

## STAKEHOLDERS' PERCEPTION OF THE DWINDLING PERFORMANCE OF STUDENTS IN THE JOINT ADMISSIONS AND MATRICULATION BOARD (JAMB) EXAMINATION

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### Abstract

**T**his study examined the perceptions of key stakeholders on the declining performance of students in the Joint Admissions and Matriculation Board (JAMB) examination in Southwest Nigeria between 2015 and 2024. The study also examines the trend in students' performance in JAMB examination between 2015-2024, investigate stakeholders' perceptions of the underlying causes of dwindling performance in JAMB examination and evaluate the difference in stakeholder's perceptions regarding the causes of dwindling performance in JAMB examination. Using a mixed-methods research design, the study utilized secondary data from JAMB annual reports and primary data from 400 respondents comprising students, teachers, parents, JAMB officials, and admission officers. Trend analysis showed that the proportion of candidates scoring 200 and above declined from 31.2% in 2015 to 12.8% in 2021, with an increase to 24% in 2024. Results on stakeholder perceptions revealed high mean scores for key issues such as inadequate access to digital tools ( $\bar{x}$  = 3.60 for students,  $\bar{x}$  = 3.72 for teachers), lack of guidance ( $\bar{x}$  = 3.68 for teachers), and poor teaching quality ( $\bar{x}$  = 3.75 for teachers). Statistically significant differences in perception across stakeholder groups for several variables ( $p < 0.05$ ) was also observed, including the impact of CBT, digital preparedness, and syllabus instability. These findings underscore a multidimensional crises in the examination system. The study recommends strengthening digital literacy programs, ensuring curriculum stability, enhancing secondary school instructional quality, and fostering collaboration among educational stakeholders to improve students' performance in national standardized examinations.

**Keywords:** JAMB Examination, Stakeholders, Perception, Dwindling Performance

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### Introduction

**S**tudents in Nigeria who seek to advance their educational attainment most especially those seeking admission into tertiary institutions are required to undergo and pass the Unified Tertiary Matriculation Examination (UTME) conducted by the Joint Admissions and Matriculation Board (JAMB) (Mohammad & Sanni, 2015). This examination serves as a national gateway, assessing candidates' academic readiness for higher education and determining their eligibility for admission into universities, polytechnics, and colleges of education across Nigeria. The Joint Admissions and Matriculation Board (JAMB) is Nigeria's official examination board for tertiary admissions (Dada et al., 2020; Babalola, 2024). This board administers the Unified Tertiary Matriculation Examination (UTME) each year for prospective undergraduates. In practice, JAMB performance is often measured by the proportion of candidates meeting or exceeding

the cut-off score (typically 200 out of 400 points).

Consequently, the performance of students in this examination significantly influences their academic progression, career aspirations, and future socioeconomic prospects. In recent years, a persistent decline in UTME results has been reported (Ejiofor et al., 2020). For example, JAMB statistics and media analyses show that a large number of candidates fail to reach the 200-point threshold: on average about 70–78% of candidates score below 200 each year (Afolabi, 2024). For instance, it was reported that in 2024, 76.1% of 1.84 million candidates scored below 200, continuing a decade-long trend of high failure rates (Punch Report, 2024). In response to this performance, there have been feedbacks from stakeholders on what could be the causes of this persistent decline in the performance of students.

Stakeholders in the education sector include all groups with a vested interest in student outcomes— notably students, parents/guardians, teachers, school administrators, and government or institutional officials (Oshemughen & Oghuvbu, 2013; Oshodi, 2021). Within the context of this study, the stakeholders also include JAMB officials and university admission officers (Galle et al., 2020). Stakeholders' perceptions refer to the beliefs, attitudes, and opinions these groups hold about issues: in this case the steady fall in UTME performance. Perception data capture attitudes and opinions of specific groups (e.g. their views on whether student performance is deteriorating) and are gathered through surveys or interviews. Stakeholders are consistently having different perception as feedbacks to the performance of students in JAMB examination.

Education stakeholders frequently attribute poor performance to declining reading culture, excessive engagement with social media, and reduced commitment to rigorous study habits. Research indicates that students' motivation, self-regulation, and time management skills are strong predictors of standardized test performance (Schunk & Di Benedetto, 2020).

