

Patterns in Unified Tertiary Matriculation Examination (UTME) Performance in Selected South-Western States of Nigeria, 2010–2024: A Longitudinal Analysis

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Abstract: *This study examined longitudinal changes in Unified Tertiary Matriculation Examination (UTME) performance in selected South-Western states of Nigeria from 2010 to 2024. A retrospective longitudinal design was used to analyse annual aggregate data on candidate numbers, mean UTME scores, standard deviations, and the percentage of candidates scoring 200 and above. Descriptive statistics and ordinary least-squares linear regression were used to estimate temporal trends. In the reported series, the mean score increased from 187.45 in 2010 to 212.74 in 2024, while the proportion scoring 200 and above increased from 54.2% to 78.6%. A decline occurred in 2020, when the mean score fell to 198.23 and the proportion scoring 200 and above fell to 65.4%. The linear trend in mean score was positive and statistically significant ($b = 1.58$ points per year, $R^2 = .904$, $p < .001$), as was the trend in the percentage scoring 200 and above ($b = 1.53$ percentage points per year, $R^2 = .905$, $p < .001$). These results describe an upward trend in the supplied series but do not establish its causes. The findings underscore the importance of validating regional data against official state-level records before using them for planning. JAMB and education authorities should maintain comparable longitudinal records and strengthen the resilience of computer-based testing infrastructure, electricity supply, and connectivity.*

Keywords: UTME, JAMB, examination performance, longitudinal analysis, educational assessment, South-Western Nigeria, trend analysis

INTRODUCTION

Educational assessment serves several functions within a national education system, including selection, placement, certification, accountability and monitoring of learning outcomes. In Nigeria, candidates seeking admission through the Joint Admissions and Matriculation Board (JAMB) ordinarily participate in the Unified Tertiary Matriculation Examination (UTME). Before the establishment of JAMB, admission into Nigerian universities was institutionally based, with each university conducting its own entrance examinations; this changed in 1978, when JAMB conducted its first placement examination following its establishment under JAMB Decree No. 2 of 1978. JAMB describes UTME as a ranking examination and indicates that other admission parameters are considered in determining minimum admissible scores. Official JAMB reporting also demonstrates considerable year-to-year variation in the distribution of UTME scores. For example, the Board's historical comparison reports that the proportion scoring 200 and above nationally was 11% in 2013, 34% in 2016, 13% in 2021 and 24% in 2024. These figures illustrate why examination performance should be examined as a longitudinal phenomenon rather than inferred from a single examination year (Joint Admissions and Matriculation Board [JAMB], 2024, 2025).

This concern is reflected in public commentary by examination administrators and education stakeholders. Annual UTME outcomes should be interpreted cautiously and in a multi-year context rather than as isolated results. Disruptions to school calendars, examination logistics, and computer-based testing (CBT) infrastructure may affect candidates' examination experiences; however, their effects on scores should be tested with appropriate data rather than assumed (Adamu, 2024; Joint Admissions and Matriculation Board [JAMB], 2024). These considerations reinforce the value of longitudinal analysis, while remaining distinct from the empirical evidence examined in this study.

The South-Western region occupies an important position in Nigeria's educational landscape, but educational opportunities and resources are not distributed uniformly across locations and institutions. Consequently, aggregate examination performance in the region warrants empirical monitoring. Longitudinal analysis can reveal whether apparent changes represent sustained movement, temporary fluctuations or structural disruptions, and it can provide a more appropriate basis for educational planning than isolated annual comparisons.

The present study therefore concentrates on the longitudinal performance series supplied for selected South-Western states between 2010 and 2024. The analysis is deliberately restricted to variables that can be supported by the reported aggregate data: the number of candidates, mean score, standard deviation and the percentage scoring 200 and above. This approach avoids attributing causal effects to variables for which a sufficiently documented respondent-level dataset was not available.

Statement of the Problem

The UTME occupies a central position in the transition from secondary to tertiary education in Nigeria, yet the distribution of examination scores has varied substantially across years. Such variation has implications for admission planning, secondary-school preparation, examination administration and the interpretation of changes in candidate achievement. A further problem is that claims about long-term improvement can be misleading when they are based on isolated years or on analyses that do not match the structure of the underlying data.

