that is more fair, transparent, and effective, ultimately improving the quality of education and better preparing its students for the challenges of the future.

VII. LIMITATION, AND FUTURE DIRECTIONS

The limitations of this study include a relatively small and specific sample size, potential confounding variables that were not considered, a lack of exploration of the potential drawbacks of the Post-UTME system, and an absence of broader socio-economic and cultural context analysis. Future research in Nigerian higher education admissions should focus on long-term performance tracking, qualitative understanding of stakeholder perspectives, and comparisons of admission methods, considering regional and socioeconomic contexts, and the impact of technology, to develop more equitable and effective admission practices.

VIII. CONCLUSION

In conclusion, this study conducted at Bauchi State University Gadau aimed to assess the relationship between JAMB scores, Post-UTME performance, 'O' Level results, and Communication Skills of candidates admitted in 2023. The findings and analysis shed light on the relevance and effectiveness of the Post-UTME in the Nigerian educational system. The study employed computational methods, including Simple Linear Regression Normal Equations and the Pearson correlation coefficient, to analyze data from 1300 candidates. The results and analysis revealed that there is a weak positive correlation between the variables, with the most substantial correlation observed between Post-UTME scores and JAMB scores. The multiple regression model confirmed that these variables are statistically significant in influencing the admission process, and they collectively account for 18.4% of the variance in Post-UTME scores. The study's findings suggest that JAMB scores, 'O' Level results, and Communication Skills are factors that impact the admission process, as reflected in Post-UTME performance. However, it is essential to recognize that there are other unaccounted factors influencing performance, as indicated by the model's R-squared value. Therefore, this study highlights the need for further research to identify and include these factors in a more comprehensive model. In light of the ongoing debates and diverse viewpoints presented in the study, it is evident that the role of Post-UTME in the Nigerian educational landscape remains a complex and evolving subject. The findings of this research contribute to the broader discussion on the relevance and effectiveness of Post-UTME, emphasizing the need for continuous examination and potential refinements in the admission process. Ultimately, the study underscores the importance of data-driven decision-making and a multidimensional approach to understanding and enhancing university admissions in Nigeria.

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