Parents and community leaders often associate poor performance with rising poverty levels, unemployment, and family instability. Economic hardship can limit students' access to quality tutorial centers, textbooks, internet connectivity, and conducive learning environments. Contemporary educational research affirms that socioeconomic status remains a powerful determinant of academic achievement (Sirin, 2021; World Bank, 2023). In Southwest Nigeria, stakeholders perceive that widening economic disparities between urban and rural communities have exacerbated achievement gaps in JAMB outcomes.

Curriculum implementation and policy instability are equally cited as contributing factors. Frequent reforms in educational policies, inconsistencies in curriculum delivery, and misalignment between secondary school

syllabi and JAMB examination content have raised concerns among educators. Stakeholders argue that when curriculum objectives are not coherently implemented, students struggle to meet examination standards. Literature on curriculum coherence underscores the importance of alignment between instruction, assessment, and learning objectives for improved student performance (Fullan, 2020).

School infrastructure and learning environments further shape stakeholders' viewpoints. Inadequate laboratories, poorly equipped libraries, irregular electricity supply, and insufficient classroom facilities in some Southwest states are perceived as barriers to effective learning. Empirical studies emphasize that conducive learning environments positively correlate with academic achievement (Barrett et al., 2019). Where infrastructure deficits persist, stakeholders argue that students' conceptual understanding—particularly in science and mathematics subjects commonly tested in JAMB—may be compromised.

Evidence from research reveals different perception on causes on the alarming trend in the decline in the performance of students in the JAMB. One major one is the transition from traditional paper-pencil modes to computer-based testing (CBT) modes (Dada et al., 2020; Esegbue et al., 2018). Such research works identified that candidates fare better when they are given the traditional format of examination because they are more familiar with test approaches in the paper mode. The challenges associated with CBT, such as low computer proficiency, apprehension towards online platforms, and technological errors during examination sessions, have been found to significantly affect candidates' performance. Ejiofor et al. (2020) college students were poorly equipped for CBT due to limited computer availability, inadequate infrastructural facilities, and insufficient orientation programs, which impacted negatively on their academic readiness and later UTME performances.

Studies also revealed that administrative and

environmental factors have continued to hinder optimal performance in JAMB tests, especially under the model of CBT (Okoye, 2019; Anagbogu et al., 2020). Okoye (2019) also reported serious challenges such as power failures, inadequate technical support, test anxiety, and poor management of CBT centers in Anambra State during the 2018 UTME. Anagbogu et al. (2020) also demonstrated that the habitual re-permutation of UTME multiple-choice questions in core subjects such as Use of English and Mathematics increased the mental burden on candidates, therefore reducing their chances of success. These findings point to inadequate planning, lack of infrastructure, and the complexities involved in test construction that have contributed to the difficulties of the candidates. Supporting these empirical studies, Punch Newspaper (2024) indicated that only 23.9% of the 1.84 million UTME candidates of 2024 scored 200 and above, which means that over 76% were below the national benchmark. Cumulatively, this is more than 9 million candidates between the period of 2018 to 2024 who fell below the minimum requirement, pointing to the depth and longevity of the performance drop in JAMB exams. It is therefore imperative to carefully examine stakeholder's perception on the dwindling performance of students in JAMB examination.

### **Purpose of the Study**

The purpose of this study is to examine stakeholder's perception on dwindling performance of students in JAMB. The specific objectives are to:

- i. examines the trend and variation in students' performance in JAMB examination between 2015-2024
- ii. investigate stakeholders' perceptions of the underlying causes of dwindling performance in JAMB examination
- iii. evaluate the difference in stakeholder's perceptions regarding the causes of 'dwindling performance in JAMB examination.
- iv. make recommendations towards better output in JAMB examinations

### **Research Questions**

The following research questions were raised for this study

1. What is the students' performance in JAMB examination between 2015-2024
2. What are the underlying causes of dwindling performance in JAMB examination

### **Research Hypothesis**

The following research hypotheses were formulated at 0.05 level of significance.

1. Stakeholder' Perception has significantly influence on Dwindling Performance in JAMB Examination in South-West, Nigeria.