The original submission combined annual aggregate UTME data with survey-based analyses and reported several inferential statistics that were not internally consistent with the tables from which they were said to have been derived. In particular, the reported ANOVA degrees of freedom did not correspond to the 15-year series, the reported post-hoc mean differences did not correspond to the annual means, and some questionnaire frequencies did not sum to the stated sample size. A rigorous longitudinal article therefore requires the empirical analysis to be reconstructed around the data that can actually be supported. This study addresses that problem by re-specifying the empirical contribution as a longitudinal trend analysis, so that every statistic reported can be traced directly to the underlying 15-year series.

Objective of the Study

The objectives of this study are to:

- i. describe annual patterns in candidate numbers, mean UTME scores, and the percentage of candidates scoring 200 and above in selected South-Western states from 2010 to 2024;
- ii. estimate the direction and magnitude of the linear trend in annual mean UTME scores over the study period; and
- iii. estimate the direction and magnitude of the linear trend in the percentage of candidates scoring 200 and above over the study period.

Research Questions

- i. What pattern is evident in UTME candidate numbers, mean scores and the percentage scoring 200 and above in the selected South-Western states from 2010 to 2024?
- ii. What is the magnitude and direction of the linear trend in annual mean UTME scores between 2010 and 2024?
- iii. What is the magnitude and direction of the linear trend in the percentage of candidates scoring 200 and above between 2010 and 2024?

Research Hypotheses

H0₁: There is no significant linear trend in the annual mean UTME score in the selected South-Western states between 2010 and 2024.

H0₂: There is no significant linear trend in the percentage of UTME candidates scoring 200 and above in the selected South-Western states between 2010 and 2024.

LITERATURE REVIEW

Unified Tertiary Matriculation Examination (UTME) and Educational Selection

UTME performance is frequently discussed in relation to tertiary admission, but the examination should not be treated as a complete measure of educational attainment. JAMB's own position is that UTME is a ranking examination and that other parameters contribute to admission decisions. Earlier Nigerian studies have examined relationships between admission or screening scores and subsequent academic performance, with mixed implications for the predictive validity of entrance examinations (Adeniyi et al., 2010; Ajala, 2010; Salahudeen & Murtala, 2005). This literature suggests the need to interpret UTME trends as evidence about examination performance rather than as direct evidence of the total quality of secondary education.

Longitudinal Examination Performance

Longitudinal examination analysis is useful because educational outcomes may change gradually in response to curriculum, teaching, demographic, technological and institutional conditions. A trend analysis distinguishes systematic movement from short-term fluctuations and is therefore more informative for planning than a comparison of two isolated years. The reported series in the present study shows an overall increase in both mean score and the percentage scoring 200 and above, but it also includes a clear interruption in 2020. This supports the use of a model that explicitly estimates the overall trend while retaining annual observations.

Computer-Based Testing and Examination Administration

The transition to computer-based testing has altered the operational requirements of high-stakes examinations. Prior studies identify connectivity, electricity supply, equipment availability and technical capacity as recurrent concerns in CBT implementation (Adamu, 2024). These factors are relevant to the interpretation of examination outcomes because disruptions in administration can affect candidate experience independently of academic preparation. However, claims about the statistical effect of these

factors on UTME scores require respondent-level or centre-level data and should not be inferred from descriptive perceptions alone.

Research Gap

The literature contains studies of UTME performance, school-level conditions and CBT implementation, but a longitudinal account of aggregate performance requires careful separation of trend evidence from explanations of causation. The present study contributes by organising the reported 2010–2024 series into a coherent longitudinal framework and estimating the magnitude of the trend in both mean score and the percentage scoring 200 and above.

Candidate-Level Predictors: Directions Suggested by the Wider Literature

Although the present longitudinal analysis is restricted to the annual aggregate series, the wider Nigerian literature offers converging evidence on candidate-level factors that plausibly contribute to UTME performance and that a future covariate-based study could test directly. School type and location have been repeatedly associated with performance differences, with urban and private-school candidates generally outperforming their rural and public-school counterparts (Olatunji & Fashiku, 2020; Afolabi, 2019). Secondary school students' academic performance more broadly, and its implications for educational planning and policy, has long been recognised as a matter of concern in Nigeria (Adepoju, 2011). Digital preparedness and CBT familiarity have also been identified as consistent predictors, with candidates who had prior exposure to computer-based testing or practice platforms tending to score higher (Adegbija & Adekoya, 2020; Abdulkareem & Lennon, 2025). Technical and infrastructural disruptions at examination centres — network failure, poor internet connectivity, power interruption and biometric-verification delays — recur across multiple studies as perceived obstacles to fair and efficient administration (Adepoju & Alonge, 2021; Adamu, 2024). Examination malpractice, including the phenomenon of so-called 'miracle examination centres' that help candidates secure unmerited results, has also been documented as a threat to the reliability of reported performance data (Agwu et al., 2022; Agwu et al., 2020). These strands of literature are consistent with, and help contextualise, the aggregate trend reported here, but none of them substitute for a properly specified candidate-level model; such a model requires verified respondent-level data of the kind discussed in the Methodology and Limitation sections of this article.