### **Methodology**

#### **Research Design**

This study adopts the descriptive research design of survey type. The descriptive design is non-experimental method that helps capture, analyze and interpret data in order to describe the characteristics, opinions, or behaviour of the participants as regards the dwindling performance of students towards JAMB (Fraenkel et al., 2019).

#### **Population and Sample**

The population for this study includes secondary school students, teachers, parents/guardians, jamb officials and admission officers in higher institutions in Ekiti State Nigeria. A total of 400 sample were selected for this study using the multistage sampling technique. To achieve this, 6 public secondary schools were purposively selected in Ekiti state spread across the senatorial districts (North, Central and South). Afterwards, a total of 50 students and 5 teachers were selected from each school to make 300 students and 30 teachers. Furthermore, 5 admission officers were randomly selected from 3 public tertiary institutions in Ekiti State making a total of 15. A total of 50 parents and 5 jamb officials were also sampled. Hence, a total of 400 participants were selected for the study to ensure that there is adequate representation of perception of the stakeholders on the dwindling performance of students in JAMB examination.

**Instrument**

A well-structured questionnaire was administered to collect data on stakeholders' perceptions on causes of dwindling performance in JAMB examination. The research instrument is divided into three sections which covered the socio-demographic characteristics of the respondents (Gender, age and educational attainment). Section B contains 10 items that focuses on stakeholder's perception of underlying causes of dwindling performance in

JAMB examination. The 4-point Likert Scale was used in this study (*Strongly Agree = 4; Agree = 3; Disagree = 3; and Strongly Disagree = 1*)

**Data Analysis**

Data obtained were analysed using both descriptive and inferential statistical techniques. Frequency counts, mean and standard deviations were employed to provide a descriptive interpretation of the underlying distribution while ANOVA was employed to test the difference in perception.

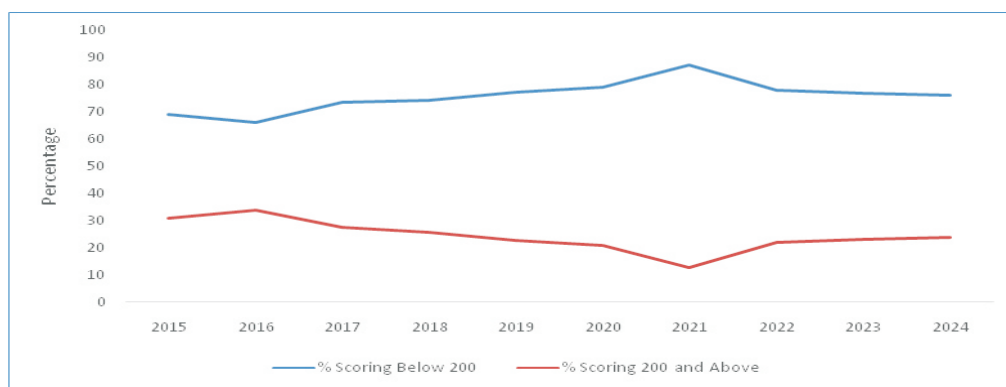
**Results**

**Table 1: Socio demographic Characteristics of the Respondents**

<b>Variable</b>	<b>Items</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Gender</b>	Male	210	52.5
	Female	190	47.5
<b>Age</b>	<18 years	280	70
	18 – 25	35	8.8
	26 – 35	30	7.5
	36 – 50	40	10.0
	Above 50	15	3.7
<b>Educational Attainment</b>	No Formal Education	5	1.3
	Primary	25	6.3
	Secondary	290	72.5
	Tertiary	80	20.0

Result in Table 1 shows the socio-demographic characteristics of the respondents involved in the study. The gender distribution shows a fairly balanced representation, with 52.5% male and 47.5% female participants. In terms of age, the majority of respondents (70%) are below 18 years, reflecting the high proportion of secondary school students in the sample. Other age groups are represented as follows: 8.8% are aged 18–25, 7.5% fall within 26–35 years, 10%

are between 36–50 years, while only 3.7% are above 50 years, representing older parents and stakeholders. On the educational attainment, a significant proportion (72.5%) have secondary education, which aligns with the large student population. Also, 20% possess tertiary education, comprising mainly teachers, JAMB officials, and admission officers. A small proportion of respondents have only primary education (6.3%), and an even smaller number (1.3%) reported no formal education.



**Figure i:** Trend in Students' Performance in JAMB Examination between 2015-2024  
**Source:** Federal Ministry of Education, 2025

The result presented in Figure 1 on the performance trend of students in the Joint Admissions and Matriculation Board (JAMB) examination from 2015 to 2024 reveals a consistent and dwindling decline in academic achievement. In 2015 and 2016, approximately 31.2% and 34% of candidates respectively scored 200 and above, indicating a relatively moderate level of performance. However, from 2017 onwards, there was a steady increase in

the percentage of students scoring below 200, reaching a peak in 2021 when a staggering 87.2% of candidates failed to attain the benchmark score. Although there was a slight recovery from 2022 to 2024, with the percentage of those scoring 200 and above improving marginally to 22.2%, 23.3%, and 24% respectively, the figures still reflect a deeply rooted issue of underperformance in JAMB examination among the students.

**Table 2: Stakeholder’ Perception of the Underlying Causes of Dwindling Performance in JAMB Examination**

S/N	Items	Students x̄ (SD)	Teachers x̄ (SD)	Jamb Officials x̄ (SD)	Parents x̄ (SD)	Admission Officer x̄ (SD)
1	The introduction of Computer-Based Testing (CBT) has negatively impacted students’ performance.	3.32 (0.68)	3.40 (0.65)	2.80 (0.73)	3.15 (0.70)	2.90 (0.85)
2	Inadequate access to digital tools and training affects candidates’ readiness for CBT exams.	3.60 (0.51)	3.72 (0.46)	3.10 (0.57)	3.45 (0.63)	3.20 (0.61)
3	Many students lack proper guidance and Counselling on how to prepare for JAMB examinations (Okoye, 2019).	3.20 (0.72)	3.68 (0.49)	3.30 (0.48)	3.60 (0.50)	3.10 (0.60)
4	Poor teaching quality at secondary school level contributes to students’ low performance in JAMB	3.05 (0.80)	3.75 (0.43)	3.40 (0.56)	3.58 (0.55)	3.25 (0.65)
5	Frequent changes in JAMB syllabus and test structure confuse candidates and affect performance.	3.12 (0.67)	3.42 (0.60)	3.25 (0.61)	3.38 (0.68)	3.00 (0.58)
6	Technical glitches during CBT exams hinder candidates from completing their tests successfully.	3.50 (0.57)	3.65 (0.50)	3.35 (0.62)	3.48 (0.52)	3.20 (0.55)
7	Many students rely on examination malpractice and are unable to perform when monitored strictly.	3.10 (0.76)	3.55 (0.59)	3.50 (0.60)	3.45 (0.66)	3.30 (0.62)
8	Socioeconomic challenges, such as poverty and inability to afford quality tutoring, limit students’ performance.	3.55 (0.53)	3.70 (0.48)	3.20 (0.65)	3.75 (0.44)	3.40 (0.60)
9	Inadequate preparation by students is a major reason for poor JAMB scores.	3.38 (0.61)	3.50 (0.55)	3.60 (0.52)	3.30 (0.71)	3.45 (0.58)
10	Lack of adequate CBT centers and poor infrastructural facilities in rural areas disadvantage students.	3.40 (0.58)	3.60 (0.50)	3.25 (0.67)	3.55 (0.49)	3.10 (0.62)

Analysis in Table 2 provides a broad consensus among stakeholders on the perceived causes of dwindling performance in JAMB examination. A significant concern across the board is the introduction of Computer-Based Testing (CBT), which students ( $\bar{x} = 3.32$ ), teachers ( $\bar{x} = 3.40$ ), and parents ( $\bar{x} = 3.15$ ) strongly believe has negatively impacted performance. However, JAMB officials ( $\bar{x} = 2.80$ ) and admission officers ( $\bar{x} = 2.90$ ) express relatively lower agreement, indicating institutional stakeholders may perceive CBT as a necessary evolution rather than a challenge. Furthermore, inadequate access to digital tools and training emerged as one of the most agreed-upon factors, especially by teachers ( $\bar{x} = 3.72$ ) and students ( $\bar{x} = 3.60$ ), highlighting a digital divide that hinders effective preparation for CBT.