Theoretical Framework

Education Production Function / Input–Output Perspective

The study is informed by the education production-function perspective, which conceptualises educational outcomes as outputs associated with a combination of educational inputs and processes. In the context of UTME performance, relevant inputs may include teacher quality, instructional resources, school infrastructure, ICT access, electricity and students' preparation, while processes include teaching, learning, assessment preparation and examination administration; the observed output is examination performance. The framework is useful as a conceptual guide, but the present longitudinal analysis does not estimate the causal contribution of individual inputs because comparable annual input data were not supplied.

METHODOLOGY

Research Design

A retrospective longitudinal design was adopted. The unit of analysis was the year: each observation in the dataset represents one examination year, yielding 15 annual observations ($n = 15$) for the period 2010–2024. The design is appropriate for examining changes in performance across successive examination years without manipulating the examination environment. The specific data custodian(s), extraction procedure, and inclusion/exclusion rules used to compile each annual value have not yet been documented in this manuscript; this provenance information should be supplied by the authors, ideally as a state-by-year appendix, before the series is treated as independently reproducible.

Study Coverage

The study's intended coverage was the six South-Western states — Ekiti, Lagos, Ogun, Ondo, Osun and Oyo — but usable institutional data were available only for Lagos, Oyo, Osun and Ekiti; Ondo and Ogun States could not be captured because the identified institutions in those states did not release the required results. This article therefore uses the more accurate description ‘selected South-Western states’ throughout and does not claim that the reported aggregate series represents all six states. This distinction is necessary for valid interpretation and generalisation. A state-by-year appendix identifying the specific contributing institutions, the date of data retrieval, and the method used to aggregate state-level figures into each annual value has not yet been compiled; this remains an outstanding requirement before the series can be treated as fully reproducible or independently audited.

Data and Variables

The analysis used the annual aggregate figures supplied for 2010–2024. The variables were: number of candidates, annual mean UTME score, annual standard deviation and percentage of candidates scoring 200 and above. The annual values are treated as study-series observations rather than as national JAMB statistics. The source, extraction procedure and state-level aggregation of these figures must be documented and independently checked against official JAMB records or the original data-extraction sheets before publication.

Data Analysis

Descriptive statistics were used to summarise the annual series. Ordinary least-squares linear regression was then used to estimate the annual trend in mean UTME score and in the percentage scoring 200 and above. The models were specified as $Y_t = \alpha + \beta t + \epsilon_t$, where Y_t is the annual outcome, t is the time index and β represents the estimated annual change. Statistical significance was evaluated at the 5% level. Because only 15 annual observations were available, the trend models are interpreted as descriptive longitudinal associations rather than causal models or definitive forecasts.

Because the data form an ordered annual series, the residuals may exhibit serial (autocorrelated) structure, which can understate standard errors under ordinary least squares; this was not formally tested here given the small number of observations ($n = 15$). The reported standard errors and confidence intervals should therefore be treated as indicative rather than fully robust. Future work with a longer series should consider

autocorrelation-robust standard errors or an explicit time-series specification (for example, an autoregressive model) as a sensitivity check on the trend estimates reported here.