Another strong factor is the lack of adequate guidance and support for candidates preparing for JAMB. Teachers ( $\bar{x} = 3.68$ ), parents ( $\bar{x} = 3.60$ ), and JAMB officials ( $\bar{x} = 3.30$ ) agree that poor Counselling contributes significantly to under performance. Similarly, poor teaching quality at the secondary level is a major concern among teachers ( $\bar{x} = 3.75$ ), parents ( $\bar{x} = 3.58$ ), and JAMB officials ( $\bar{x} = 3.40$ ), while students ( $\bar{x} = 3.05$ ) also acknowledge it to a lesser extent. Frequent changes in the JAMB syllabus and test

structure further compound the problem, confusing candidates and affecting preparation, as indicated by all stakeholders with mean values ranging from 3.00 to 3.42. Also, the widespread technical issues experienced during CBT, such as glitches and poor system stability, are acknowledged almost unanimously, with mean values exceeding 3.20 across all groups.

Moreover, stakeholders overwhelmingly agree that socioeconomic challenges such as poverty and the inability to afford quality private tutoring also constrain student performance. Parents ( $\bar{x} = 3.75$ ), teachers ( $\bar{x} = 3.70$ ), and students ( $\bar{x} = 3.55$ ) express high levels of agreement. Inadequate preparation by students themselves is also seen as a core issue, particularly by JAMB officials ( $\bar{x} = 3.60$ ) and admission officers ( $\bar{x} = 3.45$ ), suggesting that internal candidate-related factors contribute to the problem. Lastly, the lack of sufficient CBT centres and infrastructural deficits, particularly in rural areas, is highlighted by teachers ( $\bar{x} = 3.60$ ) and parents ( $\bar{x} = 3.55$ ), reinforcing the perception that geographical inequalities further disadvantage some candidates. From the result obtained, it is evident that the underlying causes of dwindling performance in JAMB is complex interplay of technological, pedagogical, infrastructural, and socioeconomic issues within the country.

**Table 4.3: ANOVA Summary of Group Difference in Perception**

S/N	Items	F-Stat	p value
1	Item 1 (CBT impact)	3.276	.013*
2	Item 2 (Digital access & training)	7.249	.000*
3	Item 3 (Lack of guidance)	5.024	.002*
4	Item 4 (Poor teaching quality)	4.545	.001*
5	Item 5 (JAMB syllabus/test changes)	2.947	.022*
6	Item 6 (Technical glitches)	1.151	.335
7	Item 7 (Examination malpractice)	1.212	.308
8	Item 8 (Socioeconomic challenges)	4.545	.001*
9	Item 9 (Inadequate student preparation)	0.372	.828
10	Item 10 (Infrastructural limitations)	3.586	.008*

\*  $p < 0.05$

The analysis of variance (ANOVA) conducted to assess group differences in stakeholder perceptions of the causes of dwindling JAMB performance revealed that significant differences exist among the stakeholder groups for several items. Specifically, there were statistically significant differences ( $p < 0.05$ ) in perceptions regarding the negative impact of Computer-Based Testing, limited access to digital tools and training, lack of proper guidance for students, poor teaching quality in secondary schools, and frequent changes in JAMB syllabus and test structure. This indicates that the level of agreement or disagreement with these issues varies considerably across students, teachers, JAMB officials, parents, and admission officers. Furthermore, socioeconomic challenges and infrastructural limitations, particularly the inadequacy of CBT centers, also showed statistically significant differences across groups.

On the other hand, the ANOVA results showed that there is no statistically significant differences in stakeholder perceptions regarding technical glitches experienced during CBT exams, reliance on examination malpractice, and inadequate student preparation ( $p > 0.05$ ). This implies a general consensus among all stakeholder groups on these particular issues, suggesting that despite their differing roles in the education system, they agree that technical issues, students' dependence on malpractice, and lack of adequate preparation are common and widely acknowledged contributors to poor JAMB outcomes.

### **Discussion**

Findings obtained revealed that there is a persistent decline in the performance of students in the JAMB test over the past decade raises critical issues regarding the effectiveness and fairness of the education and examination systems in Nigeria. The trend observed, as attested by a substantial decrease in the proportion of candidates achieving a score of 200 and above, betrays a system failure that is indicative of deep-seated socio-educational disparities and institutional inefficiencies. This

finding is paralleled by the Premium Times national report (2023), which reported that a high percentage of UTME candidates every year fail the minimum benchmark score. Not only is this phenomenon detrimental to students' academic development but also imposes challenges to higher institutions in terms of getting well-prepared candidates. This trend has been supported by research carried out by Okoye (2019) and Ejiofor et al. (2020), who blame poor performance on unaddressed issues in digitalization, inadequate academic preparation, and the psychological effects of high-stakes testing.

Stakeholder analysis further shows that views on why JAMB performance is declining are varied but concur on several of the major issues. The move to Computer-Based Testing (CBT) is central among concerns, and students, teachers, and parents are at the forefront of the criticisms. This supports Anagbogu et al.'s (2020) contention that their finding suggested CBT has disproportionately affected students from economically depressed rural regions due to low digital exposure and poor access to effective CBT facilities. Also, Yusuf and Folorunso's (2022) study emphasized that Nigerian public institutions remain inadequate in terms of digital infrastructure and computer literacy training, increasing the digital divide and limiting learners' readiness for CBT environments. In addition, the stakeholders also cited such other structural problems as irregular syllabus updates, poor instruction quality at the secondary school level, and lack of professional guidance as problems that have led to the performance crisis. These are attested to by the findings of Adegbite and Aluko (2021) that Nigeria's secondary school education system does not effectively offer the skills of analysis and technical skills necessary to excel in national standardized tests like the UTME.

Statistically significant differences between groups of stakeholders in how they see such issues suggest an incongruity in how such challenges are viewed and interpreted. Institutional actors like JAMB officials and

admissions officers would tend to underestimate some of the concerns raised by teachers, students, and parents, particularly those related to the CBT system and its implementation. This difference is consistent with the observation made by Adebayo and Oyeleye (2021), who stated that policy implementers tend to underestimate the operational challenges experienced by teachers and students. Such disagreement regarding opinions can hinder the growth of concerted and effective policy measures. The general perception regarding other issues like poverty's impacts, inadequacies of infrastructure, and over-dependence by students on malpractice indicates areas where concerted efforts can be pursued. In the opinion of Nduka and Eze (2022), resolution of these issues through a multi-stakeholder framework that includes schools, examination bodies, parents, and government agencies is of great importance in halting the trend of declining JAMB performance and providing educational equity in Nigeria.

### **Conclusion**

The performance of students in public examinations like JAMB not only reflects their level of educational attainment but also serves as an indicator of the overall state of the education system in the country. The study therefore examines stakeholders' perspective on the dwindling performance of students in JAMB examination. The study revealed a troubling decline in students' performance in the Joint Admissions and Matriculation Board (JAMB) examination over the past decade, particularly following the shift from traditional examination modes to Computer-Based Testing (CBT). The performance trend analysis between 2015 and 2024 clearly shows a consistent drop in the number of candidates scoring above the 200 benchmarks, with the lowest point recorded in

2021. Against this backdrop, stakeholders (students, teachers, parents, JAMB officials, and admission officers) identified several contributory factors to this decline, which includes inadequate digital preparedness, poor teaching quality, frequent syllabus changes, technical glitches, and socioeconomic challenges. While some issues revealed significant perceptual differences across groups, others such as infrastructural limitations, technical difficulties, and student unpreparedness were universally acknowledged.

To address these challenges, it is recommended that government and educational stakeholders invest in digital infrastructure and provide comprehensive CBT training for students, especially those in rural or underserved communities. Curriculum reform and stability in JAMB syllabus and structure are also essential to avoid confusing candidates and disrupting preparatory processes. Moreover, targeted teacher training and enhanced guidance and Counselling services should be provided in secondary schools to build students' academic readiness. Examination bodies like JAMB must ensure the reliability of CBT systems and invest in upgrading technical facilities to reduce system failures during exams.