Data Integrity

A questionnaire component involving students, teachers and CBT-related respondents was also administered as part of the wider study (drawn from a proportionate stratified sample of 2,250 undergraduates and 750 teachers across institutions including UNILAG, LASU, the University of Ibadan, Emmanuel Alayande University of Education, and Obafemi Awolowo University, using the AFIUTMEQ and CBTOCIQ instruments). However, on review, the reported item frequencies, means and inferential tables were not internally consistent with the stated sample sizes and annual data: for example, the post-hoc mean differences did not equal the differences between the annual means in Table 2, the ANOVA degrees of freedom did not match either the 15-year series or the stated respondent totals, and one questionnaire item's reported frequencies summed to 400 while the stated respondent base was 2,250. Rather than reconstruct these results without the underlying raw responses, the questionnaire-based regression and ANOVA results have been excluded from this analysis. They will be restored once the raw SPSS/Excel/CSV data have been re-analysed, and the two instruments' reliability coefficients (Cronbach's $\alpha = .82$ and $.77$) re-verified alongside that re-analysis.

The basic demographic profile of the 2,250-student sample is reproduced in Table 1 as descriptive context only, because these frequencies sum consistently to the stated sample size and involve no inferential computation; they are not used to support any statistical claim in this article. The category label 'Federal (private)' in Table 1 is internally inconsistent, since federal ownership and private ownership are not the same thing in the Nigerian school system; this label should be checked against the original questionnaire/codebook and corrected from source records, rather than inferred, before publication. If the label cannot be resolved from source records, Table 1 should be removed, since it is peripheral to the longitudinal analysis that is the focus of this article.

Table 1: Demographic Profile of the Survey Respondents (Descriptive Context Only)

Characteristic	Category	Frequency	%
Gender	Male	950	42.2
Gender	Female	1,300	57.8
School Type	State (public)	1,050	46.7
School Type	Federal (private) — label requires verification	1,200	53.3
School Location	Urban	2,050	91.1
School Location	Rural	200	8.9

Ethics and Transparency

The longitudinal trend analysis presented in this article uses only aggregate, non-identifiable annual examination statistics and does not itself require additional human-participant ethics disclosure. However, the wider study from which this dataset is drawn also collected questionnaire and interview data from identifiable students and teachers, as described above. The approving ethics committee, reference number, consent procedure and confidentiality safeguards for that component have not been supplied in the materials available for this analysis. These details must be reported by the authors before the related survey and interview material can remain in the published article; if they cannot be supplied, that material should be removed rather than retained without an ethics statement.

RESULTS**Annual Unified Tertiary Matriculation Examination (UTME) Performance, 2010–2024****Table 2: Annual UTME Performance in Selected South-Western States, 2010–2024**

Year	Candidates	Mean Score	SD	% Scoring ≥200	Year-on-Year Direction
2010	65,420	187.45	18.30	54.2	Baseline
2011	68,105	189.60	17.82	56.4	Increase
2012	71,530	191.82	19.11	58.7	Increase
2013	73,810	194.76	18.50	61.4	Increase
2014	76,520	193.84	19.03	60.9	Decline
2015	78,200	196.33	17.80	63.8	Increase
2016	80,440	198.42	18.12	65.1	Increase
2017	82,765	201.56	17.25	68.4	Increase
2018	84,350	203.61	18.04	70.2	Increase
2019	86,940	205.48	16.94	72.8	Increase
2020	84,610	198.23	20.12	65.4	Decline
2021	88,900	202.87	18.16	69.5	Increase
2022	90,520	206.81	17.40	73.1	Increase
2023	93,140	209.63	16.75	75.8	Increase
2024	95,800	212.74	16.28	78.6	Increase

Table 2 shows a generally upward movement in the reported series. The annual number of candidates increased from 65,420 in 2010 to 95,800 in 2024, representing an increase of approximately 46.4%. The reported mean score increased by 25.29 points, from 187.45 to 212.74, equivalent to approximately 13.5% relative to the 2010 mean. The proportion scoring 200 and above increased by 24.4 percentage points, from 54.2% to 78.6%.

The series was not monotonic. A small decline occurred in 2014, and a more pronounced decline occurred in 2020, when the mean score fell from 205.48 in 2019 to 198.23 and the proportion scoring 200 and above fell from 72.8% to 65.4%. Performance subsequently recovered, reaching the highest reported mean score of 212.74 and the highest reported percentage scoring 200 and above of 78.6% in 2024.