### **Limitation of the Study**

This study is a cross-sectional and relied on self-reported survey data from a sample of stakeholders in Ekiti State Nigeria. However, it may not capture changes over time or the views of all regions. It is therefore suggested that mixed methods (qualitative and quantitative) should be employed in future studies providing more robustness. Likewise, comparison among different regions within the country can also be explored for more insights to the underlying problems.

## References

- Adebayo, K. O., & Oyeleye, T. A. (2021). Policy implementation and examination reform in Nigeria: Bridging the gap between design and practice. *African Education Review*, 18(1), 77–92.
- Adegbite, A., & Aluko, F. (2021). Enhancing students' preparedness for standardized examinations: A review of secondary school teaching practices in Nigeria. *Nigerian Journal of Educational Studies*, 9(2), 45–58.
- Afolabi, L. (2024). Concerns rise over teaching as over nine million fail UTME in seven years. *Punch Nigeria*.
- Anagbogu, G. E., Okafor, I., & Chukwu, A. (2020). Permutation of UTME multiple-choice test items on performance in Use of English and Mathematics among prospective higher education students. *The Journal of Social Sciences Research*, 6(2), 93–101.
- Babalola, O. (2024). Revisiting concerns over 2024 UTME result. *The Guardian Nigeria*.
- Dada, E. G., Afolabi, B. S., & Nwosu, A. C. (2020). Performance comparison of computer-based test and paper-pencil test using support vector machine. *International Journal of Advanced Research in Computer Science*, 11(3), 1–8.
- Dada, E., Kolawole, A., Oniyide, M., & Oniyide, K. (2020). Performance comparison of computer-based test and paper-pencil test using support vector machine, 3, 478-487.
- Ejiofor, A.O., Danjuma, A.A., & Yusuf, A.M. (2020). Assessment of JAMB computer-based test (CBT) on SS3 students' academic readiness in Federal Government College Jos. *Journal of Education and Practice*, 11(5), 21–30.
- Esegbue, T.O., & Nwogu, C.I. (2018). Evaluation of students' academic performance in JAMB Chemistry test under CBT and PBT media. *International Journal of Advanced Research*, 6(7), 928–933.
- Ferraro, D. (2025). 2025 UTME Records Nigeria's 3rd-Worst Performance Since 2016 — What Went Wrong? Examscholars.com.
- Galle, S., Agahu, S., & Paul, V. (2020). An assessment of examiners and students' attitudes in Joint Admission and Matriculation Board towards Computer-Based Tests in Kaduna State, Nigeria. International Institute for Capacity Building in Africa. (2024). Nigeria: Education country brief. UNESCO IICBA. Retrieved from <https://iicba.unesco.org/en/nigeria>
- Lawal, I. (2025). 2025 UTME hobbled by glitches as JAMB admits error, takes responsibility. *The Guardian Nigeria*.
- Mohammad, M., & Sanni, A. (2015). Computer based testing (CBT): An assessment of student perception of JAMB UTME in Nigeria.
- Nduka, P.C., & Eze, S.N. (2022). Reducing examination malpractice and enhancing academic integrity in Nigeria's tertiary admissions. *Journal of Educational Development and Policy*, 13(1), 34–49.
- Okoye, F. O. (2019). Challenges of 2018 computer-based test (CBT) JAMB examination for senior secondary school students' academic performance in Anambra State, Nigeria. *European Journal of Education Studies*, 6(4), 101–110.
- Oshemughen, H., & Oghuvbu, E. (2013). Implications of scrapping Jamb and UTME from Tertiary Education Admission Process: The Educational Administrators' Perspective.
- Oshodi, O. (2021). Stakeholders' perceptive in accessing higher education in Nigerian, 04. <https://doi.org/10.47191/IJSSHR/V4-I5-10>.
- Premium Times. (2023, July 20). UTME results: Majority of candidates failed to reach benchmark score – JAMB. Retrieved from <https://www.premiumtimesng.com>
- Punch Newspaper. (2024). 2024 UTME: Only 23.9% scored 200 and above – JAMB. Retrieved from <https://www.punchng.com>
- Yusuf, S., & Folorunso, O. (2022). Digital inequality and educational disadvantage in Nigeria: Implications for computer-based testing. *International Journal of Educational Technology*, 18(1), 57–68.