Linear Trend in Mean UTME Score

Table 3: Linear Trend in Mean UTME Score, 2010–2024

Outcome	Slope (β)	SE	t	R ²	p	95% CI for β
Annual mean UTME score	1.576	0.142	11.07	0.904	< .001	1.269 to 1.883

The linear trend model indicates a statistically significant positive trend in annual mean UTME score, $\beta = 1.58$, $t(13) = 11.07$, $p < .001$, $R^2 = 0.904$. On the basis of the supplied series, the estimated mean score increased by approximately 1.58 points per year. The 95% confidence interval for the slope was 1.27 to 1.88 points per year. The model explains approximately 90.4% of the variation in annual mean score across the 15 reported observations. This is a descriptive time-trend association and should not be interpreted as evidence that any particular intervention caused the increase. The corresponding trend graph and its interpretation are presented alongside the discussion of this finding in the Discussion of Findings section.

Linear Trend in the Percentage Scoring 200 and Above

Table 4: Linear Trend in the Percentage of Candidates Scoring 200 and Above, 2010–2024

Outcome	Slope (β)	SE	t	R ²	p	95% CI for β
Percentage scoring ≥ 200	1.529	0.138	11.12	0.905	< .001	1.232 to 1.827

The trend in the percentage of candidates scoring 200 and above was also statistically significant, $\beta = 1.53$ percentage points per year, $t(13) = 11.12$, $p < .001$, $R^2 = 0.905$. The 95% confidence interval for the annual change was 1.23 to 1.83 percentage points. This result describes the supplied series; its substantive interpretation depends on verification of the regional data and on consistent definitions across years. The corresponding trend graph and its interpretation are presented alongside the discussion of this finding in the Discussion of Findings section.

Test of Hypotheses

Table 5: Summary of Hypothesis Testing

Hypothesis	Test	Result	Decision
H0 ₁ : No significant linear trend in annual mean UTME score	Trend regression	$\beta = 1.58$, $t(13) = 11.07$, $p < .001$	Reject H0 ₁
H0 ₂ : No significant linear trend in % scoring ≥ 200	Trend regression	$\beta = 1.53$, $t(13) = 11.12$, $p < .001$	Reject H0 ₂

Discussion of Findings

The principal finding is that the reported South-Western series shows a sustained upward movement in aggregate UTME performance between 2010 and 2024. The mean score rose by 25.29 points over the period, while the percentage scoring 200 and above increased by 24.4 percentage points. The statistically significant trend models reinforce the descriptive evidence that the direction of change was positive rather than being attributable solely to one or two unusually high years. Figure 1 and Figure 2 are presented alongside their interpretation to give a fuller, visually grounded analysis of this finding.

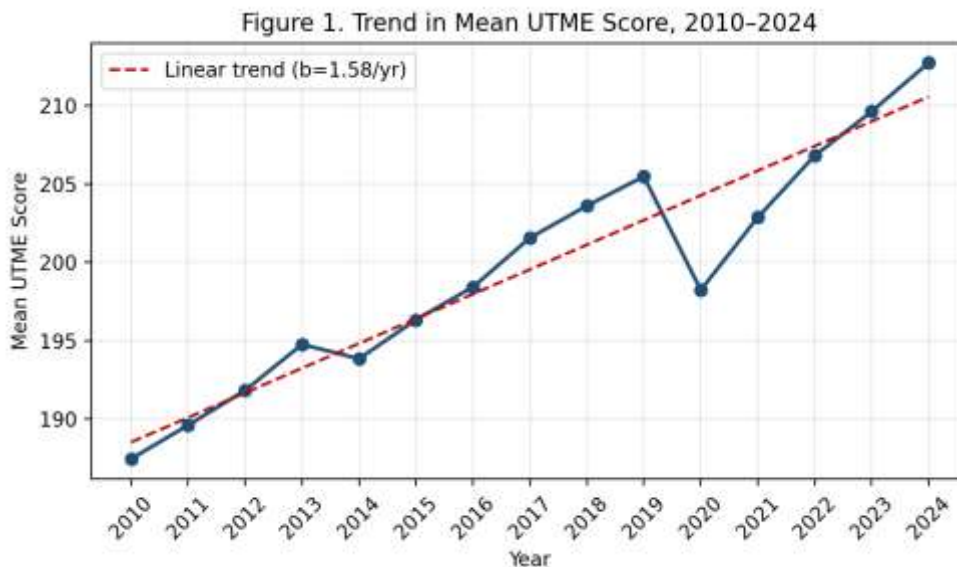


Figure 1. Trend in Mean UTME Score, 2010–2024

Source: Authors' construction from the annual values in Table 2.

Figure 1 shows mean UTME performance rising from 187.45 points in 2010 to 212.74 points in 2024, an estimated average annual increase of 1.58 points ($R^2 = 0.904$, $p < .001$, Table 3). The upward slope is consistent across most of the series, with two visible interruptions: a small dip in 2014 and a sharper one

in 2020, when the mean fell to 198.23 before recovering. The steady climb from 2021 to 2024, reaching the series' highest values, suggests the 2020 disruption was a temporary deviation rather than a reversal of the underlying trend.

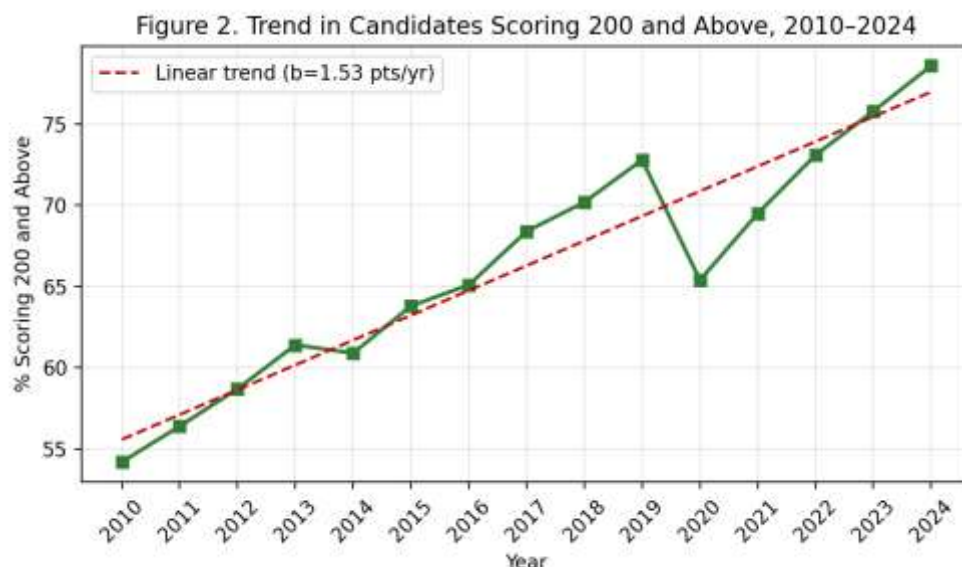


Figure 2. Trend in Candidates Scoring 200 and Above, 2010–2024

Source: Authors' construction from the annual values in Table 2.

Figure 2 mirrors this pattern for the percentage of candidates scoring 200 and above, which increased from 54.2% in 2010 to 78.6% in 2024, an estimated average annual increase of 1.53 percentage points ($R^2 = 0.905$, $p < .001$, Table 4). As with mean score, the clearest departure from trend is the 2020 decline to 65.4%, followed by four consecutive years of recovery and growth. Read together, Figure 1 and Figure 2 indicate a strong, statistically well-supported upward trajectory over the 15-year period, with a single, temporary systemic disruption around 2020 rather than an uninterrupted year-on-year improvement; the visual trend should be read alongside the regression statistics reported in Table 3 and Table 4 and not treated as independent evidence of causation.

The findings should nevertheless be interpreted cautiously. A positive time trend does not establish that teaching quality, school resources, CBT implementation, or any other specific factor caused the improvement. Aggregate longitudinal data identify temporal patterns but cannot, on their own, establish the mechanisms behind them. The education production-function perspective suggests possible pathways, but testing these pathways requires comparable annual covariates and an appropriately specified model. The 2020 observation is noteworthy. The reported mean score declined from 205.48 in 2019 to 198.23 in 2020, while the percentage scoring 200 and above fell from 72.8% to 65.4%. This occurred during the COVID-19 period, when educational activities and examination arrangements were disrupted. The temporal coincidence is a plausible contextual consideration, but this analysis cannot estimate the pandemic's effect; therefore, 2020 is described as an interruption in the series rather than a decline causally attributed to COVID-19.

The reported regional series should not be equated with national UTME performance. The manuscript cites a national figure of 24% of candidates scoring 200 and above in 2024, whereas the supplied selected-state series reports 78.6%. These estimates may have different denominators or definitions, but the difference is substantial and must be reconciled against official JAMB state-level records before publication. Until this validation is completed, the 78.6% figure should be described explicitly as the value in the study dataset, not as a verified regional estimate.

The study's results therefore have their strongest value as evidence of the reported longitudinal pattern rather than as evidence about the causes of performance changes. Future studies can build on this foundation by matching annual UTME outcomes with school expenditure, teacher characteristics, secondary-school resources, CBT-centre capacity, electricity reliability and socioeconomic indicators. Such a panel or time-series framework would permit a more rigorous examination of the mechanisms associated with performance, including the institutional and operational challenges — network failure, poor internet connectivity, interrupted power supply and inadequate CBT facilities — that candidates in the original survey component perceived as considerable obstacles to effective examination administration.

The manuscript also refers to qualitative interviews with CBT centre operators and teachers, including reports of network failure, unstable electricity, session restarts, additional generator costs, and candidates' digital unfamiliarity. The methods section does not yet provide sufficient information about interview sampling, the number and roles of participants, interview procedures, ethics, or the analysis used. These accounts should either be supported by a transparent qualitative method and appropriate results presentation or removed from the evidential discussion. They cannot be used to explain the annual trend without corroborating data.

CONCLUSION

Based on the aggregate series supplied for the study, UTME performance in the selected South-Western states displayed a statistically significant positive linear trend between 2010 and 2024. The reported mean score increased from 187.45 to 212.74, while the percentage scoring 200 and above increased from 54.2% to 78.6%. The series also contained meaningful short-term fluctuations, most notably the decline observed in 2020. The evidence therefore supports the conclusion that the long-run direction of the reported series was upward, but it does not establish that any particular educational or technological intervention caused that improvement. The findings should also be generalised only to the selected South-Western states represented in the underlying data, not automatically to all six South-Western states or to Nigeria as a whole.

Recommendations

Based on these findings, several recommendations are offered. JAMB and relevant education authorities should maintain a consistent longitudinal data system that permits state-level and centre-level examination performance to be monitored across years, since the value of the present analysis rests heavily on the

availability of a clean, comparable annual series. Educational planners should correspondingly use multi-year performance evidence rather than single-year results when assessing changes in examination outcomes and allocating intervention resources, so that normal annual fluctuation is not mistaken for a genuine shift in performance.

CBT infrastructure, reliable electricity, internet connectivity and technical support should continue to be strengthened, particularly where administrative data identify recurrent disruptions, given the plausible association between such factors and the 2020 decline; this should be treated as a policy consideration warranting independent evidence rather than as an effect already established by this model. Secondary-school improvement programmes should similarly be targeted using verified evidence on teacher capacity, instructional resources and school-level learning conditions, rather than inferred solely from aggregate UTME scores. Future longitudinal studies should link UTME performance with comparable annual data on school inputs, socioeconomic conditions and examination-centre characteristics, so that the determinants of performance can be estimated more rigorously than the present aggregate-level design allows. Finally, regional performance estimates such as those reported here should be independently reconciled with JAMB's official state-level records before publication, particularly where regional percentages differ substantially from national distributions, as they do in this study.

Limitation of the Study

Editorial data-verification note: the annual series and its provenance require confirmation against official JAMB state-level records before the findings can be treated as verified regional estimates. The current manuscript does not provide the underlying extraction sheet or state-by-state values.

The principal limitation is that this analysis relies on the aggregate 2010–2024 series rather than the underlying candidate-level JAMB records, and on only 15 annual observations, which limits the statistical power and generalisability of the trend estimates and leaves open the possibility that scoring definitions, question formats, or reporting practices changed over the period without this being documented here. Consequently, the analysis cannot estimate individual-level predictors or causal effects. The intended study area was the six-state South-Western geopolitical zone, but the reported usable data covered only four states. In addition, a questionnaire-based component of the wider study produced aggregate statistics that were internally inconsistent; those statistics were therefore excluded rather than reconstructed without raw data. Before journal submission, the regional annual figures should be reconciled with their original administrative sources, and the questionnaire component should be re-analysed from the raw dataset if the authors wish to retain it. A direct comparison with other independently verified longitudinal UTME trend studies was not possible within the scope of this analysis, since no comparable, fully verified multi-year regional series could be identified; such a comparison is recommended once verified external series become available.

Data Availability Statement

The study uses annual aggregate UTME figures from the working dataset. The research team should retain the underlying state-level JAMB records, extraction sheets, and any respondent-level data and make them available to the journal for verification, subject to permissions and data-protection requirements.

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